PRINCIPLES OF WATER RIGHTS LAW IN OHIO

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with a
Preface by
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With Additions and Annotations

by

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DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

EDITOR'S NOTE

The basic text of this printing of "Principles of Water Rights Laws in Ohio," other than Part V, is the same as that of the 1959 publication authored by Professor Callahan, who is now deceased. Part V, on the Easement for Navigation, is new.

In producing the present publication, the objective was to preserve the original excellent work, made current by an updating annotation. The text that follows, other than Part V, is Professor Callahan's; those sections that required an updating comment are followed by an annotation in italics. Text references in the original publication are retained.

The annotations and Part V were prepared by James R. Hanson, Columbus attorney who has been involved with Ohio water law and legislation since joining the staff of the Ohio Water Commission in 1960.

TABLE OF CONTENTS

PREFACE

I INTRODUCTION

II STREAMS

III DIFFUSED SURFACE WATER

IV UNDERGROUND WATER

ILLUSTRATIONS

PREFACE

by C. V. YOUNGQUIST

Water in Ohio has been regarded as an unlimited resource as freely available for human needs as the air we breathe. In pioneer days there existed no apparent need for laws pertaining to the use and disposal of water, but population growth, community living, the development of water-using industries, and intensive agricultural use of the land has been the background on which there has emerged a body of law concerning the use and disposal of water. Today we find that rights to the use of water are as real as property rights in the use of land, although not as definitive in many instances.

The Division of Water, Department of Natural Resources, has been cognizant of the importance of a knowledge of water rights to the development of Ohio's water resources. In 1950 discussions were carried on with the Ohio State University, College of Law, relative to research on the subject. The Dean of the College, then Jeffrey Fordham, assigned Harry Reese, a research assistant in the College, to the subject. Mr. Reese conducted considerable research on riparian rights. Later, Mr. Reese, became affiliated with Northwestern University Law School. Mr. Sheldon Young of Ohio State University assisted Mr. Reese and carried on diligent research after Mr. Reese left the University. He continued the study after he became a member of the Cleveland Bar.

The work of Reese and Young, although not completed at the time, was of value to the Legislative Service Commission in their review of water rights as directed by the 100th General Assembly. The publication of the Legislative Service Commission, "Water Rights in Ohio," resulted.

The present work, "Principles of Water Rights Law in Ohio" by Charles C. Callahan, is in more detail than that of the Legislative Service Commission.

No attempt has been made to include statutory law such as that on drainage, conservancy districts, or municipal water supply. The law herewith presented is largely that evolved in Ohio courts over many years in response to the needs of a growing population.

The charts, diagrams, and preface are by the Division of Water, Ohio Department of Natural Resources. Otherwise, the text is the result of the researches of Ohio State University, College of Law, whose cooperation is hereby gratefully acknowledged.

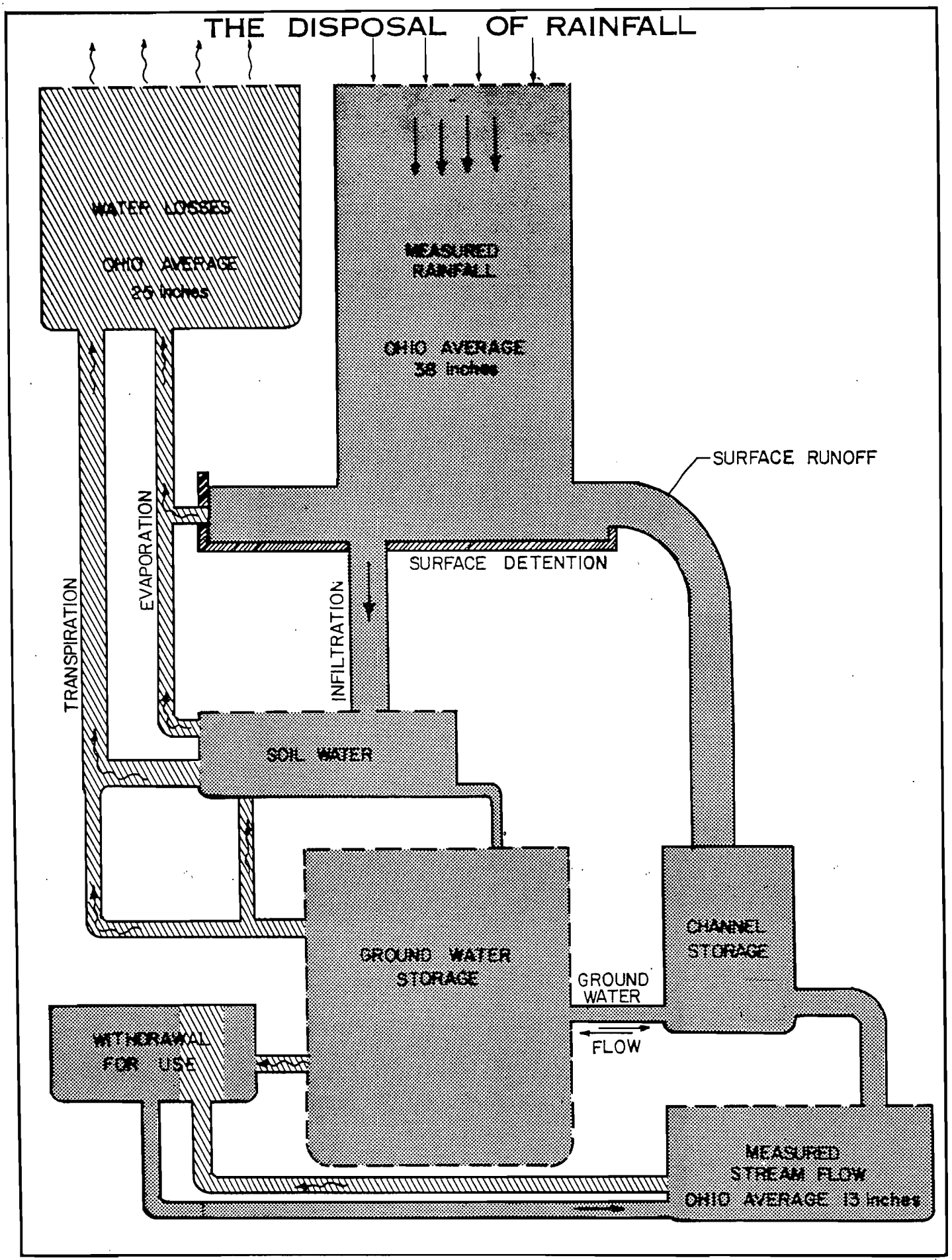
The Disposal of Rainfall

The purpose of this diagram is to represent without too much over-simplification the complex phenomena involved in the disposal of rainfall as an adjunct to the diagram on the legal classification of water.

The gross supply of water to Ohio, except along Lake Erie and the Ohio River, is the 38 inches of average rainfall. It should be considered, of course, that statewide average precipitation has been as low as 26 inches and as large as 50 inches annually.

Considering the gray side of the water ledger, rainfall is disposed of first by detention in pools and depressions in the surface after which water begins running over the surface (legally, diffused water). Water running over the surface joins together in natural troughs in the surface to form rivulets (probably still diffused water) which run together to form brooks, runs, and creeks which join to form stream tributaries and eventually rivers.

Tributaries pouring into river channels begin to fill the channel, which induces greater velocity and flow in the river. Storage of water in the river channel (channel storage) is a sizeable quantity, important in any river control, even though the storage may be transient.


THE DISPOSAL OF RAINFALL
WATER LOSSES
OHIO AVERAGE
25 inches
MEASURED
RAINFALL
OHIO AVERAGE
38 inches
SURFACE RUNOFF
SURFACE DETENTION
EVAPORATION
TRANSPIRATION
INFILTRATION
SOIL WATER
GROUND WATER
STORAGE
CHANNEL
STORAGE
GROUND
WATER
FLOW
WITHDRAWAL
FOR USE
MEASURED
STREAM FLOW
OHIO AVERAGE 13 inches

Infiltration into the soil begins immediately after rainfall and the rate and quantity depends on the soil type, vegetal and tilth conditions, climatic conditions, and the moisture already in the soil.

When the soil becomes saturated downward percolation of water to underground storage begins, replenishing such storage where underlying geologic formations permit (percolating water). The ground water reservoir is continually discharging into streams, but as the quantity in ground-water storage is increased, the flow into streams by seepage becomes greater. This is a small part of stream flow in some parts of Ohio, but on a number of rivers the contribution of ground water flow is as much as 50 per cent of the total flow. Under such favorable conditions a ground-water reservoir is as effective in maintaining and regulating stream flow as large and costly surface reservoirs.

Although the natural reservoir of ground-water storage discharges into streams, the reverse process can occur if the reservoir is drawn down below stream level by pumping or by natural causes, such as the growth of water-loving plants whose roots penetrate to the water table. Some of Ohio's most valuable ground-water reservoirs are those which are adjacent and hydraulically connected to streams. Such reservoirs store water and are often replenished by flood flows which would otherwise flow out of the State without serving any beneficial use.

The streams of Ohio would not continue to flow during rainless periods without a source of underground water to maintain such flow. The quantity of flow of a stream during such rainless periods is an index of the amount of ground-water storage in the watershed of the stream. The close relationship of water in underground storage (percolating water) and water in stream channels is not clearly recognized in Ohio law.

"Withdrawal for Use" represents the abstraction of water from streams and the ground-water reservoirs by pumping for municipal, agricultural, industrial and rural use. This represents a tremendous quantity of water, on the order of 4 inches of depth over the area of the State. Fortunately this use of water is largely non-consumptive and is returned into streams. Rarely, in Ohio, is it returned to the ground-water reservoir. Being discharged to streams such water is available for re-use if it is not seriously impaired in quality by pollution. Almost any use results in some impairment, but the aim of Ohio's clean-stream measures is to maintain water of good quality in streams of the State.

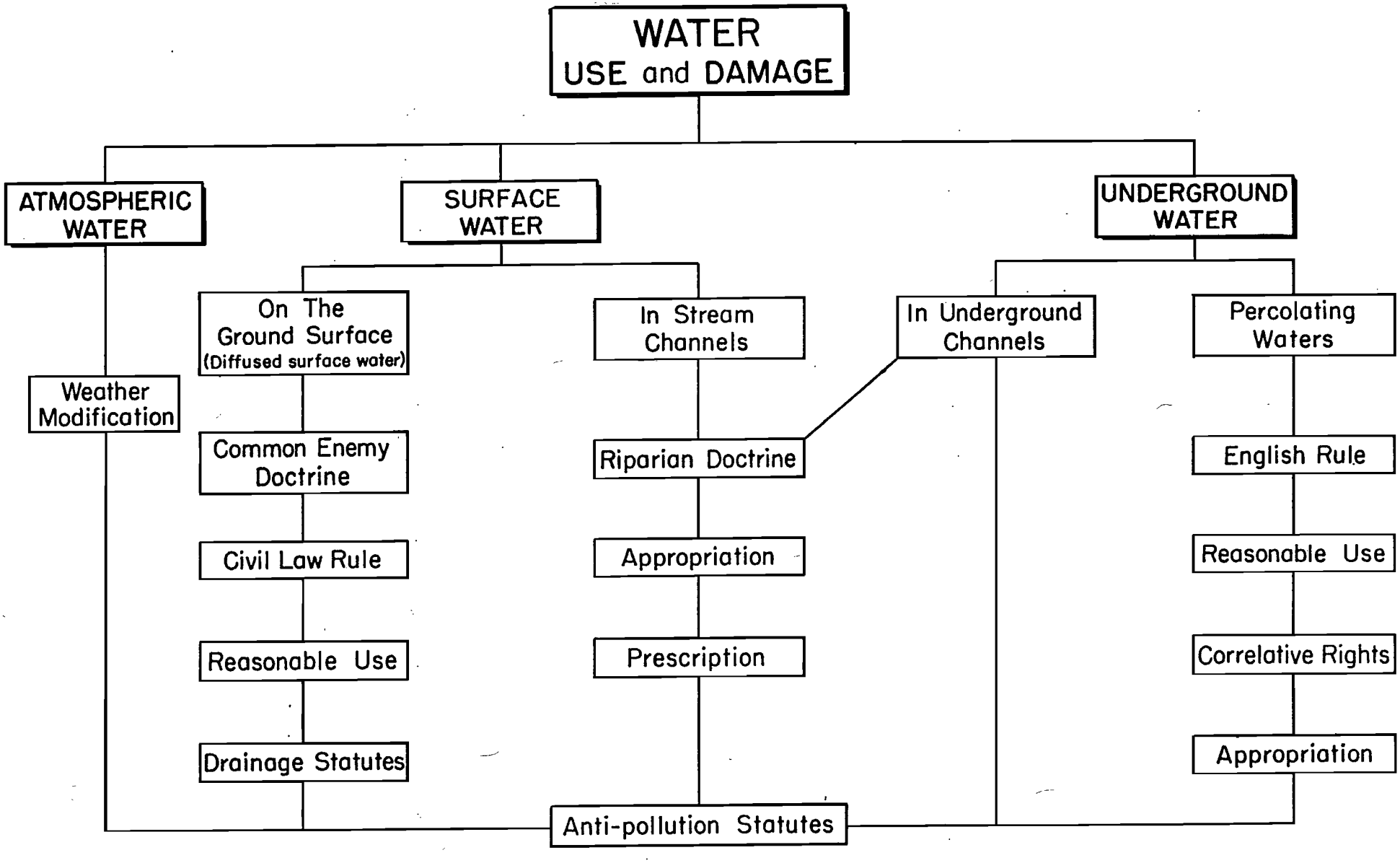
Some withdrawal uses are consumptive, that is water may enter into a product, or water is evaporated. Irrigation use is almost entirely a consumptive use the water being consumed by vegetation.

Water losses constitute an abstraction of available water over which man has least control. Its beneficial aspects are apparent when it is considered that all plant growth is dependent on this phase of the cycle of water.

Evaporation begins removal of water immediately after rainfall reaches the earth. (It actually begins in the atmosphere on falling raindrops, but here we are considering only measured rainfall which is that which reaches the earth and can be measured.) Evaporation occurs most freely from puddles and pools of surface water. It also occurs from the water in the top of the soil and through capillarity draws water from deeper in the soil.

Transpiration, which is the withdrawal of water by plants, depends on sunlight and heat. It operates continuously during the growing season and not only abstracts moisture in the surface of the soil but withdraws water to at least the depth of the plant root system. Some plants such as alfalfa, willow trees, and others almost invariably extend their root systems into the water table of the ground-water reservoir. They are as effective in withdrawing water as man-made pumps. Many of the gages recording water-table fluctuations, which are operated by the Division of Water, show graphically on the charts the pumping effects of plants and the lowering of the water table thereby.

This brief description is to serve as a clarification of the cycle of water utilization to supplement the Ohio law on the same subject. Much of Ohio law was developed when there were meager facts on water occurrence in the State.



Legal Classification of Water

Water Use and Damage

This diagram, which is a modification of one which appeared in "Water Rights in Ohio," by the Ohio Legislative Service Commission, aims at diagramming water as treated not only in Ohio law but in the law of other states.

The three principal water categories are atmospheric, surface and underground. Atmospheric water has not been a matter of consideration by Ohio law unless we consider ordinances such as those affecting atmospheric pollution or smoke abatement. The effects of smoke and fumes released to the atmosphere are related to the amount of moisture in the atmosphere. Some states have enacted statutes on weather modification such as artificially inducing rain. There are other objectives of weather modification such as smog mitigation, dissipation of thunder clouds, etc. Ohio has no law on the subject.

Surface Water includes diffused surface water and water within a definite bed and banks in a stream channel. The law in Ohio on diffused surface water, especially on its disposal, has followed at times each of the common-law concepts but in general inclines towards the civil-law rule as explained in the text. Drainage which is a disposal of excess water on the surface and in the first few inches of soil is also the subject of a considerable body of statutory law.

Water in stream channels is the subject of statutory and common law. Rights to the use of water are largely contained in the common law under the riparian doctrine and possibly under prescription. The appropriation doctrine governs in many of the western states but not in Ohio. Rights to water under the riparian doctrine are derived from the land and its advantage of position on a stream. The appropriation doctrine, although very complex, grants rights to water use by virtue of time and purpose of use. It is sometimes referred to as a doctrine of "first come, first served." The doctrine of prescription has elements of both the foregoing and is similar to the right of adverse possession as applied to other acquired rights.

Underground water is subject to two common law rules depending on its mode of occurrence. Water occurring in underground channels which can be determined is subject to the same rules as for surface streams. Percolating underground waters are governed by three rules. Ohio has in general followed the English Rule of the absolute right of a property owner to the water underlying his property.

Anti-pollution statutes have been enacted which to some extent limit the use of water. Since statutory law is not detailed in this research it is indicated in the diagram of legal classification of water as a fairly recent development in the law which must be considered in water use and damage.

PRINCIPLES OF WATER RIGHTS LAW IN OHIO

by CHARLES C. CALLAHAN

I INTRODUCTION

§ 1. A. **Nature of problems.** If the supply of water at various times and places always matched the need for it there would be no occasion to consider the type of property interest commonly referred to as water rights; the lack of competition would relegate those rights to the category of pure speculation. Of course, such an ideal condition does not exist. Indeed it is likely that water supply and demand are seldom, if ever, exactly balanced. In some locations water is chronically in short supply; in others over-abundance is the usual condition. In much of the country, including Ohio, periods of shortage are likely to be followed by periods in which water is either comfortably plentiful or so much so as to become an actual danger.

Legal problems relating to private water rights vary as the relation of supply to need varies. In times of shortage the law must attempt to adjust the competing demands of many individuals, businesses and other entities, in some manner that is at once reasonably fair and reasonably predictable. In this process the law has developed rules which may be classified as relating to water use. Conversely, when flood conditions occur and the practical problem becomes one of protecting property against water damage, the law must supply rules which will define private rights to dispose of water and to be reasonably free of additional damage caused by the protection activities of others. Rules of this type may be classed as relating to disposition rather than to use.

Although the law considered here is primarily the law of Ohio, it should not be supposed that this law is basically, or even considerably, different from that of other states similarly situated. In most of the western states a legal system of prior appropriation exists which is fundamentally different from the system of riparian rights controlling stream water in the states from the Mississippi eastward;[1] but even in these states many of the legal problems are treated in the same manner as elsewhere. Accordingly, cases from other states, although in no way binding as precedents in Ohio, are relevant; and they are cited freely here, especially on questions with respect to which Ohio authority is meager or lacking.

Many of the basic water law cases in Ohio are quite old. City of Canton v. Shock,[2] which is the fundamental Ohio case on the use of stream water, is now more than fifty years old and the issues there decided have not been re-examined in any later reported case. Most of the leading cases on percolating water and diffused surface water are even older.[3] Accordingly, these cases cannot reflect the water problems of a modern industrialized state. One can speculate as to the reason for this lack of modern case authority, but it remains a fact; and what has been referred to as the "cabin on the bank" nature of our system of water law[4] must constantly be remembered in assessing it.

> *Although not a water rights case, State v. Martin, 168 OS 37 (1958), upholding the statute requiring well drillers to furnish well logs to the Division of Water, contains an expression by the Ohio Supreme Court of the importance of water:*
>
> > *It cannot be denied that the question of water is of supreme public interest. The people of Ohio have written into their Constitution Section 36 of Article II, which provides, in part, as follows:*
> >
> > *"Laws may also be passed...to provide for the conservation of the natural resources of the state...."*
> >
> > *Water is a sine qua non of the happiness, health, welfare, and agricultural and industrial progress of the state. Its absence or presence makes the difference between a desert and a garden. It is essential to preserve life of both man and beast, and industrial progress and development depend in a tremendous measure upon an adequate underground water supply.*

§ 2. B. **General Theories of Water Rights.** The law on a particular question of water rights will reflect one of three general approaches, or occasionally a mixture of them. Leaving out of account the western system of prior appropriation,[1] rights to use or dispose of water are basically a part of the ownership of the land over, under or around which the water flows. Two extreme, and opposed, positions with regard to the right of a landowner to interfere with the flow of this water appear in the law. In

some jurisdictions, and on some questions, it is said that he may not lawfully interfere at all, but must leave the water to flow in its natural course and volume. This doctrine of natural flow probably is seldom actually applied, but it colors much of the legal writing and frequently confuses it. At the opposite extreme, it may be asserted that a landowner may do as he wills with the water he finds on his land, or that he may do anything he wishes to protect his land from water encroachment. This doctrine, although nowhere applied to all water questions, appears quite frequently in connection with the use of percolating water and protection against diffused surface water. A third general approach aims at an overall apportionment of water rights among the several property owners affected in such a way as to minimize the inconvenience or damage to each. It recognizes that the rights of each owner are limited, to some extent, by the similar rights of others. This correlative rights approach, usually designated as the doctrine of reasonable use, is necessarily difficult to state and apply, but it is likely to enter, to some extent, into the decision of most water quesions.

§ 3. C. **Legal Classification of Waters.** In an early Ohio case, Frazier v. Brown,[1] Judge Brinkerhoff of the Supreme Court said that the seeming inconsistency in the earlier water law cases was caused by failure to classify the general subject into the several distinct branches of inquiry into which it naturally falls. He then listed four classes of waters with respect to each of which the rules are, to some extent, different: (1) surface streams which flow in permanent, distinct and well-defined channels, (2) surface waters, however originating, which pass over land without any distinct channel, (3) subterranean streams, and (4) subsurface percolating waters. This classification is somewhat crude in itself and, of course, it is unscientific. It does, however, state the framework within which English and American water law has developed. With the exception of class (3), subterranean streams, each of these classes represents virtually a separate body of law which is nearly independent of that applicable to the other classes. Accordingly, in the consideration of the Ohio law of private water rights which follows, this traditional classification has been followed.

II STREAMS

§ 4. A. **The Doctrine of Prior Appropriation.** In the seventeen states constituting the western part of the country the legal theory controlling rights to use water from streams is that of prior appropriation. This theory has been described in detail elsewhere;[1] and, since it does not bear directly on the water law of Ohio, it will be noted only briefly here. Derived from early mining customs in California, the prior appropriation doctrine bases rights to the use of water on priority of beneficial use rather than on ownership of land bordering on the stream from which the water is taken. In eight of the states this doctrine is the sole basis of private water rights in streams.[2] In the others water rights are determined by a dual system of prior appropriation and riparian rights, under which grants of riparian land made before 1866 are held to have water rights paramount to all appropriations, and later grants are subject to appropriations which are senior to them in time.[3] In most of the appropriation states permits to appropriate must be obtained from state administrative agencies. Seniority of appropriation generally is determined by the dates of application for these permits; but the appropriation must actually be effected and a certificate of right issued within a reasonable time.

Since appropriation rights are not dependent on the ownership of land, appropriated water may be used beyond the watershed of the stream from which it is derived and upon lands owned by persons other than the appropriator. The quantity is limited, however, by the beneficial use claimed at the date of the appropriation.[4]

Certain qualitative use preferences exist in appropriation states through constitutional and statutory provisions. Thus, domestic uses may control over others and water for irrigation may have a preference over that to be used for manufacturing or mining.[5]

See also Dewsnup and Jensen, A Summary-Digest of State Water Laws p. 35 (National Water Commission, 1973); Hutchins, Water Rights Laws in the Nineteen Western States (U.S. Government Printing Office, 1974); and Clark, Introduction to Water Law of the Western States, 5 Water and Water Rights 1 (R. E. Clark Ed., 1972). Alaska, which became a state in 1959, established a prior appropriation system of water rights by constitutional provision.

§ 5. B. **The Doctrine of Riparian Rights.** In the part of the United States which lies in the Mis-

sissipi Valley and eastward, private rights in the use of water flowing in streams are governed basically by the doctrine of riparian rights. Under this doctrine rights to use stream water are a part of the ownership of the lands through which the stream flows; and such rights, in very large part, are confined to those who own such land. With what are perhaps minor exceptions, the location of one tract of land on a stream, whether below or above another tract, is of no significance; nor does priority in time with respect to ownership of land or use of water play a part. Further, the size of a tract of land owned by one owner, as compared to that of others, has no direct bearing on the quantity of water he may take. The essence of the doctrine is equality of treatment of all persons who own land on the stream.

The doctrine of riparian rights is the basic stream law of Ohio. It will be treated in some detail in the succeeding sections.

See Davis, Introduction to Water Law of the Eastern States, and the Right to Use Water in the Eastern States, 7 Water and Water Rights 1 and 27 (R. E. Clark Ed., 1976); 78 Am Jur 2d Waters 703, Sec. 260 et seq; and 93 Corpus Juris Secundum Waters 605, Sec. 5 et seq.

§ 6. 1. **Origin of the doctrine.** Our system of riparian rights derives from the civil law of continental Europe rather than from the common law of England.[1] The Institutes of Justinian state that running water, by natural law, is common to all.[2] The Code Napoleon provided that a landowner may use water from a stream crossing his property on condition of restoring it, at its departure from his land, to the normal course.[3] These civil law principles are acknowledged to have been the source of the riparian doctrine first brought into American law in the early nineteenth century by Mr. Justice Story, in Tyler v. Wilkinson,[4] and by Chancellor Kent in his Commentaries. The latter states the doctrine as follows:

> "Every proprietor of lands on the banks of a river has naturally an equal right to use of the water which flows in a stream adjacent to his land as it was wont to run without diminution or alteration. No proprietor has a right to use the water, to the prejudice of other proprietors, above or below him * * *. He has no property in the water itself, but a simple usufruct while it passes along. Aqua currit et debet currere, is the language of the law. Though he may use the water while it runs over his land he cannot unreasonably detain it, or give it another direction, and he must return it to the ordinary channel when it leaves his estate.[5]

The doctrine advanced by Kent is contrary to that of the early common law of England as stated in Blackstone, which is to the effect that the person who first "occupies" a stream acquires a property in the current;[6] but Nineteenth Century English cases adopted the riparian rights doctrine of the civil law as a part of the law of England.[7]

§ 7. 2. **Natural flow versus reasonable use.** The early statements of the law of riparian rights proceeded from the premise that each riparian owner was entitled to the continued flow of the stream in its natural state. The stream could not lawfully be diminished in quantity or deteriorated in quality. Although such a doctrine may have been acceptable when the only users of water were small and the uses to which it was put were either domestic or for supplying water power for mills and the like, it is apparent that it is unsuited for any situation in which a substantial consumptive use of water is required or desirable. Literally applied, this "natural flow" concept of riparian rights would permit no consumptive use at all, except perhaps by the lowest owner. Further, any substantial diminution in the flow of a stream, caused by a diversion by an upstream proprietor, gives rise to a cause of action in the downstream owners without regard to whether those owners have suffered any actual injury by the diversion.[1]

Accordingly it is not surprising that, in jurisdictions in which the supply of running water has presented a problem, the rule that landowners are entitled to the continued undiminished flow of streams has been replaced by a doctrine which permits some consumptive use of the water. This latter, commonly designated the "reasonable use" doctrine, permits each riparian owner to make a "reasonable" use of the water, having regard to the same rights existing in the other riparian owners. It is fundamental to this concept that no proprietor will be regarded as making an unreasonable use of the water unless his action causes harm to some other.[2] Accordingly, no cause of action arises merely from the fact that the flow of water in a stream has been perceptibly diminished. There is a cause of action only when the use of the stream by one owner exceeds that which he is privileged to make. As the word "reason-

able" suggests, the exact limits of the privileged use of water in a reasonable use jurisdiction are not easily determined; and perhaps they are not determinable. This matter will be considered in greater detail below.[3]

Although court decisions in Ohio, and in most other riparian states, generally have applied some concept of reasonable use, the opinions frequently employ language which is that of the unmodified "natural flow" concept.[4] This language, especially if quoted out of context, may be quite misleading as to the extent of the right of riparian owners.

§ 8. 3. **Relation to the concept of property.** Commonly it is said that the right of a riparian owner to use water from a stream which passes through his land is not proprietary, but usufructory only.[1] It is not, as an early Ohio case states, "a right to the water itself, but an interest in the manner of its flow."[2] It is likely that these statements were, and are, intended to do no more than emphasize that the rights of a landowner with respect to the flow of water in a stream are not absolute; but rather are correlative to, and limited by, similar rights enjoyed by the other owners. Rights in flowing water are no less dignified than any of the other of the large number of rights which, together, make up the ownership of real property. In any event it is clear that riparian rights are property within the purview of the constitutional provision which prevents the taking of property for a public use without just compensation.[3]

§ 9. 4. **General rule in Ohio.** Although authoritative cases on rights in flowing water in Ohio are neither numerous nor recent, it is clear that the state is a riparian rights jurisdiction and that it applies the reasonable use doctrine. As early as 1831 the Ohio Supreme Court used the phrase "riparian proprietor" and described his interest as a right to any use he could make of the water while passing over his land subject to the requirement that it be transmitted by its natural channel to the next lower proprietor.[1] The next year the Court held that an action could not be maintained by one riparian proprietor against another for interfering with the flow of a stream so as to back it up on the land of the plaintiff where no actual injury was sustained.[2] It is a principle consistent with reason and common sense, the Court said, that before such an action will lie there must be an injury which is material and substantial.[3]

Among other early Ohio cases dealing with riparian rights,[4] Frazier v. Brown[5] should be mentioned. Although the case before the Court involved diffused underground water rather than a stream, Judge Brinkerhoff took occasion to speak of water rights generally. With respect to rights in surface streams he said:

> "* * * it is now too well settled to require the citation of authorities for its support, that, notwithstanding the maxim which affirms the absolute and unlimited dominion of the proprietor of the soil upward and downward, the proprietor has, in the absence of any modification of the relative rights by contract or prescription, no right to throw the water back on him above, and has the right to receive it from the proprietor above substantially undiminished in quantity and uncorrupted in quality; and this right arises, not from any supposed grant or prescription, but ex jure naturae, and for the reason that surface streams of flowing water are the gift of Providence, for the benefit of all lands through which they flow, and as such their usufruct is appurtenant to the lands through which they flow."[6]

This is, of course, virtually a statement of the natural flow concept of riparian rights, unmodified by any reference to an exception for reasonable use. However, it clearly was not necessary to the decision of the case and it was not carried into the syllabus which, by Court rule,[7] expresses the law of the case. It is mentioned here because the case is cited so frequently in connection with all branches of Ohio water law.[8]

Whatever may have been the effect of the Nineteenth Century Ohio riparian rights cases, it is clear that the leading Ohio case, and one of the leading cases in the country, is City of Canton v. Shock,[9] decided by the Supreme Court in 1902. It is also the latest case dealing with the use of stream water. Accordingly it is worth some attention:

The owner of a water-powered grist mill, located downstream from the City of Canton, brought an action against the city for damages suffered by him by reason of a diminution in the water supply caused by a withdrawal of creek water by the city waterworks. In the trial court a verdict was returned against the city, the trial judge having instructed the jury, in part, as follows:

"* * * I say to you as a matter of law, that the undiminished flow of a natural private stream, such as the one in question is conceded to be, is the right of every riparian owner, yet this right is limited to this extent; that each riparian owner may, without subjecting himself to liability to the lower riparian owner, use of the stream whatever is needed for his own domestic purposes and the watering of stock. The defendant, the city, cannot be considered a riparian owner within the scope of this exception." [10]

The trial court's judgment for the plaintiff, rendered on the jury's verdict, was affirmed by the Circuit Court; but both judgments were reversed by the Supreme Court, which held that the trial court had erred in instructing the jury as set out above. One error, the Court held, occurred in the instruction that the city could not be considered a riparian owner. This question is considered in a later section.[11] But there was error also in the part of the instruction which limited the city's right to take water to that necessary for its domestic needs and the watering of stock. The Court's summary of the rights of riparian owners appears in the syllabus of the case:[12]

1. An incorporated municipality situated on a natural flowing stream is, in its corporate capacity, a riparian proprietor, having the rights, and subject to the liabilities, of such proprietor.

2. Such municipality so situated has the right to use out of the stream all the water it needs for its own proper purposes, returning to the stream the water not consumed in such use.

3. Such municipality so situated, may supply water to its inhabitants for domestic use, returning to the stream the water not consumed; and a lower proprietor who uses the water of the same stream for power, has no legal cause for complaint against such upper proprietor for so using the water of the stream.

4. Where there are upper and lower proprietors upon a natural running stream, both having manufactories propelled by the water of the stream, and the water is insufficient to fully supply the needs of both, each one has a right to the reasonable use of the water, considering all the circumstances.

5. In such case the water of the stream should be so divided and used that each proprietor shall bear his fair proportion of the loss caused by the shortage of water, considering all the circumstances of the case.

6. Such municipality so situated, has no right to materially diminish the flow of water in such stream, to the injury of a lower proprietor, by supplying water from the stream to persons outside of such municipality, or to be transported away from such city, or by supplying to manufactories for power purposes more than a reasonable share of the water, considering all the circumstances.

7. In case of difference between such proprietors as to the use of water for power purposes, the question should be left to a jury to say whether under all the circumstances the party complained against has used more than his fair proportion of the water of the stream.

The City of Canton case thus appears to stand for these propositions: That the law of Ohio relating to streams is based on riparian rights—the right to use the water derives from the ownership of riparian land; that such an owner is not entitled absolutely to an undiminished flow of the stream—only a material diminution gives a right of action and not every diminution, even if material, will do so; that a riparian owner may take all the water he needs for domestic purposes; and that, as between competing users for power, the rule is that of reasonable use to be determined from all the circumstances of the case. These general propositions will be examined in greater detail in the sections immediately following.

The syllabus is now referred to in Rule V, Supreme Court Rules of Practice. See Cassidy v. Glossip, 12 OS (2d) 17 (1967).

For later cases dealing with stream water, although not in the Supreme Court, see annotation to Sections 15 and 16 below.

§ 10. C. **Use of Water.** In a sense, any diversion of the water of a stream may be regarded as a use of the water. However, the sections immediately folowing have to do with uses which may be designated as beneficial to the riparian owner who makes the diversion, as opposed to those which are merely devices for disposing of surplus water. The extent to which a riparian owner may take stream water for beneficial use is determined by several factors, among which are (1) the particular use which he proposes to make of the water, (2) the uses which other owners are making, and (3) the particular land on which the use is to be made. Under the riparian rights doctrine, a landowner's right to use stream water depends upon his being classified as a riparian owner. Accordingly, some consideration must be given to the question of who may qualify as such an owner. Further, the extent to which water may be taken for use depends, in a particular instance, on the legal classification of the water source; Is it properly a stream, or is it to be regarded, for example, as diffused surface water, to which a different set of rules applies? In broad outline, these considerations are the subject matter of the following sections.

Conservancy districts and regional water and sewer districts have special powers to regulate use of water in streams to the extent that the flow is increased by improvements made by the district (Secs. 6101.24 and 6119.06(N), Ohio Rev. Code).

§ 11. 1. **Types of use.** Generally speaking, the doctrine of riparian rights limits the use of stream water to those persons who own lands bordering on the stream and to uses which take place on such lands.[1] Assuming, for present purposes, that these requirements are met, it is necessary to inquire as to the purpose for which the water is taken before the right to do so may be determined. It seems clear that, under either the natural flow or reasonable user doctrines, the purpose for which the water is taken must be one which is beneficial to the taker. No substantial quantity of water can be taken from a stream and simply wasted, to the injury of a lower riparian owner. City of Canton v. Shock[2] limits a riparian owner's right to water to that which is taken for his own "proper purposes, returning to the stream the water not consumed in such use."[3] Further, not all beneficial uses are treated in the same fashion. A riparian owner may be allowed to take a greater quantity of water for domestic purposes than for uses of a commercial nature.[4] As will be seen, the right to take water for domestic purposes is fairly well defined; but where other uses are involved the law is more than a little vague. It is difficult to state the principles accurately and difficult to determine an owner's rights in a particular situation with any precision.

§ 12. a. **Exception for domestic uses.** It is usually stated that the primary use of a stream is for domestic purposes and that, for the satisfaction of domestic needs, the right of a riparian owner to take water from the stream is absolute.[1] Accordingly he may take such water as he needs for domestic purposes, even though the result is that none is left for the commercial uses of lower owners;[2] and it has been said that an upper owner may satisfy his domestic needs even though no water is left for the domestic uses of lower owners.[3] Domestic uses thus enjoy a preferred status and constitute an exception to the general doctrine of correlative rights in stream water.

It has been said that this exception for domestic use is suported by few actual decisions[4] and certainly it will be difficult to find any in which conflicting domestic uses were involved; but an Ohio case, City of Canton v. Shock,[5] is one of the leading riparian rights cases in the country, definitely holds that domestic uses have priority over downstream power uses. In the opinion Judge Burket said:

> "All water powers on a stream are established subject to the superior right of all upper proprietors to use water out of the stream for domestic purposes, and if the upper proprietors have grown so large, or become so numerous as to consume most, or all of the water, the lower proprietors have no cause of complaint because it is only what they should have reasonably expected in the growth and development of the country, and subject to which contingency they established their water powers."[6]

The quantity of water taken for domestic uses in rural areas is likely to be small. However, the Ohio Supreme Court has held that a municipality is a riparian proprietor and, as such, may take water from a stream for the domestic uses of its inhabitants.[7] Accordingly, it can no longer be maintained, as was suggested earlier,[8] that the exception for domestic uses exists because the quantity of water taken is too trifling for the law to notice.

§ 13. **b. Types of domestic use.** As stated in the preceding section, domestic uses are not subject to the usual limitations imposed on the use of stream water by the doctrine of riparian rights. There is little authority as to which particular uses of water are to be regarded as domestic for the purposes of this exception. The Ohio Court, in City of Canton v. Shock,[1] referred to water used by riparian owners to quench their thirst and the thirst of their flocks and herds and stated that the same exception extended to "all uses for domestic purposes." [2]

It is said that the exception for domestic uses is limited to those uses which are necessary for the sustaining of life on the riparian land, the theory being that it is better for a few to have water sufficient for their health and welfare, at the expense of driving others to make their homes elsewhere, than that all should suffer from a shortage of water.[3] Accordingly, although water may be taken under the domestic use exception for drinking, bathing, the irrigation of gardens supplying food for family use and the watering of farm animals, it may not be so taken for large scale irrigation or the watering of a large herd kept for commercial purposes.[4]

Apparently, under the Ohio holding that a municipality may qualify as a riparian proprietor, the absolute right to take water necessary for domestic purposes extends to such as is necessary for the watering of streets and fire protection. Although the City of Canton case did not expressly refer to this use as "domestic" the whole effect of the opinion appears to be that the taking of water for this purpose is not limited by the considerations which control the quantities which may be taken for power purposes and for transport outside the municipality.[5] Also, it should be noted that the extension of the status of riparian proprietorship to municipalities adds to the list of those entitled to take water for domestic purposes all of the residents of the City, not just those who own land bordering on the stream in question.[6]

§ 14. **c. Commercial uses.** There has been no reported Ohio case involving the beneficial use of stream water since 1902. Accordingly, there is no case which considers directly what may be considered as large scale "consumptive" uses of water by commercial enterprises, as distinguished from uses for power purposes in relatively small quantities. Throughout the opinion in City of Canton v. Shock,[1] decided in the year mentioned, the phrases "manufacturing purposes," "power purposes" and "commercial purposes" are used interchangeably, the suggestion being that, so far as these purposes are accomplished on riparian land,[2] the same rule, that of reasonable use, applies to all. Although the only commercial uses involved in the case may have been of the non-consumptive power type, which would permit the eventual return of the water to the stream, there is nothing in the opinion to suggest that no water could have been taken for a consumptive commercial use, or that any rule other than reasonable use would be applied to such a taking. In fact the opinion suggests the contrary. Judge Burket said:

> "The obligation to return the water to the stream without 'any essential diminution' means that the water not consumed in the use, or 'legal purpose,' must be returned to the stream, or an opportunity given for it to flow back into the stream by the ordinary channels." [3]

The context of this statement is such that it may be inferred the Court would have recognized a consumptive commercial use as a "legal purpose" if it met the requirement that it be reasonable under the circumstances;[4] and it is said, generally, that if the custom of the locality recognizes a consumptive use as desirable it will be considered a proper use, even though commercial and of a substantial size.[5]

The question of commercial riparian uses is closely related to that of the use of water on non-riparian lands which will be considered below.[6]

§ 15. **d. Irrigation.** Water necessary for small gardens supplying food for domestic consumption may be taken from a stream under the domestic use aspect of the doctrine of riparian rights.[1] Water used to irrigate commercial farming operations presumably falls within the class of commercial uses for which water may be taken under the reasonable use limitation; but authority for this proposition is slight, especially in Ohio.

Agricultural uses are not mentioned specifically in the leading Ohio case, City of Canton v. Shock,[2] and do not appear to have been involved in the fact situation which gave rise to that case. An earlier Ohio case, M'Elroy v. Goble,[3] does refer to such uses, although, again the matter does not appear to have been related to the case before the Court. Because of the lack of other Ohio authority the following quotation from the **per curiam** opinion in the M'Elroy case is included:

"The right of the riparian proprietor to the natural flow of the stream through his premises is subject to qualification, from the circumstance that streams of water being intended, as is well said by Chancellor Kent in his Commentaries, 'for the use and comfort of man, it would be unreasonable, and contrary to the universal consent of mankind, to debar riparian proprietors from the application of the water to domestic, agricultural, and manufacturing purposes,' in a proper manner, even though it did, to some extent, interfere with the natural flow of the water.[4]

At most, this suggests that commercial irrigation, along with other commercial uses, is a use which will be permitted if found to be reasonable under all the circumstances of the particular case;[5] and it has been said that this probably is the case in all reasonable use jurisdictions.[6]

In certain of the western states, irrigation is made a preferred use by statute or constitutional provision.[7] There are, of course, no such provisions in Ohio.

Irrigation use was approved in Montelious v. Elsea, 11 00 (2d) 57 (Common Pleas Court of Pickaway County, 1959).

For Western water law, see Section 4 above.

§ 16. 2. **Meaning of "reasonable use."** With the exception of water taken for domestic purposes, riparian owners are entitled to make only such use of stream water as is reasonable, considering all the circumstances. It is inherent in this type of limitation that it is not susceptible to precise statement, since the circumstances will vary greatly from case to case. Certain observations may be made, however, about the manner in which courts and text writers have used the phrase.

(1) Sometimes the adjectives "reasonable" or "unreasonable" are applied to a particular use standing alone, without regard to the circumstances. Thus it may be stated that irrigation is a reasonable use.[1] Apparently all the phrase means, when so used, is that the particular purpose is one which is proper generally. It does not mean that all such uses will be upheld, regardless of the quantity of water taken and regardless of the effect on other potential users. In this sense of the term all properly conducted beneficial uses of water on riparian lands are, it would seem, "reasonable." The unnecessary wasting of a substantial quantity of water, and perhaps the transporting of it for use on non-riparian lands,[2] may be regarded as "unreasonable" in this sense.

(2) It is clear, however, that the mere finding that a use of a particular quality is "reasonable" in itself does not mean that the withdrawal of a given quantity of water from a stream in a particular situation will be upheld. The use must be reasonable, not only in itself, but also with reference to all the other circumstances and these circumstances include similar rights in other riparian proprietors to make uses of their own. The proportional nature of the reasonable use doctrine is made clear in City of Canton v. Shock[3] where it is held that where the water of a stream is insufficient to supply the needs of two riparian proprietors for power purposes, each has a right to the reasonable use of the water, which is to be divided so that each will bear his fair proportion of the loss occasioned by the shortage.[4]

In Kistler v. Watson, 79 Abs 552 (Seventh District Court of Appeals, Mahoning County, 1957), construction of an impoundment that cut off the flow in a small stream was found to be unreasonable under the showing of needs by upper and lower owners.

§ 17. a. **Criteria.** Where two or more riparian owners, each making a non-domestic use of water, contend for a limited water supply, each is entitled to make a reasonable use in view of the similar rights of the others.[1] How is the right of each to be determined? The law does not furnish a precise answer to this question. The Supreme Court of Ohio has held that it "should be left to a jury to say whether under all the circumstances the party complained against has used more than his fair proportion of the water of the stream."[2] Occasional statements of more precise criteria can be regarded as no more than attempts by the courts to list, by way of example, some of the circumstances to be considered. Thus, in Bisher v. Richards,[3] the Ohio Court stated the circumstances to be considered to be "such as the width and depth of the bed, the volume of water, the fall, the previous usage, and the state of improvement in manufacture and arts." A listing of criteria by the Wisconsin Court is somewhat more inclusive

but, again, must be considered as offered only by way of example:

> "In determining this question, regard must be had to the subject matter of the use, the occasion and manner of its application, its object, extent, and the necessity for it, to the previous usage, and to the nature and condition of the improvements upon the stream; and so also the size of the stream, the fall of the water, its volume, velocity, and prospective rise and fall, are important elements to be considered. The nature and situation of the plaintiff's mill and pond, the limited capacity of the latter, and the absence of any means or facilities by which it could be enlarged so as to retain and hold the water of the stream when discharged in quantities larger than its ordinary and accustomed flow or current, were, therefore, circumstances not to be overlooked in determining the reasonableness of the defendant's use."[4]

The American Law Institute's Restatement of the Law of Torts states that the process of determining whether a riparian proprietor's use of water is reasonable is one of determining whether "the utility of the use outweighs the gravity of the harm."[5] In assessing the utility of the use the factors to be considered are said to be (a) the social value of the primary purpose for which the use is made, (b) the suitability of the use to the watercourse and the customs existing with respect to it, (c) the impracticability of preventing the harm and (d) the classification of the use as riparian or non-riparian.[6] In a similar vein, the gravity of the harm is determined by (a) the extent of the harm, (b) the social value of the use which is interfered with, (c) the suitability of the watercourse for such use, (d) the burden on the proprietor harmed of avoiding the harm, and (e) the classification of his use as riparian or non-riparian.[7]

See cases cited in annotations to Sections 15 and 16 above.

§ 18. **b. Apportionment of water.** The right of a riparian owner to use water from a stream is of a correlative nature; that is, under the reasonable use concept of riparian rights, his taking must not only be reasonable in relation to his own needs, but also reasonable in relation to the needs of other riparian owners.[1] Accordingly, the decision of any contest among riparian owners over the use of water requires that the water be apportioned among them. In an action for damages by one riparian proprietor against another, such as that in City of Canton v. Shock,[2] it must be determined whether the defendant has taken more than his proportionate share of the water and, if so, the extent to which such taking has damaged the plaintiff. In such an action the actual quantitative apportionment made is not likely to be discovered because of the secrecy of jury deliberations. However, where an injunction is asked and allowed the decree of the court must, of necessity, be specific as to the apportionment of water. Perhaps the most usual device is to specify the quantity of water which the defendant or defendants may withdraw. Thus, in one Ohio case,[3] the decree required defendants to take no more water than would permit a flow of 125.7 cubic feet of water per minute; and, in another, the maximum was fixed at a half million gallons per day.[4] Occasionally circumstances may dictate other devices for apportionment. Thus, courts have sometimes limited the defendant to a fractional share of the water and sometimes its use has been apportioned by days rather than by quantity.[5] Whatever the method of apportionment adopted, such decrees are subject to modification as circumstances change.[6]

See also MacDonald and Beuscher, Water Rights 109 (Second Ed. 1973).

§ 19. 3. **Lands on which water is used.** Contrary to the system of water rights in which the use of stream water is governed by prior appropriation,[1] the doctrine of riparian rights, as a general proposition, limits such use to riparian owners, i.e. those who own land fronting on the stream.[2] Further, and again as a general proposition, the use of water by a riparian owner is limited to lands which are considered riparian, that is, lands which have actual contact with the stream. Mere proximity without contact with the water is not sufficient.[3] Assuming these general rules, questions arise as to what limitations, if any, exist as to the size of the riparian tract upon which water may properly be used. Further questions arise as to possible exceptional cases in which water may be used on lands not actually contiguous to a particular stream. These questions are considered in the sections immediately following.

§ 20. a. **Extent of riparian lands—in general.** Although the frontage of a particular riparian tract on a stream may conceivably be a circumstance to be considered in determining the reasonable use of water by the owner of the tract,[1] land qualifies as riparian so long as it fronts on a stream at some point; and there is no suggestion that there is any rule of law which relates the quantity of water which may

be taken to the extent of the frontage. Nor is there, in the majority of jurisdictions, any limitation on the area of land which may be regarded as riparian, assuming that it is held as one tract and is within the watershed of the stream in question.[2] In some states, however, the extent of land which may be treated as riparian is limited by considerations having to do with the derivation of the title under which the land is held. Thus, it has been held that riparian rights extend only to the smallest part of the particular tract which was acquired from the government as a single unit;[3] and, further, that land, in order to be considered riparian, must be held under a single source of title—that is, a riparian owner cannot add to his riparian estate by the acquisition of a contiguous inland tract.[4] Under this latter view, land which was once riparian loses its status if conveyed separately from land abutting on the stream and does not regain it by being later reunited with waterfront property.[5] There is no indication that either of these area limitations is applicable in Ohio. Indeed, the extension of riparian rights to all the inhabitants of a municipality located on a stream[6] suggests the contrary.

See also MacDonald and Beuscher, Water Rights 146 (Second Ed. 1973).

§ 21. b. **Limitation to watershed.** Where the use of stream water is controlled by the doctrine of riparian rights it is held generally that such water may not lawfully be diverted from the stream for use on land which, although it may otherwise qualify as riparian, is beyond the watershed of the stream from which the water is taken.[1] The California court has stated the reasons for this limitation as follows:

> "The principle reasons for the rule confining riparian rights to that part of land bordering on the stream which is within the watershed are that where water is used on such land it will, after such use, return to the stream, so far as it is not consumed, and that as the rainfall on such lands feeds the stream, the land is, in consequence, entitled, so to speak, to the use of its waters."[2]

Although the question of diversion beyond the watershed does not affirmatively appear to have been involved in the leading Ohio riparian rights case, City of Canton v. Shock,[3] it is apparent that the Court had this limitation in mind. In Judge Burket's opinion the following appears:

> "The obligation to return the water to the stream without 'any essential diminution' means that the water not consumed in the use, or 'legal purpose,' must be returned to the stream, or an opportunity given for it to flow back into the stream by the ordinary channels. It cannot be lawfully diverted, or transported, so as to prevent it from flowing back into the stream."[4]

Conceding that a diversion of stream water beyond the watershed is an unauthorized use, the question remains whether such a diversion is actionable in itself, or whether no cause of action arises in the absence of an actual injury to the party complaining. The significance of this question is that the time at which the statute of limitations begins to run will vary with the answer. There is no direct answer in the Ohio cases; but the unanimity of the Ohio cases in holding an actual injury necessary for a cause of action in the case of other types of diversion,[5] suggests that the same condition would be imposed here.

In the Northwest Ohio Water Development Plan, Legal Analysis p. 291 (Ohio Water Commission/Department of Natural Resources, 1967), the law firm of Squire, Sanders & Dempsey gave the opinion that the Northwest Ohio Water Plan was legally feasible in relation to various rights and controls, including rights of riparian owners in streams and rivers. The plan contains a number of suggested diversions from one watershed to another. The firm presented its detailed rationale in a memorandum entitled "Principles of Ohio Water Law Applicable to the Diversion of Stream Waters by a Municipal Corporation" submitted to the Ohio Water Commission. (Although the Ohio Water Commission is no longer in existence, its records are maintained by the Division of Water, Department of Natural Resources.)

§ 22. c. **Use on non-riparian lands.** The use of water from streams is confined generally to lands which are considered riparian, that is, those which border on the stream in question and which are held by a single owner.[1] In a few cases it has been held, however, that lands which are no longer riparian under this definition nevertheless continue to enjoy riparian rights because of the history of their titles. Thus, it has been held that where riparian land, owned by tenants in common, is partitioned among the owners so that one or more owners are assigned tracts which no longer border on the stream, the owners

of such tracts continue to have riparian rights.[2] Also, the owner of riparian land, upon subdividing it, may provide that riparian rights shall continue in those tracts which, after the subdivision, no longer contact the stream.[3] The question of the effect of a partition appears not to have arisen in Ohio; but there is one Ohio case holding that a grantor of a tract of land bordering a stream may reserve riparian rights in favor of an inland tract retained by him.[4] The court pointed out that, in the absence of the express reservation, all riparian rights would have passed to the grantee.

§ 23. 4. **Types of riparian owners.** Ownership of a tract of land contiguous to a stream is the basis of riparian rights; and, in general, the identity of the owner of such a tract has no effect on the existence or scope of those rights. The doctrine of riparian rights developed in a setting of individual disputes over water rights and most of the cases have had to do with the relative rights and liabilities of individuals. There seems to be no doubt, however, that corporations and partnerships, as well as individual owners, have riparian rights by virtue of the ownership of a riparian tract,[1] subject, of course, to the limitations which attach to those rights when held by individuals. So, too, the state and, in some jurisdictions, its political subdivisions, notably municipalities, have been held to have the rights of riparian proprietors. These questions are considered in the sections immediately following.[2]

§ 24. a. —**Municipalities.** A municipality may, of course, take water from a stream, for a public purpose, by virtue of the power of eminent domain, paying for the damage suffered by individual riparian owners by reason of such taking. But does a municipality, located on a stream, enjoy the status of riparian proprietor in its corporate capacity, so as to enable it to take water for the domestic and commercial uses of its inhabitants as though each of the inhabitants were, himself, a riparian owner? In most states this question has been answered in the negative, the courts of those states holding that a municipality does not have the right, merely because it is located on a stream, to divert water to the use of its inhabitants who, individually, are not riparian owners within the traditional concept.[1] But in Ohio, although an early lower court case seemed to approve the majority view,[2] the law is clearly otherwise.

In **City of Canton v. Shock**[3] the owners of a water-powered grist mill, located on Nimishillen Creek below the City of Canton, sought to recover damages for the diminution of the flow of the stream caused by the city's diversion of the creek waters for its water supply. The mill owners, who prevailed in the lower courts, contended that the city could not be considered a riparian owner for the purpose of supplying the domestic and commercial needs of its inhabitants. The Ohio Supreme Court rejected this argument and reversed the judgments of the lower courts. In the opinion, Judge Burket said:

> "Sound reason, the weight of authority, and the present state of municipal government, rights and liabilities, require that a municipality should be held and regarded, in its entirety, as an individual entity, having in its corporate capacity the rights, and subject to the liabilities, of a riparian proprietor, and we so hold in this case."[4]

The United States Supreme Court has recognized City of Canton v. Shock as stating the law of Ohio. In 1918 it refused to enjoin the diversion of river water by the City of Akron.[5] One reason given for the decision was that, under the Canton case, the city might not be exceeding its rights as a riparian proprietor.[6]

It should be noted that in the Canton case the city which was held to have riparian rights was itself located on the stream in question. The syllabus of the case states that these rights exist in a "municipality situated on a natural flowing stream."[7] Accordingly, there is nothing in the case which supports any right in a municipality to take water from a stream outside its limits, whether the water is taken directly by the city, or through a water company. An earlier Ohio Circuit Court case throws some doubt on the right of a water company to take water from a stream for the use of a municipality, and to the injury of the lower riparian owners, even though the municipality is located on the stream[8]; but the present effect of this case is questionable since, at the time it was decided, the status of a municipality as a riparian proprietor had not been established in Ohio.

§ 25. b. —**The state.** The United States Supreme Court has held that a state which is itself the owner of land contiguous to a stream has, by reason of such ownership, the same riparian rights that any other owner would have;[1] and in one Circuit Court case in Ohio the statement is made that "the state of Ohio has riparian rights in the Ohio River."[2] In the latter case no question of water rights was directly involved and it is not entirely clear whether the court was referring to riparian rights of the state, as such, or to rights enjoyed by riparian owners whose land is located in the state.[3] There is

nothing in the cases to suggest that the state, as a separate entity, has any such extended riparian rights as those enjoyed by municipalities under City of Canton v. Shock.[4]

§ 26. 5. **Waters to which the doctrine applies.** Two distinctly different fundamental legal doctrines are applied to resolve questions as to the use of water which may be found above ground. If the condition of the water is such that it may be classed as diffused surface water the doctrine of absolute dominion in the owner of the land generally is applicable.[1] If it may not be so-classed, the use of the water is governed by the doctrine of riparian rights, considered in the preceding sections. Accordingly, it is significant to consider the bases on which water found in a particular condition may be assigned to one class or another. The doctrine of riparian rights was formulated, and traditionally is stated, in terms of natural flowing streams, the recognition of which, in most instances, perhaps is not difficult. But questions may arise as to waters which flow in particular places only seasonally, or only as a result of rare conditions. Further, the applicability of the doctrine of riparian rights to waters found in lakes and ponds must be considered, as well as the effect, in all categories, of conditions produced by artificial alterations. These questions are considered in the sections immediately following.

§ 27. a. **Natural streams.** As suggested in the preceding section, it is perhaps not difficult, in most instances, to recognize a flow of water which would properly be designated as a natural stream. Definitions of such natural streams, or water courses, are, therefore, largely attempts to classify the marginal cases. Typical of such definitions is that quoted by the Supreme Court of Ohio in East Bay Sporting Club v. Miller:[1]

> "A stream of water flowing in a definite channel, having a bed and sides or banks, and discharging itself into some other stream or body of water. The flow of water need not be constant, but must be more than mere surface drainage occasioned by extraordinary causes; there must be substantial indications of the existence of a stream, which is ordinarily a moving body of water."

There are definitions to the same general effect in other Ohio cases.[2]

It has been held that where a spring is the source of a flowing stream, the spring, for purposes of determining water rights, is a part of the stream. Both constitute a natural watercourse and the owner of the land has only riparian rights in both.[3]

See also Caldwell v. Goldberg, 43 OS (2d) 48 (1975).

§ 28. b. **Flood Waters.** Statements in Ohio cases suggest that, for purposes of the application of riparian rights, the flood waters of a stream which has overflowed its banks are to be treated in the same manner as the waters of the same stream while in normal flow. The Supreme Court has said that a stream does not become any less a watercourse because at times its banks fill and overflow from freshets, rainfall, flood or backwater;[1] and, in another case, the following apears:

> "It is difficult to see on what principle the flood waters of a river can be likened to surface water. When it is said that a river is out of its banks, no more is implied than that its volume then exceeds what it ordinarily is. Whether high or low the entire volume at any one time constitutes the water of the river at such time; and the land over which its current flows must be regarded as its channel, so that when swollen by rains and melting snows it extends and flows over the bottoms along its course, that is its flood channel, as when, by droughts, it is reduced to its minimum, it is then in its low water channel."[2]

Although no Ohio case appears to have been concerned with the question of the beneficial use of flood waters, cases in other states have held that such waters cannot be diverted beyond the watershed [3] or for purposes of sale [4] to the injury of other riparian owners.[5]

§ 29. c. **Ravines, swales, etc.** Although it is commonly said that a body of water may be classed as a watercourse even though the flow is not constant,[1] it is the usual view that ravines, swales and similar depressions through which water flows only when rainfall occurs are not to be so classed.[2] The absence of a fixed and predictable source appears to make the difference.[3] A few cases to the contrary have been said to have resulted from a failure to distinguish between the water itself and the channel in which it flows.[4]

Such authority as exists in Ohio is in accord with the usual view. In Commissioners of Greene County v. Harbine,[5] a case involving the meaning of the term "watercourse" as used in the county ditch law,

the Supreme Court referred to statements by Farnham in his work on Water Rights to the effect that watercourses, on the one hand, and ravines, swales and other natural drains, on the other, are different concepts to which different rules apply; and in Dissette v. Lowrie,[6] an earlier lower court case, it was held that evidence that a ravine which fed the plaintiff's pond was low and wet in places and that water flowed through it most of the year was insufficient to establish a watercourse which the plaintiff was entitled to require to be maintained.

In Caldwell v. Goldberg, 43 OS (2d)48 (1975), where a ditch followed the natural drainage of the land but its flow was intermittent, the Supreme Court said that "diffuse and intermittent flow of water over lowlands" does not qualify as a "public watercourse". In the context of the case, this had the same significance as "natural watercourse".

§ 30. d. **Lakes and ponds.** It is generally agreed that an owner whose land abuts on a lake or pond which has an inlet or an outlet channel has the same rights, and is subject to the same liabilities, as in the case of a riparian proprietor on a stream.[1] In the case of lakes and ponds the position of the owner sometimes is termed "littoral," rather than "riparian," but this is a matter of technical nomenclature only. Such an owner may make a reasonable use of the water having regard to the similar rights of others.[2] The Supreme Court of Ohio has held that the owner of land fronting on a lake, in this case Chippewa Lake, is entitled to use the lake water for domestic and agricultural purposes in connection with his land, even though his title does not extend beyond the edge of the water.[3] Where a lake or pond is wholly on the property of a single owner his rights, nevertheless, are those of reasonable use only, so long as such lake or pond feeds a watercourse.[4] However, where the water from such an intra-tract lake or pond has no apparent outlet into a watercourse it has been regarded as subject to the exclusive use of the owner of the land on which the lake or pond is found.[5]

§ 31. e. **Effect of artificial changes.** Traditionally riparian rights have been regarded as those which arise in a landowner by reason of the location of his land on a natural stream, which rights entitle him, within limits, to the continued flow of the stream in its natural condition. But this does not mean that the same, or similar, rights may not attach to a body of water the location, condition or existence of which is the result of artificial operations. The extent to which such rights will be held to exist will depend both on the situation within which the change was made and on the particular legal theory applied to that situation.[1]

Changes effected by one owner may, of course, subject him to liability if the changes infringe the rights of other riparian owners; but the question here is whether other owners may acquire rights by reason of such changes. Typically the question arises where one owner has made changes and then wishes to, or does, effect another change which causes the stream, or other body of water, to revert to its former condition. May he lawfully do so over the objections of others who have been benefited by the changes? Where a riparian owner effects artificial changes in a stream, which changes benefit a part of the land held by him, and subsequently conveys that part of the land which is benefited to another party, the grantee likely will be able to insist on the continuance of the artificial condition. Here the theory is that of an easement included, by implication, in the grant.[2] Similarly, if the person who made the changes retains the part of his land which is benefited and conveys another part, he likely will be held to have reserved an easement by implication.[3]

Where changes made by an owner benefit land then owned by another, as where the damming of a stream creates a lake which backs up on upstream property, there is no deed involved upon which an easement can be grafted by implication and the theoretical basis of any right which the upstream owners may have in the continuance of the artificial condition must be somewhat different. Sometimes such a right is asserted on a theory of reciprocal easements arising by prescription; that is, after the period has run which gives the builder of the dam the right to maintain it against the upstream owners, such owners, by reciprocity, have a right to insist that it be continued.[4] This theory has, however, been regarded by some as a distortion of the principle of prescription[5] and most cases which have required the continuance of the changed conditions have done so on the basis of estoppel, or some closely analogous theory.[6] One Ohio case, Peter v. Caswell,[7] suggests that the estoppel theory may be applied in this state in a proper case. Water in a stream had been turned from its ancient channel for mill purposes but a gate had been erected, the only purpose of which would have been to enable the mill owners to return the stream to its original channel. After several years the mill owners did return the

stream, while repairing the mill, and the water flowing in the old channel damaged the plaintiff. The court held that there was nothing in the situation to lead the plaintiff to believe that the change in the channel was to be permanent and, accordingly, the defendant was not estopped to return the water to the original channel.

The above refers to changes effected by private proprietors in the course of private improvements. In the case of the canals, constructed in the nineteenth century by the State, or by private companies under state authorization, it has been held that the owners of land abutting on the canals have no property interest in the incidental benefits afforded by them and cannot enjoin their abandonment or claim compensation for such abandonment.[8]

§ 32. D. **Disposition of Water.** The questions considered in the preceding sections arise out of conflicts over the beneficial use of water from streams. In those conflicts one landowner, typically, has complained that because of the activities of another he has been deprived of his lawful share of the water. Such complaints occur, of course, when water is in short supply. Difficulties of another sort may develop out of the propensity of stream water, especially when overly plentiful, to damage property. In these cases the typical complaint is that operations conducted by one landowner have resulted in casting water on the land of another so as to cause damage to the latter, or to render more severe the damage which would have occurred in any event.

The two succeeding sections deal with such damage cases, excluding those involving damage caused by surface water which are considered elsewhere.[1]

§ 33. 1. **Ordinary Waters.** In some jurisdictions it is held that a riparian owner may construct an embankment, or other structure, along a stream in order to protect his land from commonly recurring flood waters without incurring any liability for the damage which his action may cause to other riparian owners;[1] but the general rule is that no such right exists.[2]

Ohio follows the general rule. In Crawford v. Rambo[3] it was held that the owner of land situated on a stream has the right to erect embankments for the purpose of protecting it from the current, or otherwise benefiting it; but in doing so he must exercise ordinary care to determine whether his actions will cause material damage to other owners at the time of such floods as might reasonably be anticipated. If reasonably foreseeable damage does result from the erection of an embankment, liability attaches for the damage and, in a proper case, the court may order the embankment removed.[4] If damage to others does in fact occur during an ordinary flood, and if it seems likely that it will continue, it becomes the duty of the person who erected the embankment to remove or modify it so as to prevent future damage, even though the damage could not have been foreseen at the time of the original construction.[5]

Similarly, a riparian owner who erects a dam across a stream is liable for the damage which results from the backing up of water on upstream lands during times of normal high waters;[6] and where such a dam breaks during a normal flood, with resulting damage to a lower owner, the person who built the dam is liable for the injury caused, negligence in such a case being presumed.[7]

§ 34. 2. **Extraordinary flood waters.** The liability of a riparian owner for damage caused to others by reason of embankments, dams, etc., built on his land is conditioned on the fact that such damage might reasonably have been anticipated.[1] Accordingly, there is no liability where the damage is caused by an extraordinary or unprecedented flood so outside ordinary experience that its occurrence could not reasonably have been foreseen.[2] Whether a particular flood is of such a character as to come within this exception is a question of fact.[3] In one Ohio case[4] the court, determining the facts on appeal, held that the defendant's having witnessed the flood of 1884 on the Scioto, which was unprecedented, did not, of itself, require him to anticipate a recurrence of such high waters. However, the court stated that had two or three such floods occurred before the defendant built his embankment, he would have been bound to anticipate the occurrence of others.

§ 35. E. **Pollution.** In 1951 the Ohio General Assembly enacted a water pollution control act which established a water pollution control board with broad powers to act in relation to the pollution of the waters of the state.[1] Under this act it is unlawful for any person, defined to include the state and its subdivisions, corporations, individuals, partnerships, or other entities, to discharge harmful substances into any of the waters of the state except under a valid permit issued by the pollution control board.[2] The board has full powers to investigate, hold hearings and issue orders and to enforce its orders and

compliance with the statute through criminal prosecutions and proceedings for injunctions.[3] The act applies to all waters located wholly or partly within, or bordering on, the state, except "private waters which do not combine or effect a junction with natural surface or underground waters."[4] With a few specific exceptions,[5] it applies to the discharge of all substances which render water harmful to public health or to animal or aquatic life or which hinder its use for domestic, industrial, agricultural or recreational purposes.[6]

By express provision, the water pollution control act saves any rights which riparian owners, or others, may have, under equity or the common law, to suppress nuisances or abate pollution.[7] In a number of Ohio cases riparian owners have recovered for damage caused by reason of pollution;[8] and, in some, injunctions have been granted against the continuance of pollution.[9] It has been held that it is the right of a lower riparian owner to receive the water free from contamination by artificial means and that he may maintain an action for any substantial injury which results from such contamination, regardless of whether the upper owner conducted his operations with care, or was following the general practice, or would have been put to considerable expense to avoid the contamination.[10] If the evidence shows an injury, that the deposits were made intentionally and that the result might reasonably have been foreseen, a cause of action is made out.[11] In these cases, involving serious pollution by reason of the discharge of sewage or industrial wastes into a stream, the Ohio courts have shown no tendency to inquire into the reasonableness of the defendant's activity. However, in a recent court of appeals case in which the plaintiff sought to recover for damage caused by the discharge of mud, seeds, etc. into a stream, the court, in upholding a judgment for the defendant, pointed out that there was no allegation of negligence or unreasonable or improper use of the defendant's land, and held that in the absence of such a showing there was no cause of action, notwithstanding that some incidental damage may have been suffered.[12] Since the pollution in the sewage and industrial waste cases appears usually to have been such as virtually to destroy the stream for purposes of beneficial use by downstream owners, it well may be that the results would have been the same had the reasonable user doctrine been applied expressly.

An earlier statutory procedure by which the department of health, after investigation and hearing, may order the purification of sewage or other wastes being discharged into watercourses, is still a part of the Revised Code.[13]

The Water Pollution Control Board was abolished in 1972, and in its place was created the Environmental Protection Agency. The Revised Code references in this section are still pertinent as they apply to powers of the Environmental Protection Agency, except that the Department of Health powers in Sections 6111.09 - 6111.11 of the Revised Code have been repealed.

The definition of "pollution" in Section 6111.01 has been changed from the former description pertaining to effect on water, to a description of types of material that constitute pollution (sewage and industrial and other wastes).

Creation of the new agency and major changes in the statutes were designed to meet requirements of the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. Sec. 1251-1376), creating the National Pollution Discharge Elimination System (NPDES) under which the U.S. Environmental Protection Agency could issue discharge permits. The law allowed states to obtain primary enforcement responsibility by enacting required powers and standards and by developing an acceptable program. Stated goals of the federal law are to eliminate all discharges of pollutants into navigable waters by 1985 and, wherever attainable, to provide water quality suitable for recreation and for the protection and propagation of fish, shellfish and wildlife by July 1, 1983.

Prior to 1972, Ohio water pollution control statutes were directed at achieving general standards of water quality for various uses in particular bodies of water. The 1972 changes required by federal law added discharge standards expressed as effluent limitations applicable to point sources of pollution, aimed at the ultimate goal of prohibition of all pollution.

Other parts of the Ohio Revised Code contain specific provisions relating

to water pollution, including: Sec. 307.79 requiring adoption of standards by the Division of Soil and Water Districts, and authorizing adoption of rules by county commissioners, to abate wind or water erosion or degradation of waters by soil sediment in conjunction with land grading and other soil-disturbing practices for non-farm purposes, and requiring adoption of standards by the Division to abate wind or water erosion or degradation of waters by soil sediment in conjunction with farming or silvicultural operations, and degradation of waters by animal waste; Sec. 1509.22 prohibiting contamination of surface or underground water by brine or waste from oil and gas production; Sec. 1513.07 and 1523.16 (B) (5) requiring that a person strip mining coal prevent water pollution during mining and reclamation; Sec. 1514.02(A) (9) (h) requiring that a person mining sand, gravel, limestone, etc., present a plan that will insure that contamination of underground water will be prevented; Sec. 3734.02 requiring the Director of Environmental Protection to adopt regulations for solid waste disposal that will assure that such disposal will not cause or contribute to water pollution, and Sec. 3734.12 to adopt regulations for disposal and handling of hazardous waste as necessary to protect the environment; Sec 6111.044 providing special procedures for liquid disposal underground; and Sec 6111.42 requiring the Environmental Protection Agency to prescribe regulations for the drilling, operation, maintenance, and abandonment of wells as necessary to prevent contamination of underground waters. See also Secs. 1531.29 and 3767.32 prohibiting placing of refuse in or near a stream or lake. (References to federal prohibitions on placement of materials are contained in annotation to Section 48, below.)

See also Remedies of Riparian Owners, 43A O Jur Pollution Control and Conservation Laws 34, Sec 100 et seq; 93 Corpus Juris Secundum Waters 686, Sec. 43 et seq; and Gindler, Water Pollution and Quality Controls, 3 Waters and Water Rights (R.E. Clark, Ed., 1967). For recent Ohio lower court cases affirming common-law rules concerning water pollution see Crane v. Brintnall, 58 00 (2d) 175 (1972); Peyton v. Hammer, 56 00 (2d) 265 (1970); Board of Commrs. v. Mentor Lagoons, Inc., 35 00 (2d) 244 (1965); and Aubele v. Galetovich, 83 Abs. 200 (1960).

III DIFFUSED SURFACE WATER

§ 36. A. **Relation to Other Waters.** The law of the more arid states comprehends that water, at a given time and place, is pursuing a cycle all stages of which are related and that the taking of water from whatever source, whether from the ground or from the surface, inevitably affects the total supply. The opinion in a Colorado case recognizes that the flow of a stream is as much affected by intercepting and diverting water which otherwise would flow into it as by directly withdrawing water from the channel.[1] In these states rights in surface water are generally the same whether the water is diffused or flows in an identifiable watercourse.[2] However, as stated earlier, the tradition in most jurisdictions has been to regard water which is diffused over the ground as being in a separate category of its own and governed by legal rules which are applicable neither to streams nor to underground percolating water.

Surface water, thus distinguished for legal purposes, has been defined as that which is diffused over the ground derived from falling rains and melting snows. It continues to be such until it reaches some well defined channel in which it is accustomed to and does flow with other waters, whether derived from the surface or springs. It then becomes the running water of a stream and ceases to be surface water.[3] Surface water does not lose its character as such merely because it has collected in a swamp or pond; but if the pond is a permanent one only the overflow from it can be treated as surface water.[4] It is difficult to draw a clear dividing line where diffused surface water collects and flows intermittently through depressions. It is said that the factors weighed by the courts in such cases include the presence or absence of a clearly defined bed and banks, the length and dependability of the annual flow, and the local classification given to such waters as shown by the name by which they are known.[5]

Although diffused surface waters have been placed in a legal category of their own, the facts in the

actual cases frequently have been such as not to conform readily to this separate treatment. Many of the cases, in Ohio as elsewhere, have resulted from situations in which diffused surface water has been collected from the land of one person into a clearly defined watercourse by which it is conducted onto the land of another.[6] In such cases the manipulation of separate legal concepts controlling diffused surface water and water collected in watercourses becomes difficult.

§ 37. B. **Use of Surface Water.** The law relating to diffused surface waters has been concerned largely with problems arising from attempts by landowners to rid themselves of such water.[1] Cases dealing with the affirmative use of the water are not nearly so numerous as those having to do with the use of water flowing in streams. Such authority as there is is to the effect that diffused surface water may be taken freely by the owner of the land on which it is found and used by him to the exclusion of any lower owner. This position was thus stated in an early English case:[2]

> "No doubt all the water falling from heaven and shed upon the surface of a hill, at the foot of which a brook runs, must, by the natural force of gravity, find its way to the bottom and so into the brook; but this does not prevent the owner of the land on which this water falls from dealing with it as he may please and appropriating it. He cannot, it is true, do so if the water has arrived at and is flowing in some natural channel already formed. But he has a perfect right to appropriate it before it arrives at such a channel.

American authority is to the same effect. It is said that diffused surface water belongs to the land owner who captures and retains it; he may divert it for any use, domestic or commercial without reference to a resulting depletion of the water supply of other owners.[3] One case has suggested that the appropriation of surface water by an owner must be in a reasonable use of his land; which appears to mean, at least, that one person may not maliciously deprive another of the use of surface water.[4]

As elsewhere, authority in Ohio on the use of diffused surface water is slight. Such as it is it points to the same conclusion—that such water is the property of the owner on whose land it falls to be used by him as he sees fit. In 1861, in a case which actually involved underground water,[5] the Supreme Court of Ohio took occasion to comment on the law governing other types of water as well. The opinion by Judge Brinkerhoff included the following:[6]

> "In respect to surface waters which, without any permanent, distinct and definite channel, are shed, or by any means pass, from the lands of one to those of another proprietor—it seems now to be established doctrine that, unless some right derived from actual contract or positive legislation intervene, the doctrine which asserts the absolute dominion of proprietors applies to its full extent and without exception. Paramount considerations of public policy forbid the acquisition of any right in such waters by an adjoining proprietor on the ground of prescription. Otherwise than on the ground of actual contract or positive legislation, he can have no legal right in such waters; and, whatever damage he may suffer by reason of the exercise of his neighbor's rightful command over his own soil, it is damnum absque injuria. To this effect the cases are nearly uniform and seem to rest on a broad and sound basis of reason and policy."

Some twenty-five years later the concept of ownership of diffused surface water by the owner of the land on which it falls was applied by a common pleas court in an action brought by a private land owner to enjoin a taking of water by the City of Springfield.[7] The court held that the City, although owning land on a stream, was not a riparian proprietor and so was not entitled to take water from the stream for its water supply.[8] But the evidence in the case also showed that there was a supply of water on the surface of the ground and percolating in the soil which was not in defined channels. Quoting from Gould on Waters to the effect that no right can be claimed in the continued flow of such waters, the court held that the city might lawfully take the surface and percolating waters; and they were excepted from the injunction which was issued.

For a discussion of the law governing rights to use of diffused surface water see Davis, The Law of Diffused Surface Water in Eastern Riparian States, 6 Conn. L. Rev. 227 (1973).

§ 38. C. **Disposition of Surface Water.** As stated above,[1] the law of surface water has been concerned very largely with the damage caused by such water and attempts to fix responsibility for the

damage. It is worth noting that the problems arising in this connection, although clearly related, fall into several categories depending on the fact situations in which the damage occurs. These situations typically involve two tracts of land, one upper and one lower with respect to the flow of diffused surface water. The damage caused by the water may occur either to the upper land or to the lower; and in either case it may be claimed that the damage is the result of a wrongful act by the owner of the other tract of land. Thus, a lower owner may throw up an embankment on his land which results in impeding the flow of surface water from the upper tract, to the damage of the latter. In such a case the question will concern the responsibility of the lower owner for his actions. Conversely, the lower owner may be damaged by surface water flowing from the upper tract, in which case the liability of the owner of the upper tract will be in question. Whether the damage occurs to the upper or to the lower tract, the resolution of the question of responsibility may depend, further, on whether the owner of the upper tract has changed the natural flow of surface water by alterations made to his land and, if he has so changed the flow, on the type and extent of the change.

In considering the rules which have been developed with respect to the disposition of surface water it will be convenient to assume, first, that the land of the upper owner is in its natural state.[2] The effect of alterations made by the owner of the upper tract in the drainage of his land will then be considered.[3] It will be seen that most of the litigation, and most of the confusion as to the applicable rules of law, arises from situations of the latter type.

For a thorough description of the law of disposition of diffused surface water, see Beck, The Law of Drainage, 5 Water and Water Rights 475 (R.E. Clark Ed., 1972). See also Bridges, Application of Surface Water Rules in Urban Areas, 42 Mo. L. Rev. 76 (1977); Dobbins, Surface Water Drainage, 36 Notre Dame Lawyer 518 (1960); 59 ALR (2d) 421 (1958); 78 Am. Jur. (2d) Waters 561, Sec. 117 et seq.; 93 Corpus Juris Secundum Waters 799, Sec 112 et seq., and Dewsnup and Jensen, A Summary - Digest of State Water Laws p. 47 (National Water Commission, 1973).

§ 39. 1. **Drainage of land in natural state.** An alteration in the physical characteristics of a tract of land may result, intentionally or otherwise, in obstructing the natural drainage of diffused surface water from an adjoining tract owned by another person. In any particular state the liability of the person thus obstructing the natural drainage for the damage caused, and his susceptibility to a court order prohibiting the maintenance of the obstruction, will depend, primarily, on which of several basic legal approaches to the matter that state has adopted. These approaches have been designated (a) the common enemy doctrine, (b) the civil law doctrine, and (c) tne doctrine of reasonable use. Each of these will be considered briefly.

§ 40. a. **Common enemy doctrine.** In approximately half of the American states the question of the right to obstruct the natural flow of diffused surface water is controlled by the theory that such water is a common enemy of man, to be fought off by each property owner as he sees fit.[1] Under this doctrine each property owner is privileged to erect embankments or otherwise impede the flow of surface water onto his land. In doing so he incurs no liability to the upper owner upon whose land the surface water may be thrown back. Any damage caused to the upper owner is not regarded as a legal injury.[2] This approach frequently is referred to as the "common law doctrine," although it has been pointed out repeatedly that this designation is misleading in that the rule of the English common law is not the common enemy doctrine, but rather is the same as the doctrine of the civil law as set out in the next section.[3]

For reference to the common enemy doctrine in relation to damage caused by changes in upper land see Section 45, below, and annotation.

§ 41. b. **Civil law doctrine.** By the so-called Civil law doctrine, recognized by nearly half the states, lower lands are held to be servient to upper lands with respect to receiving the natural flow of diffused surface water. The upper owner may require the lower to receive the diffused surface water which naturally drains onto the lower land.[1] This theory acts upon the maxim that water is descendible by nature and its usual flow should not be interfered with, the burden being borne by the land onto which it naturally flows rather than by land onto which it can only be made to flow by artificial means.[2] This doctrine, as its name suggests, derives from the continental law of Europe, but it was also the doctrine of the English common law.[3]

For reference to the civil law doctrine in relation to damage caused by changes in upper land see Section 45, below, and annotation.

§ 42. c. **Reasonable use.** In a few jurisdictions a third type of basic doctrine concerning the right of a lower owner to obstruct the natural flow of surface water prevails. This doctrine, sometimes referred to as the reasonable use doctrine,[1] makes the legality of an obstruction of the water flow depend on the circumstances of the particular case. If the obstruction results from a use of the lower land which is regarded as "reasonable" no liability is imposed upon the lower owner. Whether a particular land use is, or is not, reasonable is largely a question of fact to be decided in each case. The New Hampshire court, which has been the principal exponent of this view, has defended it as follows:

> "If the correlative rights of adjoining owners in the control of surface water, as thus defined, is peculiar to the jurisprudence of this state, the principle involved is based upon a broader ground of justice than attends the practical operation of either of the two extreme views above noted * * * The question presented in such cases is not so much one of law as of fact. It would doubtless be convenient if it could always be answered by citing a stereotyped definition of legal right. But as the situation of all adjoining owners of land is not the same, and as the circumstances attending the use of land in view of the flow of surface water are infinitely various, the failure to attain substantial justice by the enforcement in all cases of a rule of law which does not recognize these important differences is not surprising. The result is that the question of the reasonableness of the use in a given case must be determined as a question of fact under all the attendant circumstances."[2]

It should be noted that the term "reasonable use," as employed here, appears to refer to the use which the defending owner is making of his land, rather than to the theory of correlative rights in the use of water, which is the basic doctrine applicable to streams. It should also be noted, as will be seen below, that the concept of reasonable or unreasonable use of the land may appear in jurisdictions which are committed to one of the other basic doctrines. Indeed it may be doubted whether any jurisdiction applies either the common enemy or the civil law view in its full vigor.[3]

For reference to the rule of reasonable use in relation to damage caused by changes in upper land see Section 45, below, and annotation.

§ 43. d. **Ohio law—general rule.** The cases make it quite clear that Ohio is committed to the general doctrine of the civil law with regard to the obstruction of the natural flow of diffused surface water.[1] As early as 1865 the Supreme Court said the principle was well established that where two parcels of lands, belonging to different owners, were adjacent and one was lower than the other the lower parcel was subject to a servitude to receive the water which naturally ran from the upper.[2] The right of the owner of the upper parcel was referred to as a natural easement in the lower parcel to the extent of the natural flow of the surface water. A few years later the Court reaffirmed that principle and held that the obstruction of surface water by a lower owner was a wrong for which an action might be maintained by the owner of the upper parcel without the requirement that he show damage or injury.[3] This civil law doctrine has been asserted in numerous later cases. It is clear that it applies, as stated, in cases where the lands involved are rural and where the upper parcel of land is being drained by a natural run-off of water, unaltered by any artificial drainage devices. Beyond these limits the extent of the application of the civil law doctrine is perhaps not so clear.[4]

§ 44. e. **Exception in urban areas.** In 1953 an Ohio court of appeals held that although Ohio has adopted the civil law doctrine with respect to the drainage of surface waters of rural lands, this doctrine does not apply to urban areas.[1] The court held that the owner of a city lot which received the natural flow of surface water from an adjoining lot might fill his lot and erect structures on it without incurring liability to the adjoining lot owner by reason of the consequent obstruction of the flow of surface water, provided the improvements were effected by the lower lot owner in a reasonable manner.

This is the latest of a series of Ohio cases which have considered rights to the drainage of surface water as between adjoining property owners within municipalities. Although these cases have extended over a period of more than seventy-five years, it is not yet entirely clear whether a different rule applies to urban areas, or, if there is a different rule, what it is. The question appears first to have been raised in the Superior Court of Cincinnati in 1873.[2] That court pointed out that the Supreme Court of the State, in Butler v. Peck[3] and Tootle v. Clifton,[4] the cases which established the doctrine of the civil law as to surface water drainage in Ohio, had stated no exception for urban areas. Although those cases involved rural land, the Cincinnati court felt that if the Supreme Court had not intended the doc-

trine to be of general application it would have said so.

Two cases in the Supreme Court of Ohio include statements about the rule to be applied in urban areas. In Springfield v. Spence,[5] the Court held that the City of Springfield was not liable for damage done to the lot of the plaintiff by surface water flowing onto it, not naturally but by reason of the raising of other lots to grade. In the course of the opinion the Court said that surface water is a common enemy in a city and that the owner of a private lot can raise it to grade if he so desires, and thus keep out surface water.[6] Some years later, in Mason v. Commissioners of Fulton County,[7] a case involving rural lands, the Court, after stating the rule that a landowner may use natural drainage channels through his land to carry off the flow of surface water, said: "as a matter of precaution, it may be proper to call attention to the fact that the rule is not always applied in the case of city lots."[8]

Some subsequent cases in the lower courts have asserted that a different rule with respect to the right to drainage of surface water applies in urban areas.[9] Other such cases have denied that any difference exists.[10]

If it is assumed that a different rule applies in urban areas, as the weight of Ohio authority perhaps indicates, what is that rule? As stated above, the Supreme Court once said that surface water in cities is a common enemy.[11] On the other hand, the most recent case on the Courts of Appeals specifically held that the rule is that of reasonable use[12] and this is supported by an earlier Court of Appeals case.[13] In the latter case the court indicated that reasonable use of property in an urban locality is such a use as might reasonably be expected to exist. So viewed, the term "reasonable use" probably comprehends most uses which are at all likely to occur, except perhaps the case in which the flow of surface water is blocked from motives of pure malice; and it is unlikely that a present day court will support such an action.

See annotation under Section 45, below.

§ 45. 2. **Effect of changes in upper land.** In the discussion above relating to liability for obstructing the flow of surface water[1] it has been assumed that the upper land from which the surface water drained was in its natural condition. The general rule in Ohio in that situation, is that the lower owner is required to take the flow of surface water from the upper land, and, accordingly, is liable for any obstruction of it.[2] In urban areas it is likely that the lower owner is not liable for obstructions of surface water which result from a reasonable use of the lower land.[3] So long as the upper land remains in its natural condition the upper owner will not be liable, under either rule, to the owner of the lower land for damage caused to the lower land by surface water, since, by the assumption, the upper owner has done nothing to cause the damage. However, in many of the litigated cases the owner of the upper land has, by ditching, tiling or otherwise, changed the natural drainage of surface water from his land. Where this occurs the possibility of his being liable for damage caused to the land of the lower owner is raised.

It is clear that the questions, on the one hand, of liability of the owner of the lower land for obstructing the flow of surface water and, on the other, of liability of the upper owner for increasing or otherwise changing such flow, are reciprocal. The answer to each question depends on the amount and nature of surface water flow which the law requires the lower owner to take. If the lower owner obstructs water which the law requires him to take he, of course, is liable. If the upper owner precipitates onto the lower land water which the law does not require the lower owner to take, the upper owner is liable; such action is a trespass and renders the upper owner liable regardless of whether he may be said to have been negligent in the manner in which his improvements have been made.[4]

If the rule of the civil law, requiring the lower owner to take the natural drainage of surface water from the upper land, were universally applicable, and if this rule required the lower owner to take only the natural drainage of surface water with no changes whatever by the owner of the upper land, the question of the liability of the upper owner for damage caused by artificial changes instigated by him would be easily answered. Although it has been said frequently that the servitude of the lower owner to accept the flow of surface water is limited to the "natural" flow of such water,[5] it is clear from the cases that the upper owner may nevertheless effect certain changes in the drainage of surface water from his land without incurring liability. It cannot be said that **any** change in the drainage of the upper land relieves the lower land of its servitude to accept the water. Accordingly it is necessary to inquire what the rights of the upper owner are with respect to changes in surface water drainage.

Since the original publication of this report in 1957, the Ohio cases concerning diffused surface water have not involved situations where water

is thrown back upon the upper owner, but rather of damage caused by changed or augmented flow affecting the lower owner's land.

In this regard, there has been increasing reference to the "rule of reasonable use".

Im Masley v. Lorain, 48 OS (2d) 334 (1976), the Supreme Court, citing City of Canton v. Shock, 66 OS 19 (1902), Ohio's landmark riparian law case, identified as a "basic principle" that "the city must exercise its rights reasonably, and so as to cause as little injury to others as circumstances permit." A detailed statement of a reasonable use rule is contained in Chudzinski v. Sylvania, 53 O App (2d) 151 (1976), including the text of the American Law Institute's Restatement, 4 Torts directed specifically to the subject of flow of surface waters and citing factors to be weighed. The court cited the following statement of the rule:

> *"Under it a possessor of land is not unqualifiedly privileged to deal with surface water as he pleases, nor is he absolutely prohibited from interfering with the natural flow of surface waters to the detriment of others. Each possessor is legally privileged to make a reasonable use of his land, even though the flow of surface waters is altered thereby and causes some harm to others. He incurs liability only when his harmful interference with the flow of surface water is unreasonable." Kinyon and McClure, Interferences With Surface Waters, 24 Minn. L. Rev. 891,904 (1940).*

In Butler v. Bruno (RI), 341 A 2d 735 (1975), the Supreme Court of Rhode Island announced its adoption of the rule of reasonable use, in lieu of the "common enemy" and "civil law" rules, citing 11 jurisdictions that have adopted the rule.

Concomitantly with increased reference to "reasonable use", reference to the "common enemy" rule has declined. Where public improvements are concerned, the "common enemy" rule appears to have no application.

In Lucas v. Carney, 167 OS 416 (1958), the county had changed the grade and permeability and made other changes to a parcel in the city of Youngstown for the construction of a garage, which allegedly caused inundation of an abutting privately-owned parcel where no water in perceptible quantities had flowed prior to the changes. The Supreme Court did not discuss the "common enemy" rule but held that the petitions set forth a cause of action, citing the syllabus of City of Norwood v. Sheen, Exr., 126 OS 482 (1933): "Any direct encroachment upon land, which subjects it to a public use that excludes or restricts the dominion and control of the owner over it, is a taking of his property, for which he is guaranteed a right of compensation by Section 19 of the Bill of Rights."

The Supreme Court later gave this rule a broader application in Masley v. Lorain, 48 OS (2d) 344 (1976), in a case involving privately-owned lots on a natural watercourse in the city of Lorain. The city implemented a storm sewer construction program which increased the volume and accelerated the flow of water into the watercourse, causing flooding of the lots. In this case, the court said that in Lucas v. Carney (supra) it had impliedly rejected the common enemy doctrine of surface water drainage as applied to public improvements in urban areas. Emphasizing the failure of the city to improve the stream in order to carry the increased water that the city knew would result from the drainage improvements, the court said that the correct principle of the Ohio cases is that a municipal corporation may make reasonable use of a natural watercourse to drain surface water, and will not be liable for incidental

damages; that it is not liable for increased flow caused simply by improvement of lots and streets; and that a municipal corporation is not ordinarily subject to an injunction to prevent the completion of a storm sewer which will increase the volume and accelerate the flow of water; but where it constructs a public improvement such as a storm sewer system and thereby effectively takes private property for its own use by casting surface waters upon that property, it must pay compensation under Section 19, Article I, Ohio Constitution.

A different result has been reached in the earlier case of Munn v. Horvitz, 175 OS 521 (1964), another urban situation where the city of Mayfield Heights built a storm sewer that emptied into a natural watercourse upon which plaintiff's property was located. There, the court found that even though the city had committed an unlawful act 36 years earlier in locating an older sewer that diverted water into the watercourse from two watersheds that did not naturally drain into it, it had acquired a prescriptive right by open and adverse diversion of such water for more than 21 years. This right allowed it to build a new sewer along the same course, draining the same area but carrying a greater volume of water.

The emphasis of Munn v. Horvitz contrasts with that of Masley v. Lorain. In the former case the Court, citing City of Canton v. Shock, 66 OS 19 (1902), stated:

> *The foregoing rule would appear to be necessary if the law is to foster economic growth and development rather than to inhibit such development. Such a rule imposes no undue burden on a lower-property owner, who must be held to expect, when he acquires lands through which a natural watercourse flows, that the dominant landowners will develop their lands to their most beneficial uses and, in the promotion of those uses, will collect surface water and accelerate the flow thereof into its natural watercourses...It must be presumed that the lower-land owners purchased their lands aware of this contingency, since community growth and land development are inevitable."*

In Masley v. Lorain the Court also cited Canton v. Shock, for the rationale that "Each should use the water reasonably, and so as to do as little injury to the others as circumstances will permit." The Court said:

> *"It would be anomalous indeed to hold that a municipality may plan and build a storm sewer system to collect surface water and channel it into a natural watercourse, with knowledge that the watercourse is insufficient to accommodate the flow during rains which can be reasonably anticipated, and thereby cause continual flooding of lower land, without compensation to the owner, despite the municipality's liability for causing surface water to flood the property directly, and its liability for failure to use reasonable care in its construction of a hydraulic system in order to prevent injury to others in times of flooding. This anomaly is particularly apparent where, as here, a different design would have averted the flooding."*

In two urban-area cases in courts of appeals, Chudzinski v. Sylvania, 53 O App(2d)151 (1976), and Myotte v. Mayfield, 54 O App(2d)97 (1977), involving accelerated runoff from a shopping center in one case and an industrial park in another, the courts flatly stated that they were following the rule of reasonable use. In the Sylvania case the court cited, as factors to be considered, whether in-stream construction by the city was reasonable (applying rules of the American Law Institute Restatement, 4 Torts), and alternatives available to the city. In the Mayfield case, the court found that the village, although it knew of the recurring flooding of plaintiff's property, failed to implement a

real solution such as widening of the existing watercourse so that the increased flow of water from the industrial park would be accommodated--at relatively small cost to the village, in contrast to the serious harm to the market value of plaintiff's land if the flooding persists. The court cited Armstrong v. Francis Corporation, 20 N.J. 320 (1956), as follows:

> *"While today's mass home building projects, of which the Francis development is typical, are assuredly in the social good, no reason suggests itself why, in justice, the economic costs incident to the expulsion of surface waters in the transformation of the rural or semi-rural areas of our State into urban or suburban communities should be borne in every case by adjoining landowners rather than by those who engage is such projects for profit. Social progress and the common well-being are in actuality better served by a just and right balancing of the competing interests according to the general principles of fairness and common sense which attend the application of the rule of reason." (Emphasis added by the Ohio court.)*

While the "civil law" rule and the "common enemy" rule have been criticized for their arbitrariness, the "reasonable use" rule has been criticized as lacking certainty in application. A defender of the traditional rules states:

> *"The author recognizes the theoretical superiority of the reasonable use rule but feels that the practical application of the rule is so difficult, and the results are so uncertain, that this theoretical superiority should give way to more practical considerations. Both agriculture and industry need a rule which is sufficiently definite to permit the improvement of surface water drainage without the threat of a law suit each time such an improvement is constructed. In the absence of such a rule a prudent man might well be required to seek a declaratory judgment to determine the reasonableness of his plans before starting the construction of any drainage work which will in any way alter existing conditions." (Dobbins, Surface Water Drainage, 36 Notre Dame Lawyer 518, 1960).*

Another defender denies that the three rules are merging, calling this a "deceptive impression". (George, Surface Water Flooding in Urban Areas: Rights and Remedies Under the Common-Enemy Doctrine, 12 Tulsa L.J. 574, 1977).

See also Long, Surface Waters and the Civil Law Rule, 23 Emory L.J. 1015 (1974).

§ 46. a. **Changes in location of quantity of discharge.** The natural drainage of diffused surface water from the land of one person onto that of another has aspects both of quantity and of location. Some of the surface water which accumulates on the land of an upper owner may flow off in one direction and some in another; some may accumulate on the surface to pass off ultimately by percolation into the soil or by evaporation. As a general proposition the civil law doctrine requires the lower owner to receive only that part of the surface water which naturally passes over his land from upper land, and to receive it only in the places where it naturally flows. Accordingly an upper owner cannot discharge, directly onto lower land, surface water which, but for changes instigated by him, would have evaporated or which would have passed off in another direction and over the lands of others.[1] Similarly, even as to surface water which would have flowed naturally over particular lower land, the upper owner cannot turn such water onto the lower land in a different way or in different places.[2]

Butler v. Peck,[3] an early Ohio Supreme Court case on surface water, is an example of the application of these principles. Surface water naturally passed from the land of the defendant to the adjoining land of the plaintiff. There was a marsh on the defendant's land covering several acres. The evidence showed that in wet times some of the water from this marsh naturally overflowed over the plaintiff's

land; but defendant had so ditched his land as to drain over the lower land of the plaintiff water which, but for the ditch, would have evaporated from the marsh. The trial court charged the jury that in this state of facts the plaintiff was entitled to recover for the damages caused by the additional water precipitated onto his land. This was affirmed by the Supreme Court. The servitude which the upper owner enjoys in lower lands with respect to the drainage of surface water is limited, the court said, to that water which naturally flows over the lower land; to hold that the upper owner may divert water which has no natural outlet over the lands of the lower owner would be "to sanction the creation of an easement which nature has denied."

A landowner cannot lawfully increase the burden on lower lands by collecting surface water and discharging it in large quantities at points other than those established by natural drainage. Johnston v. Miller, 15 O App (2d) 456 (1968). Ground water used for toilets, washrooms, restaurants, and other business uses is not part of the surface water which a lower owner must accept from the owner of higher ground. Bey v. Wright Place, Inc., 108 O App 10 (1956).

See also Lucas v. Carney, 167 OS 416 (1958), where the court found that augmented flow over the servient land caused by changes in the county-owned dominant land resulted in a taking requiring compensation under Section 19, Article I, Ohio Constitution.

Necessity of injury: In Spicer v. White Brothers, 118 O App 11 (1962) a court of appeals found that flow following a course of normal drainage may not be enjoined in the absence of a showing of substantial injury constituting an appropriation of property. However, the Supreme Court in Caldwell v. Goldberg, 43 OS(2d)48 (1975) held that use of a private ditch would be enjoined as a continuing trespass under the rule of Lembeck v. Nye, 47 OS 336 (1890) that an injunction may be granted where the injury from each act is trifling in amount.

§ 47. b. **Discharge into watercourse.** Although an upper owner cannot lawfully increase the burden on lower lands by collecting surface water and discharging it directly on such lands in larger quantities or at different points than those established by natural drainage, he can, without incurring liability, channel his surface water into a watercourse passing through his land thus increasing the volume and accelerating the flow of the watercourse.[1] The exact limits of this right of an upper owner to discharge surface water into an existing watercourse are not entirely clear.[2] It appears that the rule applies not only to watercourses, in the usual sense, but also to natural drainways through which surface water is accustomed to flow, "although the flow is not strong enough to cut the sod or form a trench in the soil."[3] Obviously this makes it rather difficult to distinguish cases subject to this rule from those subject to the rule considered in the immediately preceding section. It has been held in one case that the rule which permits an owner to collect surface water and discharge it into a watercourse applies only where the watercourse into which the water is discharged is located on his own land.[4] Thus a lower owner had a cause of action against a city which emptied a storm sewer into a watercourse at a point outside the corporate limits.[5]

In draining surface water into a watercourse the upper owner can lawfully include water which otherwise would have passed away from his land by evaporation;[6] but he cannot, it is said, so construct his drains as to send to the watercourse surface water from a new area.[7]

There is some disagreement in the Ohio cases as to whether the privilege of draining surface water into a watercourse without incurring liability to lower owners extends to the case where the quantity of such drainage exceeds the capacity of the watercourse into which it is emptied. In several lower court cases it is said that the drainage must not exceed the capacity of the stream.[8] On the other hand the Supreme Court, in Mason v. Commissioners of Fulton County,[9] decided in 1909, quoted at length from a North Carolina case which it said[10] was in harmony with the law of Ohio. The quote, in part, is as follows:[11]

"We are aware that great hardship may sometimes occur from the unlimited right of increase and acceleration, and that there are some authorities limiting it to the capacity of the natural outlet; but we must adhere to the rule as the result of our deliberate judgment.

However short it may fall as a theoretical definition of ideal right, we can frame none better that is capable of practical application.

"Its limits are clearly defined by the natural landmark of the watershed, which seen of all men, renders it easy of application and capable of definite proof. Any other rule would prevent the drainage of large bodies of swamp lands of great natural fertility and capable of the highest degree of improvement. * * * Suppose the natural capacity of the watercourse was made the test of the rule; it would be so extremely difficult of application as practically to destroy its value. What is the natural capacity of a stream? Is it measured at low water or at high water? Almost any stream can carry off whatever water may be made to flow into it in dry weather, or perhaps even in ordinary times. On the contrary, the clearing up of our lands is having the double effect of greatly accelerating the flow of water and at the same time filling up our streams with sand, so that very few of them can now carry the water naturally flowing into them after heavy rains.

"Again, suppose the upper tenant were compelled to regard the natural capacity of the stream, how far down would this limitation extend? Naturally many others would drain into the same stream, so that the landowner near its mouth would get the accumulated waters of all those above him. In case of injury how would he apportion his damage, and where would the liability of each tort feasor begin and end? These questions, it seems to us, would severely tax the utmost ingenuity of the courts, and leave the jury in such a state of perplexity as to seriously endanger their intelligent determination of the issues."

As suggested in this quotation, conflicting rulings as to the right of an owner to drain surface water into a watercourse in excess of its capacity also exist in states other than Ohio.[12] It has been suggested that the difficulty usually can be resolved by distinguishing cases in which one owner, acting independently of others, has discharged more water into a stream than it can carry from those in which the overflow is the result of the combined activities of several owners. Generally, it is said, liability is confined to cases of the former type.[13]

Diversion from one watershed to another so that surface water flowing onto the subservient estate (in a natural watercourse) is increased in volume and intensity, is unlawful. Steinbeck v. Stenger, Inc., 46 O App (2d) 22 (1975). Where diversion was originally unlawful, open and adverse diversion for more than 21 years creates a prescriptive right in the dominant owner. Munn v. Horvitz, 175 OS 521 (1964).

A court of appeals has indicated, without expressly so holding, that some water may be brought in from other watersheds. In Oakwood Club v. City of South Euclid, 83 O L Abs 153 (1960), involving a natural watercourse, the court appears to say that where 15 percent of the total water flowing from a watershed may have come from outside the watershed, but the increased amount did not "materially affect the flood conditions" complained of, damages were not compensable. The same court, in Aubele v. A.B. Galetovich, Inc., 83 O L Abs 200 (1960), dismissed an alleged diversion as a factual matter by stating: "The amount, in either case, does not seem to have imposed an unreasonable burden upon the properties herein."

Even though there is no diversion, where the dominant owner is a public agency, increased flow may result in a taking for which compensation is required under Section 19, Article I, Ohio Constitution. Masley v. Lorain, 48 OS (2d) 334 (1976). Also, the rule of reasonable use may require a remedy for the subservient owner where the action of the dominant owner is unreasonable. Chudzinski v. Sylvania, 53 O App (2d) 151 (1976); Myotte v. Mayfield, 54 O App (2d) 97 (1977). See also Columbus v. Farm Bureau Co-op Assn., 27 O App (2d) 197 (1971).

Capacity of the stream rule: In Masley v. Lorain (supra) the Supreme Court stated: "Some cases have considered the question open because this

court has not considered or adopted the so-called capacity-of-the-stream rule." In Myotte v. Mayfield (supra) the Court of Appeals said that it could have based its decision on this rule, but instead chose "the broader, more flexible rule of reasonableness". The Court of Appeals in Chudzinski v. Sylvania (supra) noted "the confusion that exists with regard to the application of the capacity-of-the-stream rule", then stated that it chose to follow the rule of reasonable use, stating that this is "the trend of decisions in the area of surface water disputes".

For definition of "natural watercourse" see Section 27 above.

§ 48. 3. **Flood waters.** There is authority in Ohio that a landowner may lawfully do what is necessary to protect his property from "unprecedented" floods. In Brewing Company v. Ulland[1] the plaintiff's building collapsed, allegedly because of the action of the defendant, who owned the property next door, in pumping water from his, the defendant's, basement during the 1913 flood. A judgment for the plaintiff was reversed by the Supreme Court. The Court said:

> "The waters of this unprecedented flood were a common enemy. Each proprietor had a right to repel its invasion upon his own property as best he could, if in doing so he did not increase the volume or direct its force against his neighbor's property, further than its mere failure to find access to his property."

Urban property was involved in that case; but a later court of appeals case indicates that similar considerations apply in rural areas. In Frazier v. Westerville[2] the defendant erected a dam in a creek which, in the flood in 1937, caused surface water to back up on the plaintiff's land. In affirming a judgment for the plaintiff, the court held that the defendant had failed to establish its contention that the flood of 1937 was such an act of God as to relieve the defendant of liability. The test, the court said, is whether a prudent man would have anticipated the flood after considering the pertinent factors. Among things to be considered are the laws of hydraulics, the natural formation of the country, the character of the stream and its habits and history. The fact that similar floods have occurred tends strongly to show that a present one is not so unusual that it might not reasonably have been expected to occur.[3]

A board of county commissioners may adopt more stringent building regulations in flood hazard areas in order to prevent or reduce the hazard resulting from flooding, including regulations necessary for participation in the national flood insurance program. Section 307.37 Ohio Rev. Code. See also the "National Flood Insurance Act of 1968", 42 U.S.C. et seq., and the "Flood Disaster Protection Act of 1973", 42 U.S.C. 4001. Chapter 6105. Ohio Rev. Code authorizes creation of watershed districts which may establish "restricted channels" and "restricted floodways" to reduce flood hazard. Section 6109.19 Ohio Rev. Code prohibits anyone from erecting a dam or reservoir upon a watercourse within the drainage area of a conservancy district, or any work or obstruction diminishing the cross section of such a watercourse, until a copy of the plans for the improvement has been filed with the district. Section 3767.13 of the Revised Code prohibits obstruction of a navigable river, harbor or collection of water, or unlawfully diverting a watercourse from its natural course to the injury or prejudice of others. Federal law restricts construction of bridges, dams or other obstructions, or deposit of materials, in navigable waters: see "Rivers and Harbors Act of 1899", 33 U.S.C. 401-413; and permits for dredged or fill material, referred to as "Section 404 permits", at 33 U.S.C. 1344. The principal purpose of the older federal provisions is maintenance of navigation, while the "404 permit" is directed at protection of the environment.

(Note: When one sees reference to the "Section 10" permit, the reference is to 33 U.S.C. 403, above, which requires authorization by the Secretary of the Army for obstruction, filling, or excavating in navigable waters. Neither "Section 10" nor "Section 404" refer to section numbers by which such sections are found in the United States Code.)

§ 49. 4. **Statutory provisions for surface water drainage.** The Revised Code of Ohio provides a procedure by which a landowner may construct an underground drain across the land of another person where such a drain is his natural and only practical outlet.[1] The owner requiring such a drain must first give notice to the lower owner, making an offer of a sum of money in exchange for the right to construct and maintain the drain. If the two owners cannot agree, the location and size of the drain and the compensation to be paid are fixed by the board of township trustees, after notice and a meeting with the persons involved. The cost may be apportioned between the upper and lower owners in accordance with the benefits conferred on each. If either owner fails to construct the portion allotted to him the trustees are directed to contract for its construction, the cost to be collected as taxes.

In addition to this provision for obtaining private drainage there are numerous detailed sections of the Revised Code which deal with county ditches,[2] joint county ditches,[3] interstate county ditches,[4] township ditches,[5] and conservancy districts,[6] under which provision may be made for the drainage of areas of greater or less extent in the state. Drainage for much of the land in the state is provided by improvements constructed and maintained under these chapters of the Code.[7]

See also Chapter 1515. of the Revised Code creating the Soil and Water Conservation Commission and providing for creation of soil and water conservation districts; Chapter 6105. of the Revised Code authorizing the creation of watershed districts, which may establish "restricted channels" and "restricted floodways"; and Sections 307.79 and 1515.30 of the Revised Code which, effective in 1979, authorize establishment and enforcement of standards by county commissioners and the Chief of the Division of Soil and Water Districts for management and conservation practices to abate wind or water erosion of the soil and degradation of the waters of the state by soil sediment.

IV UNDERGROUND WATER

§ 50. A. **Percolating Water.** Diffused underground waters commonly are designated by the courts as "percolating." They have been defined as subsurface waters which, without any permanent, distinct or definite channel, percolate in small veins, ooze, or filter from the lands of one owner to those of another.[1] It has been said that subsurface waters which flow in definite channels, the courses of which are unknown and unascertainable, also are to be treated as percolating.[2]

As suggested by the definition, the withdrawal of percolating water by one landowner may substantially diminish the supply of such water available to another. Notwithstanding the now clearly established interrelation between water flowing on the surface and that found underground, the law traditionally has approached this problem as one which is distinct from that of the right to use water in surface streams. The common law tradition is that percolating water may be taken by the owner of the soil in which it is found without regard to the effect of such taking on the supply of percolating water available to his neighbor. In some states this common law tradition has been modified or replaced by doctrines which limit, in some degree, the use which a landowner may make of percolating water.[3] One such limiting doctrine restricts each owner to the quantity of percolating water which he reasonably may use on his own land.[4] Another, which is more restrictive than the reasonable use doctrine, is the so-called doctrine of "correlative rights" which is essentially the application to percolating water of the principles of riparian rights commonly governing the taking of water from streams.[5] In most jurisdictions, however, as in Ohio, the common law theory of absolute ownership in percolating water has continued with little or no modification. This theory will be considered in greater detail in the sections immediately following.

The withdrawal of percolating water by one landowner may also affect in some degree the flow of water in surface watercourses. Where this occurs the application of different basic theories to percolating water, on the one hand, and to streams, on the other, causes some difficulty. This problem will be considered separately.[6]

A study of Ohio's ground-water situation, including conflicts in use, contamination, water rights law, and legislative alternatives is contained in Ground Water, Ohio Legislative Service Commission Report No 115 (1974). A

detailed, illustrated study of Ohio cases affecting ground water is contained in Coogan, Problems of Groundwater Rights in Ohio, 9 Akron Law Review 34 (1975). For other references on the subject see Corker, Groundwater Law, Management and Administration (National Water Commission, 1971); Dewsnup and Jensen, A Summary-Digest of State Water Laws p. 49 (National Water Commission, 1973); Davis, The Right to Use Water in the Eastern States, 7 Water and Water Rights 27 (R.E. Clark Ed., 1976); 78 Am Jur (2d) Waters 593, Sec 146 et seq.; and 93 Corpus Juris Secundum Waters 761, Sec. 86 et seq.

§ 51. 1. **Common law rule.** The common law principle that the owner of the soil may make free use of percolating waters derives from Acton v. Blundell,[1] an English case decided in 1843. In that case mining operations by the defendant had substantially diminished the supply of spring and well water on the adjoining land of the plaintiff. The court held that the case was governed not by the established rules governing the use of water flowing in streams, but rather by the principle that the owner of the soil owns not only the surface but all that is found beneath it, which he may extract at his pleasure, whether it be earth or soil or water.

The question was raised in the Supreme Court of Ohio in 1861. In Frazier v. Brown,[2] a case similar to Acton v. Blundell, the Court reviewed the cases, English and American, and concluded that they were uniform in holding that a landowner has no right to the continued presence of percolating water on his land. The following paragraph from the opinion states the reasoning which the Court found persuasive:[3]

> "The reasoning is briefly this: In the absence of express contract, and of positive authorized legislation, as between proprietors of adjoining lands, the law recognizes no correlative rights in respect to underground waters percolating, oozing or filtrating through the earth; and this mainly from considerations of public policy. 1. Because the existence, origin, movement and course of such waters, and the causes which govern and direct their movements, are so secret, occult and concealed, that an attempt to administer any set of legal rules in respect to them would be, therefore, practically impossible. 2. Because any such recognition of correlative rights would interfere, to the material detriment of the common wealth, with drainage and agriculture, mining, the construction of highways and railroads, with sanitary regulations, building and the general progress of improvement in works of embellishment and utility."

However convincing, or otherwise, this reasoning may appear today, the Ohio courts have continued to assert the common law rule that the diversion of percolating water is not a legal wrong for which an action may be maintained.[4] Thus, in Logan Gas Co. v. Glasgow,[5] the most recent case in the Ohio Supreme Court involving the point, the plaintiff claimed that a spring on his land had dried up as a result of well drilling operations conducted by the defendant on other land some distance away. The court held that, even if it were conceded that the drilling of the well had intercepted percolating water so as to dry up the plaintiff's spring, a verdict should nevertheless have been directed for the defendant. "It is elementary," the opinion states, "that the person who owns the surface may dig therein and apply all that is found to his own purpose at his free will and pleasure."[6]

In a case brought against the state for loss of water in a well caused by excavation for a highway, in which plaintiffs asked that the court adopt the rule of "reasonable use" in lieu of the rule of Frazier v. Brown, the Court of Appeals for Franklin County refused to do so, saying that this would be a challenge for the legislative body, not the judiciary. Huelsman v. State, 56 O App (2d) 100 (1977); (Motion to Certify overruled by the Supreme Court April 20, 1978). In a case involving dewatering of numerous wells for construction of a sewer, the Supreme Court of Wisconsin announced that it was adopting the "reasonable use" rule in lieu of the "English" or "common-law" rule that had theretofore been the law in Wisconsin for ground water. State v. Michels Pipeline Construction, Inc., 63 Wis. (2d) 278 (1973). The Supreme Court of Missouri announced a similar change in a case involving a large-volume municipal well, in Higday v. Nickolaus, 469 SW (2d) 859 (1971). Courts have from time to time adopted the "reasonable use" rule in this situation, beginning with Forbell v. City of New York, 61 N.Y.S. 1005 (1900). The Vermont court

refused to change the rule under such circumstances. Drinkwine v. State, 131 Vt 127 (1973).

§ 52. 2. **Effect of Malice.** In a jurisdiction such as Ohio in which the common law principle of absolute ownership in percolating water obtains generally, the further question may be raised as to the effect of malicious motives on the part of the person taking the water. Suppose a landowner in taking percolating water from his own land is motivated wholly or partly by a desire to injure his neighbor; is his action then wrongful? Overtones of this question appear in a few Ohio cases. In Frazier v. Brown,[1] the leading Ohio case on percolating water, the plaintiff alleged that the defendant had acted maliciously in intercepting the water. The Supreme Court interpreted this as an allegation that malice was **one** of the motives of the defendant, not that it was the sole motive. It was held that the presence of a malicious motive, along with others, would not make the defendant liable. The Court expressly left open the question of the effect of the interception of percolating water when motivated wholly by malice.[2] Some thirty-five years later this reservation was noted in a case decided by the Common Pleas Court of Franklin County.[3] In that case a petition was filed which alleged that the defendant had dug a hole on his own land a few feet from the property line, that the effect of this action was to divert percolating water which fed a spring on plaintiff's land, and that the defendant was motivated by "unmixed" malice, his purpose being neither the ornament nor the use of his own land. The defendant contended that this petition did not state a cause of action; but the court ruled that it did. A person cannot, the court ruled, deprive another of the use of a spring or well for the mere gratification of malice. However, when the case came to be tried three years later, the same judge, in charging the jury, said that the question of malice was material in the case only as it bore on the amount of damages which they might return if they found for the plaintiff; that is, the jury might add a proper sum as punitive damages if they found the defendant had acted maliciously.[4]

This one common pleas court case appears to be the only one in Ohio in which the question of liability for withdrawing percolating water from motives of unmixed malice actually has been raised. It likely stands for the proposition that motive makes no difference on the basic question of liability. However, it should be recalled that the case is nearly sixty years old. It should also be noted that in a much more recent Supreme Court case[5] the syllabus, written by the Court, states that the owner of land is not precluded from making any **legitimate** use of his land even though such use results in draining a spring on the land of an adjoining proprietor by cutting off water supplied to it by percolation.[6] What is to be regarded as a legitimate use is, of course, not specified and the case actually involved no question of malice.

A majority of the cases in other jurisdictions hold that the taking of water from one's own land for the malicious purpose of injuring another is a wrong for which action may be maintained.[7]

§ 53. 3. **Effect of negligence.** If a person conducts operations on his own land in a negligent manner, and if, as a result of this negligence, the supply of percolating water under the land of his neighbor is diminished, may the neighbor who is thus deprived of water recover? It is clear that the negligent operations cannot be regarded as a reasonable use of the land; accordingly, in a jurisdiction applying the reasonable use doctrine to percolating waters liability attaches.[1] Presumably this would be true also where a doctrine of correlative rights is applied to these waters. Where the basic theory is that of the common law—absolute ownership in percolating waters—the result is likely to be different, although even in this situation some cases have held the negligent operator liable.[2] An Ohio case, decided in 1892, held that there was no liability for interfering with the flow of percolating water supplying a spring even though the defendant in the case might have been negligent in the operations which it, a municipality in this case, performed on its own land.[3] In essence, the reasoning of the court was that since the plaintiff, under the Ohio law, had no right to receive percolating waters through the land of another, he could not demand that another person exercise care to protect those waters.

§ 54. 4. **Subsidence of surface caused by withdrawal of percolating water.** The owner of land has, as part of his ownership, a right to the continued lateral and subjacent support of his soil in its natural condition.[1] This is a natural right which is absolute in its nature. An adjoining owner, or other person, who withdraws it is liable for the damage regardless of whether the operations which he performed can be characterized as negligent in themselves.[2] When a subsidence in the surface of a tract of land is caused by the withdrawal of percolating water by an adjoining landowner, something of a conflict of principles results. On the one hand is the absolute right to support; on the other, the absolute right to withdraw percolating waters.[3] The stated reason for the rule that an owner of land may

withdraw percolating water without liability for injury to the water supply of his neighbor—namely, that the movement of percolating water is so uncertain as to make it impossible practically to administer any set of legal rules with respect to it—is equally applicable whether the injury is to the neighbor's water supply or to the soil itself; accordingly the right to withdraw water usually has prevailed over the neighbor's right to support of his soil.[4]

Ohio authority on this question is very slight. In City of Columbus v. Williard[5] the city, in constructing a sewer, pumped from the excavation a mixture of sand and percolating water, so blended, the opinion states, as to be inseparable. This resulted in a subsidence of adjoining land owned by the plaintiff. The trial court charged the jury that the defendant city would be liable for damage caused to the plaintiff's land by the removal of underlying "material." A judgment for the plaintiff was affirmed in the Circuit Court. Judge Shauck, who wrote the opinion, stated that there was no question as to the general doctrine of absolute liability for removing the obvious support from land; but that a different doctrine had been applied to cases in which only percolating water was taken. Apparently he was satisfied with the result in the particular case since the evidence showed that the withdrawn water carried off soil in solution. This distinction has been applied in some other jurisdictions, although it sometimes has been criticized as unrealistic.[6]

Another situation must be distinguished from the one just considered. The withdrawal of obvious subjacent support, such as the removal of coal pillars, may result in a subsidence of the surface with consequent damage to springs or wells. When this occurs the person who removes the support is liable for the loss of the water supply as well as for other damage to the land. Here his action cannot be justified on the basis of his right to withdraw percolating water from his own land.[7]

See Wright, Establishing Liability for Damage Resulting from the Use of Underground Percolating Water: Smith-Southwest Industries v. Friendswood Development Co., 15 Houston L. Rev. 454 (1978); and State v. Michels Pipeline Construction, Inc., 63 Wis (2d) 278 (1974). In these cases involving both the right to support and the right to withdraw percolating water, the courts changed the rule in favor of the right to support.

§ 55. 5. **Pollution.** Although an owner of land may withdraw percolating water for his own use without regard to the effect of such withdrawal on the water supply of his neighbor,[1] it does not follow that he can escape liability for injury to his neighbor through pollution of his supply of percolating water. In Frazier v. Brown,[2] the leading Ohio case on percolating water, the Supreme Court pointed out that the considerations of policy which govern the right to take water do not apply to its pollution. Although that case did not actually involve an element of pollution, a subsequent circuit court case clearly held that the pollution of percolating water is a wrong for which an action will lie and that the liability does not depend on negligence.[3] Rather it is based on the theory of absolute liability for harm caused by the escape of substances kept on land.[4] Accordingly, the court enjoined the maintenance of a cesspool which contaminated a spring on adjoining land so as to render it unfit for use. Similarly, liability has been imposed for contamination resulting from the storage of gasoline.[5] This absolute liability for the contamination of percolating water is the general rule in this country, although there are a few cases to the contrary.[6]

See annotation to Section 35 above. For a detailed description of laws affecting contamination of ground water see Ground Water, Ohio Legislative Service Commission Report No. 115 (1974), at p. 35. For a general study see Lehr and others, A Manual of Laws, Regulations, and Institutions for Control of Ground Water Pollution (U.S. Environmental Protection Agency, 1976).

§ 56. 6. **Decreased stream flow caused by withdrawal of percolating water.** As stated above,[1] the consideration in the preceding sections of rights in percolating water has assumed cases in which the withdrawal or pollution of such water by one landowner has affected the supply of percolating water in the land of some other person. However the relation of percolating water to streams flowing on the surface is such that actions with respect to one may affect the other. At a given time and place one of several conditions may exist. Water may be passing from diffused underground sources to a stream; it may be passing from the stream into the earth to become percolating water; or the relation between the stream and water percolating in the earth through which the stream flows may be one of equilibrium.[2] Accordingly, withdrawal of percolating water from the earth, either near the stream or at

some distance from it, may result, in a particular situation, in diminishing the flow of the stream.

The owner of lands through which a stream flows has rights in the continued flow of that stream. These rights, considered in detail above, may be invaded, and a consequent cause of action arise in the owner, if a substantial amount of water is taken directly from the stream by some other person. Suppose, however, that the level of the stream is lowered indirectly by withdrawing percolating water from the adjacent lands. Does the general right of a landowner to appropriate percolating water from his own land protect him from liability in this situation? It is said that the common law rule is that it does;[3] and there are English and some American cases so holding.[4] There are, however, cases in this country in which the rights of the riparian owner to the flow of his stream have been held to prevail over the rights of others in percolating water.[5]

In Ohio's leading case on percolating water, Frazier v. Brown,[6] the plaintiff alleged that a spring on his land fed a stream which flowed through the land of the plaintiff and others; and that the adjoining landowner, by withdrawing percolating water, had destroyed the spring and the stream. It was held that the plaintiff had stated no cause of action. Despite the allegations regarding the stream, the case was treated throughout as involving only rights in percolating water. However in a subsequent common pleas court case, Warder & Barnett v. City of Springfield,[7] the question of the effect of the withdrawal of percolating water on streams definitely was raised and considered by the court. In that case the plaintiffs, operators of commercial enterprises depending on the flow of a stream, sought to enjoin operations of the city in connection with its water supply. In constructing a reservoir, the city had encountered percolating water which it pumped from the excavation in considerable quantity. The court concluded that, although no appreciable diminution in the current or flow of the stream had yet occurred, such a diminution ultimately would occur if the proposed draft of percolating water should be maintained. Further, the evidence showed that a spring branch which fed the stream actually had dried up following the city's operations. The court expressly refused to decide the question which would arise if it were shown that the defendant city had intercepted percolating water before it reached the watercourses; but it enjoined the city from "withdrawing water flowing in the channels of Buck or Beaver Creek or said spring branch, through said reservoir, pipes and waterworks, so as to reduce the waters of Buck Creek at plaintiff's dam below their ordinary level."[8] Whatever the precise meaning and effect of this case, it at least indicates that the rights of riparian owners in the flow of a stream may limit, to some extent, the rights which a landowner has in the percolating water beneath the surface of his land.

§ 57. B. **Underground Streams.** An underground stream, clearly defined and known to exist, does not lose its legal character as a stream merely from the fact that it is underground. The rights of riparian owners in the continued flow of surface streams are equally applicable where the stream flows beneath the surface. The rules as to streams, not those relating to percolating waters, are to be applied. There is no difficulty about this general proposition, which is accepted in Ohio,[1] as elsewhere.[2] A substantial question does arise, however, as to the type of situation in which an underground stream will be held to exist for legal purposes; or, stated in another way, as to the kind of evidence which will be acceptable to establish the existence of an underground stream. This question is considered in the succeeding section.

§ 58. **—Evidence to establish existence.** Underground water is presumed to be percolating. That is, the rules with respect to percolating water will be applied, rather than those applicable to streams, unless it can be shown that an underground stream exists. Further, scientific evidence of the existence of an underground stream in a particular instance, however convincing, will not be sufficient to overcome the presumption. In order to bring a case within the rules applicable to streams, it must be shown not only that such a stream in fact exists, but also that its existence was known, or reasonably discoverable, by the landowner who is accused of interfering with its flow. These principles appear to be established by Logan Gas Co. v. Glasgow, a case decided by the Supreme Court of Ohio in 1930.[1] It is apparent that they arise not from any distrust of scientific evidence, as such, but rather from a policy of protecting the rights of a landowner in withdrawing underground water which he has no reason to suppose comes from a stream. In the following excerpt from the opinion Judge Matthias quotes from an Irish case which has been regarded as a leading one on the point:

> "In order that a subsurface stream may be treated as a watercourse, its course must be discoverable from the surface of the ground. It is quite generally held that an under-

ground stream, the direction and course of which can only be discovered by excavation, is not a known stream governed by the rules applicable to surface water courses. The rule has been quite generally adopted and followed, as stated in the Black case,[3] that the requirement as to a known and defined channel places the burden upon the plaintiff, and that it devolves upon him to show that, 'without opening the ground by excavation, or having recourse to abstruse speculations of scientific persons, men of ordinary powers and attainments would know, or could with reasonable diligence ascertain, that the stream, when it emerges into light, comes from and has followed through a defined subterranean channel. The instance given in some of the cases of a stream sinking underground when it reaches a certain place, and pursuing for a short space a subterraneous course, and then emerging, shows plainly the kind of knowledge required.'"

Judge Matthias also referred to Frazier v. Brown[4] in which the Court had said that the application of riparian rights to underground streams was subject to the limitation that the existence and course of the stream must be, to some extent, known or notorious; and he distinguished another Ohio case[5] in which a recovery was allowed on the basis of its being a case in which the defendant had deliberately set out to intercept a known underground stream.

The requirement that an underground stream, in order to be treated as a stream for legal purposes, must be known, or discoverable with some degree of ease, is typical not only of the Ohio cases but also of those in other jurisdictions.[6]

V EASEMENT FOR NAVIGATION

Sec. 59. A. Ownership of subaqueous lands. Lake Erie and its bed within the boundaries of Ohio are owned by the State of Ohio. The General Assembly has declared:

> *"...the waters of Lake Erie...together with the soil beneath and their contents, do now and have always, since the organization of the state of Ohio, belonged to the state as proprietor in trust for the people of the state, for the public uses to which it may be adapted, subject to the powers of the United States government, to the public rights of navigation, water commerce and fishery, and further subject to the property rights of littoral owners, including the right to make reasonable use of the waters in front of or flowing past their lands."[1]*

The beds of Ohio streams and rivers are owned not by the state, but by the owners of the land abutting the water. Unless otherwise provided by deed, one who owns the land up to the river owns to the middle of the river, subject to the easement for navigation.[2] It is a trespass to take sand or other material from the bed of a stream without permission of the owner.[3]

In the case of inland lakes, ownership of the bed is determined by the deeds affecting the area occupied by the lake.[4] This is not necessarily true in the case of the old canal feeder lakes--Buckeye Lake, Indian Lake, Grand Lake St. Marys, Lake Loramie, Guilford Lake, and the Portage Lakes--where the state did not record its takings in the early Nineteenth Century and deed records do not show the state's claim. The office of "Lake Lands Administrator" was created to solve the myriad title questions that have arisen concerning these lakes.[5]

Sec. 60. B. Right to go on navigable waters. Despite this private ownership, the public has a right to go upon any water that is "navigable". Cases in recent decades have broadened the meaning of this word, but they have not defined it so that one may be certain that he is not a trespasser, or that

his activity on or in the water is lawful. Certain principles are established, however, warranting assumptions that offer the recreational user of a stream legal reassurance on many miles of Ohio streams that have not been specifically adjudicated as "navigable".

Sec. 61. 1. Principles for determining navigability. More than a century ago the Ohio Supreme Court declared:

> *"A river is regarded as navigable which is capable of floating to market the products of the country through which it passes, or upon which commerce may be conducted; and, from the fact of its being so navigable, it becomes in law a public river or highway."[1]*

In the leading modern statement of the Ohio law in the case of Coleman v. Schaeffer the Supreme Court enunciated the following principles for determining navigability:

> *1. "In determining the navigability of a stream, consideration may be given to its availability for boating or sailing for pleasure and recreation as well as for pecuniary profit."*
>
> *2. "Such navigability may be determined on the basis of not only the natural condition of the stream but also of its availability for navigation after the making of reasonable improvements."*
>
> *3. "In determining the navigability of a stream, consideration may be given to its accessibility by public termini, but the presence or absence of such termini is not conclusive."[2]*

That the capacity of a stream for recreational boating is a proper test for navigability was underlined by the Court in Mentor Harbor Yachting Club v. Mentor Lagoons.[3] There the Court stated that navigation for pleasure and recreation is as important in the eyes of the law as navigation for a commercial purpose.

In the most recent interpretation of the concept of "navigability" the Hamilton County Court of Appeals stated:

> *"The state of Ohio holds these waters in trust for those Ohioans who wish to use this stream for all legitimate uses, be they commercial, transportational, or recreational."[4]*

Sec. 62. 2. Included activities. While it appears clear that the public under the decided cases has a right to travel on any stream that will reasonably allow the recreational use of a canoe and which may be reached by public access, the further range of activities that might be included under the phrase "legitimate uses" is only partially defined.

Sec. 63. a. Mooring a boat. From an early time, a person using a navigable river had the right to moor in front of private land to do such things as repair his engine, since this was an "incident of navigation and commerce".[1] The right of the shore owner to the water "is but a usufructory right, a right to enjoy that which belongs to another..." and "that other, as to the water of a navigable stream, is the public for, in Ohio, it is established law, that navigable rivers are public highways".[2] However, a ship owner has no right to run a line to shore.[3]

Sec. 64. b. Fishing and hunting by boat. A right that adheres to any waters that are navigable, and thus "public", is the right of the public to fish.[1] It is not so clear that hunting is one of these uses, but arguably it is. In State v. Shannon[2] the Court held that a statute which prohibited hunting on posted land included a privately-owned stream bed under navigable water. However, that statute has been repealed. The present statute states:

> *"No person shall hunt or trap upon any lands, pond, lake, or private waters of another, except water claimed by riparian right of ownership in adjacent lands, or shoot, shoot at, catch, kill, injure, or pursue a wild bird, wild waterfowl, or wild animal thereon without obtaining written permission from the owner or his authorized agent."[3]*

This statute does not prohibit hunting or trapping on navigable waters.

A Wisconsin case holds:

> *"Sound public policy requires that the state continue to hold its navigable waters in trust for the public, and that such trust extend to the uses of such waters for fishing, hunting, and other recreational purposes, as well as for pure navigation."[4]*

Sec. 65. c. Other purposes. In Michigan, a trout fisherman who waded a river, angling as he went, was found not to be a trespasser on lands of the riparian owner who owned the banks and the land to the center of the stream.[1] In Wisconsin, bathing and ice skating have been mentioned as public purposes of navigable streams and rivers.[2] It should be noted, however, that these activities were not cited as tests to determine navigabiliby, but as proper uses of streams that were found navigable because of their capacity to carry boats or logs.

In considering particular uses of a navigable stream which are not the subject of Ohio decisions, the following statement from American Jurisprudence (2d) offers some guidelines:

> *"The right to use watercourses as highways, and the right to use highways on land, are said to be analogous, and to depend on the same general principles. One's right to navigate a public river is not a private but is a public right, to which he is entitled only in common with the whole public. Any and all of the public have an equal right to a reasonable use, but the enjoyment by one necessarily interferes to some extent, for the time being, with its absolutely free and unimpeded use by others, and each must exercise his rights with a proper regard for the rights of others. An individual has no right to make such use of his rights of navigation as practically to monopolize the water and deprive others of the exercise of equal rights. Furthermore, the exercise of the public right of navigation may be properly regulated or limited under the police power in the interest of the general welfare.*
>
> *As to what constitutes reasonable use it has been said that no precise definition, adapted to all cases, can be laid down. By reason, however, of the analogy of the rights of the public in navigable waters to its rights in highways, the principle that whether or not any particular use is reasonable depends on the character of the highway, its location and purposes, and the necessity, extent, and duration of the use, under all the attendant and surrounding circumstances, has been applied, as have also the general limita-*

tions on the use to the effect that when such use constitutes an obstruction to the highway, it must be of a partial and temporary character, justified by necessity and convenience, and in the ordinary and contemplated use of the highway. It must not be incompatible with the reasonable free use of others who may have occasion to travel or transport over it."[3]

Sec. 66. 3. Use of shore. A ship operator on a navigable waterway has no right to run a line to a privately-owned shore.[1] *In the case of a canoe there is no indication in the Ohio cases that the canoeist would have any right to portage or to otherwise use a privately-owned shore.*

Entering upon the land of another without permission or privilege is made a crime by Ohio statute.[2] *"Privilege" is defined as:*

"...an immunity, license, or right conferred by law, or bestowed by express or implied grant, or arising out of status, position, office, or relationship, or growing out of necessity."[3]

The public right of navigation is a "right conferred by law", exempting the boater on navigable streams from the prohibition of the statute. Insofar as use of the shore is concerned, the Legislative Service Commission note to Section 2911.21 states, in part:

"Persons taking shelter from danger might claim privilege--the classic rule that vessels in distress may tie up at a private dock is an example of this type of justification."

One must bear in mind that the criminal law does not define private rights, however. An entry not subject to fine may still support a cause of action for damages or for an injunction against future entry. To determine private rights, in the absence of statute, one must look to court cases.

Sec. 67. 4. Obstructions and changes as affecting navigability. As stated in Coleman v. Schaeffer, above, one does not determine the status of a stream as to "navigability" by showing its present capacity, but rather its availability for navigation if reasonable improvements were made.[1] *A natural temporary obstruction to navigation, in the form of a sand bar, does not destroy the otherwise navigable character of a watercourse.*[2] *Also, a naturally navigable watercourse does not lose its character as a public watercourse because a part of its channel has been artificially created; and navigable artificial extensions of a naturally navigable watercourse in the form of lagoons become a part thereof.*[3]

Sec. 68. 5. Lakes. Lakes are less likely to be found navigable, even though eminently suited for recreational boating. Most publicly-owned lakes are open to the public, their uses being dependent upon regulations applicable to particular bodies of water. But a privately-owned lake without public access is "non-navigable".

"A non-navigable inland lake is the subject of private ownership; and where it is so owned, neither the public, nor an owner of adjacent lands, whose title extends only to the margin thereof, have a right to boat upon, or take fish from, its waters."[1]

In a later case involving a privately-owned lake, the court said:

"The exclusive right to fish even as against the public is vested in the owner of the land underlying waters which are not legally navigable, except where such waters are a portion of a body of water that is legally navigable."[2]

Sec. 69. C. Federal jurisdiction. The Ordinance of 1787, which created the Northwest Territory, declared that:

"...navigable waters leading into the Mississippi and St. Lawrence, shall be common highways and be forever free."

The paramount authority over navigable waters within the United States rests with Congress under the Commerce Clause of the United States Constitution.

"The power to regulate commerce comprehends the control for that purpose, and to the extent necessary, of all the navigable waters of the United States which are accessible from a State other than those in which they lie. For this purpose they are the public property of the nation, and subject to all requisite legislation by Congress. This necessarily includes the power to keep them open and free from any obstruction to their navigation, interposed by the States or otherwise, to remove such obstructions when they exist; and to provide, by such sanctions as they may deem proper, against the occurrence of the evil and for the punishment of offenders."[1]

The federal government has and exercises jurisdiction over Lake Erie and the Ohio River for navigation purposes. Congress has acted only once to declare a watercourse navigable in Ohio--the Muskingum River in 1796, to a point 79 miles from its conjunction with the Ohio River. In addition, administrative determinations have been made concerning other rivers that empty into Lake Erie or the Ohio River. However, these actions are not necessary to make a river "navigable" for federal jurisdiction.

"The navigability of a stream is to be determined on the basis, not only of its natural condition, but also of its possible availability for navigation after the making of reasonable improvements; ... it is not necessary that such improvements be actually completed or even authorized."[2]

The federal courts have not defined "navigability" as broadly as the state courts, confining its application to waters able to carry commerical rather than mere recreational boat traffic. But rivers and streams that might not be navigable under federal definitions still may be subject to federal jurisdiction as they affect federally navigable waters. For example, the "Refuse Act of 1899" prohibits deposition of any refuse into any navigable water of the United States, or on the bank or in any tributary of a navigable water from which it might be washed into a navigable water.[3]

Sec. 70. D. Removal of obstructions. Federal law prohibits obstruction of navigable waters without approval of the Chief of Engineers and the Secretary of the Army, and in some cases the consent of Congress.[1] *Ohio law prohibits obstruction of a navigable river, harbor or collection of water.*[2]

By statute, an action for injunction to abate a nuisance may be brought by the Attorney General, a prosecuting attorney, or a person in the name of the

state upon relation of the Attorney General. Even without statute, obstruction of a navigable river is a public nuisance.[3] *State ex rel Brown v. Newport Concrete Co., cited above, was an action by the Attorney General to remove a causeway that obstructed part of the Little Miami River. In that case the Court said:*

> *"It is quite natural, pursuant to the general constitutional and statutory powers of the Attorney General of the state, that his office is the one which should exercise the rights of the state of Ohio as they relate to the natural resources of the state, and the rights of the citizens of this state to the continued free use of such resources as are held in trust by our state.*[3]

Sec. 71. E. State jurisdiction on the Ohio River. An action brought by the Ohio Attorney General is pending before the United States Supreme Court to determine what Ohio's jurisdiction may be in the Ohio River. The question concerns location of the boundary between Ohio and Kentucky, and Ohio and West Virginia. In 1889 the Supreme Court held that:

> *"the jurisdiction of Kentucky at that time (when Kentucky was admitted to the Union) extended, and ever since has extended, to what was then low-water mark on the north side of that channel."*[1]

Nevertheless, with the construction of navigation dams that raised the low-water line, a question has persisted as to whether the boundaries of Kentucky and West Virginia assumed the new low-water line, or remained at the original line. Ohio has contended that it has jurisdiction between the original line and the present line, giving it jurisdiction, for example, concerning fishing license requirements for people fishing from piers on the Ohio side, and concerning boats wharfed on the Ohio side.

TEXT REFERENCES

§ 1:

1. See § 4, below
2. 66 OS 19 (1902)
3. e.g., Frazier v. Brown, 12 OS 294 (1861); Butler v. Peck, 16 OS 334 (1865); Crawford v. Rambo, 46 OS 279 (1886).
4. Remarks of Atty. Gen. C. William O'Neill. Ohio Water Clinic Conference, Feb. 11, 1954.

§ 2:

1. See § 4, below

§ 3:

1. 12 OS 294 (1861)

§ 4:

1. See, e.g. Busby, American Water Rights Law, 5 S. Car. L. Quart. 106 (1952); VI—A Amer. L. of Prop. § 28.58 (1954); Water Rights in Ohio, Ohio Legis. Serv. Comm. Research Report No. 1, pp. 11-15 (1955)
2. Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming. VI-A Amer. L. of Prop. § 28.58
3. VI-A Amer. L. of Prop. § 28.58
4. Note 3, above
5. See Thomas, Water for a Preferred Purpose, 22 Rocky Mt. L. Rev. 422 (1950)

§ 6:

1. For accounts of the history of the doctrine of Riparian Rights see, Wiel, Origin and Comparative Development of the Law of Watercourses in the Common Law and in the Civil Law, 6 Calif. L. Rev. 245; Wiel, Waters: American Law and French Authority, 33 Harv. L. Rev. 133
2. 2 Inst. tit. 1, § 1. See, VI-A Amer. L. of Prop. § 28.55
3. Art. 644. See Wiel, Waters: American Law and French Authority, note 1 above.
4. 4 Mason 397, Fed. Cas. No. 14, 312 (C.C.R.I. 1827)
5. 3 Kent Comm. 439 (3d ed., 1836). The first edition of the Commentaries was published in 1827
6. II Blackstone, Comm., c. 26, part 3
7. Mason v. Hill, 5 B. & Ad. 1, (1833); Wood v. Waud, 3 Ex. 748 (1849).

§ 7:

1. Webb v. Portland Mfg. Co., 3 Sumner 189 (1838); Robertson v. Arnold, 182 Ga. 664 (1936). Presumably, under any general doctrine, a diverson of water so insubstantial as to be considered *de minimis* would not give rise to a cause of action.
2. See Kinyon, What Can A Riparian Proprietor Do?, 21 Minn. L. Rev. 512, 524 (1936)
3. §§ 10 et seq.
4. See, e.g. Frazier v. Brown, the Ohio case noted in § 9

§ 8:

1. See, e.g., the quotation from Kent's Commentaries in § 6, above; also VI-A Amer. L. of Prop. § 28.55 (1954)
2. Cooper v. Williams, 4 Ohio 253, 287 (1831); Salem Iron Co. v. Hyland, 74 OS 160, 165 (1906)
3. City of Mansfield v. Balliett, 65 OS 451 (1901)

§ 9:

1. Cooper v. Williams, 4 Ohio 253, 286 (1831); aff. on rehearing, 5 Ohio 391 (1832)
2. Cooper v. Hall, 5 Ohio 321 (1832)
3. p. 324
4. See Buckingham v. Smith, 10 Ohio 288 (1840); McElroy v. Goble, 6 OS 187 (1856); Bisher v. Richards, 9 OS 495 (1859)

5. 12 OS 294 (1861)
6. p. 299
7. Rule VI, Supreme Court Rules of Practice. This rule is effective as to cases bearing a date subsequent to Feb. 1, 1858. See 94 OS ix, Reporter's Note.
8. E.g., in Conobre v. Fritsch, 92 O App 520, 526 (1952) the following appears: "An excellent analysis of the rights and obligations of owners of adjoining lands in respect to water passing from the lands of one owner to those of another is found in the case of Frazier v. Brown." As to other aspects of Frazier v. Brown, see the sections below dealing with Diffused Surface Water and Underground Water.
9. 66 OS 19 (1902)
10. 66 OS 19, 22
11. See § 24
12. As to the effect of the syllabus as the law of the case, see note 7, above.

§ 11:

1. See §§ 19-25, below
2. 66 OS 19 (1902), see § 9 above
3. Syllabus 2
4. § 12

§ 12:

1. See City of Canton v. Shock, 66 OS 19, 31 (1902); VI-A Amer. L. of Prop. § 28.57 (1954); 3 Tiffany, Real Prop. § 724 (3d ed., 1939)
2. City of Canton v. Shock, 66 OS 19 (1902)
3. Evans v. Merriweather, 3 Scam. 492 (Ill., 1842); VI-A Amer. L. of Prop. § 28.57 (1954)
4. 10 Columbia L. Rev. 65, 66 (1910)
5. Note 2, above
6. p. 31. The same point is stated in syllabus no. 3 of the case, quoted in § 9, above
7. See § 24, below
8. See Warder v. Springfield, 9 O D Repr. 855 (1885)

§ 13:

1. 66 OS 19 (1902)
2. p. 31
3. Lone Tree Ditch Co. v. Cyclone Ditch Co., 26 S. Dak. 307 (1910)
4. VI-A Amer. L. of Prop. § 28.57 (1954); 3 Tiffany, Real Prop. § 724 (3d ed., 1939)
5. City of Canton v. Shock, 66 OS 19 (1902), syll. 2 and opinion, pp. 28-29
6. Note 5 above, syll. 3

§ 14:

1. 66 OS 19 (1902)
2. As to the extent of riparian lands see §§ 19-22, below
3. Note 1 above, p. 33
4. As to the meaning of "reasonable use," see §§ 16-18, below
5. VI-A Amer. L. of Prop. § 28.57, p. 166 (1954)
6. See § 22

§ 15:

1. See § 13, above
2. 66 OS 19 (1902)
3. 6 OS 187 (1856)
4. p. 188
5. As to the meaning of "reasonable use," see §§ 16-18
6. VI-A Amer. L. of Prop., p. 166 (1954)
7. For a review of the statutory law of the western states, see Water Rights in Ohio, Ohio Legis. Serv. Comm. Research Report No. 1, pp. 12-15 (1955)

§ 16:

1. See VI-A Amer. L. of Prop., p. 166 (1954)
2. As to use of water on non-riparian lands, see § 22 below
3. 66 OS 19 (1902)
4. Note 3 above, syll. 4 and 5

§ 17:

1. See § 16
2. City of Canton v. Shock, 66 OS 19, syll. 7 (1902). This case was an action for damages. Presumably, in an injunction proceeding the same function could be performed by the trial judge himself. See Warder v. Springfield, 9 O D Repr. 855 (1885)
3. 9 OS 495, 503 (1859)
4. Timm v. Bear, 29 Wis. 254 (1871). For similar listings of criteria by other courts, see 70 ALR 220, 224 et seq.
5. Restatement, Torts, § 852 (1939)
6. Note 5, § 853
7. Note 5, § 854

§ 18:

1. § 16, above
2. 66 OS 19 (1902)
3. Turner Mfg. Co. v. Holly Mfg., 12 OCD 738 (1889)
4. Warder & Barnett v. Springfield, 9 O D Repr. 855 (1885)
5. See VI-A Amer. L. of Prop. § 28.57 (1954)
6. See cases cited, notes 3 and 4 above

§ 19:

1. See § 4, above
2. City of Canton v. Shock, 66 OS 19 (1902). "A riparian owner means, in its common law sense, the owner of the ripa, or bank of a stream." Mallory v. Dillon, 18 O L Abs. 239, 240 (1934)
3. 56 Am. Jur., 731

§ 20:

1. See §§ 16 and 17 above
2. VI-A Amer. L. of Prop., § 28.55 (1954). As to the watershed limitation, see § 21, below
3. Lux v. Haggin, 69 Cal. 255 (1886); Rancho Santo Margarita v. Vail, 11 Cal. (2d) 501 (1938); Crawford v. Hathaway, 67 Neb. 325 (1903)
4. Boehmer v. Big Rock Irrig. Dist., 117 Cal. 19 (1897); Miller & Lux, Inc., v. James, 180 Cal. 38 (1919)
5. VI-A Amer. L. of Prop. § 28.55 (1954)
6. City of Canton v. Shock, 66 OS 19 (1902). See § 24, below

§ 21:

1. Swindon Waterworks Co. v. Wilts and Berks Canal Co., 33 L.T.R. (N.S.) 13 (Eng., 1875); Chauvet v. Hill, 93 Cal. 407 (1892). Bathgate v. Irvine, 126 Cal. 135 (1899); Anaheim Water Co. v. Fuller, 150 Cal. 327 (1907); Rancho Santa Margarita v. Vail, 11 Cal. (2d) 501 (1938); Stratton v. Mt. Hermon Boys' School, 216 Mass. 83 (1913). In Jones v. Conn, 39 Ore. 30 (1901) it was held that diversion beyond the watershed was a circumstance to be considered on the question of the reasonableness of the use.
2. Anaheim Water Co. v. Fuller, note 1 above, p. 330
3. 66 OS 19 (1902)
4. p. 33. The same restriction appears in syllabi 2 and 3 of the case.
5. See § 9 above. In City of Canton v. Shock, note 3 above, it was held that, for purposes of transport away from the city, the city had no right "to materially diminish the flow of water in such stream to the injury of a lower proprietor." Syll. 6

In a series of cases involving alleged unlawful diversions of stream waters by the City of Akron, memorandum opinions by the Ohio Supreme Court state that the facts show no injury resulted to the plaintiffs. These opinions, which appear in 93 OS 484, 486 and 490, are the only published material on this litigation and are not specific as to the grounds on which the conclusions were reached. The records filed in the Supreme Court show that diversion beyond the watershed was argued, at least in the earlier stages of the litigation. See also, Sears v. City of Akron, 246 U.S. 242 (1918).

§ 22:

1. § 19
2. Rancho Santo Margarita v. Vail, 11 Cal. (2d) 501 (1938), noted 27 Cal. L. Rev. 92 (1938)
3. Miller and Lux, Inc. v. J. B. Jones Co.,179 Cal. 689 (1919); St. Anthony Falls Water Power Co. v. Minneapolis, 41 Minn. 270 (1889)
4. Mallory v. Dillon, 18 O. L. Abs. 239 (Ct. App. Mahoning County, (1934)

§ 23:

1. 56 Am. Jur. 735. See Warder and Barnett v. Springfield, 9 O D Repr. 855 (1885), where the court assumed that riparian rights exist in corporations and partnerships.
2. §§ 24 and 25

§ 24:

1. See cases collected in 141 ALR 639
2. Warder and Barnett v. Springfield, 9 O D Repr. 855 (1885)
3. 66 OS 19 (1902)
4. p. 28. Essentially the same proposition appears in syllabus 1 of the case.
5. Sears v. Akron, 246 U.S. 242 (1918)
6. p. 253
7. Syllabus 1
8. Turner Mfg. Co. v. Holly Mfg. Co., 12 OCD 738 (1889)

§ 25:

1. Oklahoma v. Texas, 258 U.S. 574 (1922)
2. Greenville v. Demorest, 14 OCC NS 113 (1911)
3. The case had to do with the constitutionality of a statute dealing with sewage disposal which exempted municipalities located on the Ohio river. The decision of the Circuit Court that the statute was unconstitutional because not uniform in its operation was reversed by the Supreme Court in State Board of Health v. Greenville, 86 OS 1 (1912). The opinion of the higher court does not refer to riparian rights except to state that the case does not concern such rights of the proprietors on the Ohio side. (p. 38)
4. 66 OS 19 (1902). See § 24, above

§ 26:

1. See § 37, below

§ 27:

1. 118 OS 360, 366 (1928). The issue in this case was whether the waters in question were to be treated as a part of Sandusky Bay for purposes of fishing rights.
   Similar definitions have been suggested by many other courts. See 3 Tiffany, Real Prop. § 719 (3d ed., 1939.)
2. See Gavit v. Chambers, 3 Ohio 495 (1828); Crawford v. Rambo, 44 OS 279 (1886); Dissette v. Lowrie, 9 O D 545 (1899); Deming v. Cleveland, 22 OCC 1 (1900); Conobre v. Fritsch, 92 O App. 520 (1952)
3. Conobre v. Fritsch, note 2, above

§ 28:

1. East Bay Sporting Club v. Miller, 118 OS 360, 369 (1928)
2. Crawford v. Rambo, 44 OS 279, 282 (1886)
3. Miller v. Bay Cities Water Co., 157 Cal. 256 (1910)
4. Thompson v. New Haven Water Co., 86 Conn. 597 (1913)
5. See 40 ALR 848

§ 29:

1. See § 27, above
2. 3 Tiffany, Real Prop. § 719 (3rd ed., 1939); 40 ALR 850
3. See VI-A Amer. L. of Prop. § 28.55 (1954)
4. Tiffany, note 2, above
5. 74 OS 318 (1906)
6. 9 OD 545 (1899)

§ 30:

1. 3 Tiffany, Real Prop. § 739 (3d ed., 1939); VI-A Amer. L. of Prop. § 28.55 (1954)
2. Tiffany, note 1, above
3. Lembeck v. Nye, 47 OS 336 (1890). See also, Bass Lake Co. v. Hollenbeck, 11 OCC 508, 523 (1896). As to domestic uses generally see §§ 12 and 13, above.
4. Note 1, above
5. 3 Tiffany, Real Prop. § 739 (3d ed., 1939)

§ 31:

1. See, in general, Evans, Riparian Rights in Artificial Streams and Lakes, 26 Mo. L. Rev. 93 (1951).
2. Lampman v. Wilks, 21 N.Y. 505 (1860); Roberts v. Roberts, 55 N.Y. 275 (1878)
3. See Elliot v. Selles, 14 OS 10 (1862). As to implied easements generally in Ohio, see Helle v. Markotan, 73 O L Abs. 387 (1955) and the cases there cited.
4. See Kray v. Muggli, 84 Minn. 90 (1901)
5. 3 Tiffany, Real Prop. § 737 (3d ed., 1939)
6. Tiffany, note 5, above
7. 38 OS 518 (1882)
8. Vought v. Railway Co., 58 OS 123 (1898); Longstreet v. Harkrader, 17 OS 23 (1866). Attempts to assert rights in the continuance of the canals by reason of conditions included in the federal grant of canal lands and in private grants of such land to the state likewise have been unsuccessful. Walsh v. Columbus, Hocking Valley & Athens Ry. Co., 176 U.S. 469 (1899); Wright v. Ry. Co., 58 OS 123 (1898), aff. 176 U.S. 481 (1899)

§ 32:

1. See §§ 38, et seq.

§ 33:

1. California, Indiana and Missouri are listed as so holding. See 23 ALR (2d) 750, 752 (1952)
2. 23 ALR 750, 751 (1952)
3. 44 OS 279 (1886)
4. Note 3, above
5. Note 3, syllabus 4
6. Fox v. Fostoria, 14 OCC 471 (1897), rev. on other grounds, 60 OS 340; Neff v. Sullivan, 9 O D Repr. 765
7. East Liverpool City Ice Company v. Mattern, 101 OS 62 (1920)

§ 34:

1. See Crawford v. Rambo, 44 OS 279 (1886) and other cases cited in the preceding section.
2. Lytle v. The Pennsylvania Rd. Co., 91 O App. 232 (1951); Welty v. Vulgamore, 1 OCC NS 553 (1901). See East Liverpool City Ice Co. v. Mattern, 101 OS 62 (1920)
3. Lytle v. The Pennsylvania Rd. Co., 91 O App. 232 (1951)
4. Welty v. Vulgamore, 1 OCC NS 553 (1901)

§ 35:

1. Ohio Rev. Code, §§ 6111.01—6111.08; 124 Ohio Laws 855 (1951)
2. Ohio Rev. Code, § 6111.04
3. Ohio Rev. Code, §§ 6111.03, 6111.07, 6111.99
4. Ohio Rev. Code, § 6111.01
5. Ohio Rev. Code, § 6111.04
6. Ohio Rev. Code, § 6111.01. For a detailed study of the operation of the pollution control act since its inception, see Water Pollution Control in Ohio, Ohio Legis. Serv. Comm., Research Report No. 3 (1955).
7. Ohio Rev. Code, § 6111.08
8. Straight v. Hover, 79 OS 263 (1909); City of Mansfield v. Balliett, 65 OS 451 (1902); C. & H. C. & I. Co. v. Tucker, 48 OS 41 (1891); Ohio Stock Food Co. v. Gintling, 22 O App. 82 (1926); Standard Hocking Coal Co. v. Koontz, 5 O App. 84 (1915); Upson Coal & Mining Co. v. Williams, 7 OCC NS 293 (1905); Mansfield v. Hunt, 19 OCC 488 (1900); Tepe v. Norwood, I OLR 9 (1903), aff. 71 OS 519. See also Weade v. Washington, 71 O L Abs. 294 (1955); Columbus v. Rohr, 10 OCC NS 320 (1907)
9. Vian v. Sheffield Bldg. & Dev. Co., 85 O App. 191 (1948); Kirk v. Cincinnati, 25 ONP NS 473 (1925)
10. Straight v. Hover, 79 OS 263 (1909); C. & H. O. & I. Co. v. Tucker, 48 OS 41 (1891); Mansfield v. Hunt, 19 OCC 488 (1900)
11. C. & H. C. & I. Co. v. Tucker, 48 OS 41 (1891)
12. Ratcliffe v. Indian Hill Acres, 93 O App. 231 (1952)
13. Ohio Rev. Code, §§ 6111.09—6111.11. See Board of Health v. Greenville, 86 OS 1 (1912); Bucyrus v. State Dept. of Health, 120 OS 426 (1929).

§ 36:

1. Comstock v. Ramsey, 55 Colo. 244 (1913). See also Richards Irrigation Co. v. Westview Irrigation Co., 96 Utah 403 (1938)
2. VI-A Amer. Law of Prop. § 28.61 (1954)
3. Crawford v. Rambo, 44 OS 279 (1886)
4. Hoffines v. Hott, 23 ODNP 627 (1913)
5. VI-A Amer. Law of Prop. § 28.61 (1954)
6. See cases in § 43, below

§ 37:

1. See Water Rights in Ohio, Ohio Legislative Service Commission Research Report No. 1, p. 8 (1955)
2. Broadbent v. Ramsbotham, 11 Exch. 602, 614 (1856). In this case the owner of a mill which had been powered by a stream for more than fifty years was held to have no remedy against an upper owner who appropriated surface water which fed the stream.
3. VI-A Amer. Law of Prop. § 28.62 (1954); 3 Tiffany, Real Prop., § 744 (3d ed., 1939)
4. Swett v. Cutts, 50 N. H. 439 (1870)
5. Frazier v. Brown, 12 OS 294 (1861)
6. p. 299
7. Warder v. Springfield, 9 O Dec. Repr. 855 (Common Pleas, Clark County, 1885)
8. In this respect the case undoubtedly is overruled by the subsequent Supreme Court case, City of Canton v. Shock, 66 OS 19 (1902). See § 24, above. This should not affect the authority of the case as to surface waters, however.

§ 38:

1. § 37
2. §§ 39-44
3. §§ 45-47

§ 40:

1. The law of the states following the common enemy doctrine is discussed in Kinyon and McClure, Interferences with Surface Waters, 24 Minn. L. Rev. 891 (1940).
2. See Crawford v. Rambo, 44 OS 279 (1886)
3. See, e.g., Farnham, Law of Waters and Water Rights, quoted in Mason v. Commissioners of Fulton County, 80 OS 151 (1909)

§ 41:

1. Blue v. Wentz, 54 OS 247 (1896)
2. Crawford v. Rambo, 44 OS 279
3. § 40, n. 3, above

§ 42:

1. It has been suggested that "reasonable interference" is a more appropriate designation. VI-A Amer. Law of Prop., § 28.63 n. 7 (1954)
2. Franklin v. Durgee, 71 N. H. 186 (1901)
3. See Franklin v. Durgee, n. 2, above

§ 43

1. Butler v. Peck, 16 OS 334 (1865); Tootle v. Clifton, 22 OS 247 (1871); Blue v. Wentz, 54 OS 247 (1896); Vermillion v. Myers, 82 OS 414 (1910); Kasch v. City of Akron, 100 OS 229 (1919); Henicle v. Pennsylvania R. Co., 49 O App. 447 (1934); Nafzger v. Nieman and Toker, 12 O L Abs. 735 (1932); McCoy v. Rankin, 35 O L Abs. 621 (1941); Larson v. Remeikis, 49 O L Abs. 402 (1946); Neff v. Sullivan, 9 OD Repr. 765 (1885); Hoffines v. Hott, 23 ODNP 627 (1913)
2. Butler v. Peck, n. 2, above
3. Tootle v. Clifton, n. 2, above. See also McCoy v. Rankin, n. 2, above
4. See §§ 44-48, below

§ 44:

1. Lunsford v. Stewart, 95 O App. 383 (1953)
2. C. H. & D. R. R. Co. v. Ahr, 13 OD Repr. 1035 (1873)
3. 16 OS 334 (1865)
4. 22 OS 247 (1871)
5. 39 OS 665 (1883)
6. Note 5, above, p. 671
7. 80 OS 151 (1909)
8. Note 7, above, p. 180
9. Brown v. Crody, 19 OLR 506 (1921); Strohm v. Molter, 30 O L Abs. 330 (1939); Cavanaugh v. Texas Distr. Co., 37 O L Abs. 1 (1942); Lunsford v. Stewart, 95 O. App. 383 (1953), n. 1, above
10. Evers v. Akron, 23 OCC NS 168 (1912); McKiernann v. Grimm, 31 O. App. 213 (1928). See also: Rueckert v. Sicking, 20 O. App. 162 (1923); McCrary v. Knight, 62 O L Abs. 353 (1951)
11. 39 OS 665, 661
12. Lunsford v. Stewart, 95 O App. 383 (1953)
13. Strohm v. Molter, 30 O L Abs. 330 (1939)

§ 45:

1. §§ 38-44
2. § 43
3. § 44
4. City of Barberton v. Miksch, 128 OS 169 (1934); Cincinnati v. McLaughlin, 12 OCC NS 220 (1909)
5. See e.g., Butler v. Peck, 16 OS 334 (1865); Kasch v. City of Akron, 100 OS 229 (1919)

§ 46:

1. Butler v. Peck, 16 OS 334 (1865); Taylor v. Nickel, 13 O L Abs. 489 (1932); Neff v. Sullivan, 9 OD Repr. 765 (1885); Dill v. Oglesbee, 8 ODNP 224 (1900); Fry v. Agler, 16 ONP NS 379 (1912); Hoffines v. Hott, 23 ODNP 627 (1913)
2. Mason v. Commissioners of Fulton County, 80 OS 151 (1909); Vermillion v. Myers, 82 OS 414 (1910); Hunter v. C. H. & D. R. R. Co., 1 ODNP 223 (1894); Dill v. Oglesbee, 8 ODNP 224 (1900); Isaacs v. Nowman, 10 O L Abs. 317 (1931)
3. 16 OS 334 (1865)

§ 47:

1. Mason v. Commissioners of Fulton County, 80 OS 151 (1909); Kemper v. Widows' Home, 6 OD Repr. 1049 (1881); Dill v. Oglesbee, 8 ODNP 224 (1900); Pontificial College v. Kleeli, 18 ODNP 703 (1907); Persin v. Youngstown, 37 O. L. Abs. 560 (1949); Ratcliffe v. Indian Hill Acres, 93 O. App. 231 (1952)
2. Difficulty in reconciling the cases is recognized in 41 Ohio Jurisprudence 54 and in Fry v. Agler, 16 ONP NS 379 (1912)
3. Mason v. Commissioners, note 1, above, quoting Farnham, Waters and Water Rights. In Ratcliffe v. Indian Hill Acres, 93 O App. 231 (1952) it was said that if the upper owner, in the reasonable use of his property, facilitates the final discharge of surface water "in accordance with the contour of the watershed" the owner of the lower land has no cause of action.
4. Nagy v. City of Akron, 27 O App. 250 (1927)
5. Note 4, above
6. Mason v. Commissioners of Fulton County, 80 OS 151 (1909); Pontifical College v. Kleeli, 18 ODNP 703 (1907)
7. Dill v. Oglesbee, 8 ODNP 224 (1900); Fry v. Agler, 16 ODNP 379 (1912)
8. Kemper v. Widows' Home, 6 OD Repr. 1049 (1881); Love v. Simon, 1 OCC NS 359 (1908); McBride v. City of Akron, 12 OCC 610 (1894); Pontifical College v. Kleeli, 18 ODNP 703 (1907); Neff v. Sullivan, 9 OD Repr. 765 (1885); McCoy v. Rankin, 35 O L Abs. 621 (1941)
9. 80 OS 151 (1909), note 6, above
10. p. 180
11. Mizzell v. McGowan, 129 N. Car. 93, quoted in 80 OS 151, 174-176.
12. Right to Drain Surface Water into Natural Watercourse, 28 ALR 1262, 1267 (1924). The conflict in the Ohio cases is here especially noted.
13. VI-A Amer. Law of Prop., § 28.64 (1954)

§ 48:

1. 97 OS 210 (1918)
2. 37 O L Abs. 227 (1941)
3. Note 2, above

§ 49:

1. Ohio Rev. Code § 6139.06
2. Ohio Rev. Code, chapter 6131
3. Chapter 6133
4. Chapter 6135
5. Chapter 6139
6. Chapter 6101
7. See Drainage Laws in Ohio, Ohio Legis. Serv. Comm., Research Report No. 2 (1955)

§ 50:

1. Frazier v. Brown, 12 OS 294 (1861)
2. Wyandot Club v. Sells, 4 OD 254 (1896). This question is considered in § 58, below. As to underground streams see §§ 57 and 58
3. VI-A Amer. Law of Prop. § 28.66 (1954)
4. See Mecker v. East Orange, 77 NJL 623 (1909)
5. See Pasadena v. Alhambra, 33 Cal. (2d) 908 (1949)
6. § 56

§ 51:

1. 12 Mees. & W. 324 (1843)
2. 12 OS 294 (1861)
3. p. 311
4. Elster v. Springfield, 49 OS 82 (1892); Logan Gas Co. v. Glasgo, 122 OS 126 (1930); Warder & Barnett v. City of Springfield, 9 OD Repr. 855 (1887); Wyandot Club v. Sells, 9 OD 106 (1899); Dissette v. Lowrie, 9 OD 545 (1899); In re Conservancy District, 25 ONP NS 325 (1924).
5. 122 OS 126 (1930)
6. p. 128

§ 52:

1. 12 OS 294 (1861)
2. "* * such a case, should it ever arise, is reserved for future consideration." Note 1, above, p. 304.
3. Wyandot Club v. Sells, 4 OD 254 (1896)
4. Wyandot Club v. Sells, 9 OD 106 (1899)
5. Logan Gas Co. v. Glasgo, 122 OS 126 (1930)
6. The words "lawful and legitimate use" appear in an earlier Supreme Court case, Elster v. Springfield, 49 OS 82 (1892).
7. 55 ALR 1395, 109 ALR 399. This result would seem inevitable in a state applying the reasonable use doctrine or the correlative rights doctrine to percolating water. See § 50, above

§ 53:

1. Sloss-Sheffield Steel & Iron Co. v. Wilkes, 231 Ala. 511 (1936)
2. See 33 ALR 1398
3. Elster v. Springfield, 49 OS 82 (1892)

§ 54:

1. VI-A Amer. Law of Prop. § 28.36 (1954)
2. Note 1, above
3. § 51, above
4. New York Continental Jewell Filtration Co. v. Jones, 37 D. C. App. 51 (1911); 55 ALR 1420 (1928)
5. 7 OCD 33 (1893), aff. 54 OS 615
6. See VI-A Amer. Law of Prop. § 23.46 (1954)
7. Ohio Colleries Co. v. Cocke, 107 OS 238 (1923)

§ 55:

1. § 51, above
2. 12 OS 294
3. Bassett v. Osborn, 23 OCC NS 342 (1912)
4. Note 3, above
5. Sinclair Refining Co. v. Keister, 64 F (2d) 537 (C. C. A. 6th, 1933)
6. 56 Am. Jur. 604, § 122

§ 56:

1. § 50
2. For a detailed description of the interrelation between streams and diffused underground water see Tolman and Stipp, Analysis of Legal Concepts of Subflow and Percolating Waters, 21 Ore. L. Rev. 113 (1942)
3. 55 ALR 1416; 109 ALR 404
4. See cases cited 55 ALR 1416
5. Note 4, above
6. 12 OS 294 (1861). See § 51, above
7. 9 OD Repr. 855 (1887)

8. In this case the city, as such, was held not to be a riparian proprietor. Accordingly it was not entitled to take any appreciable amount of water from the stream. On this point the case is overruled by City of Canton v. Shock, 66 OS 19 (1902). See § 24, above. If the city is regarded as a riparian proprietor presumably it would be entitled to take its share of water from the stream either directly or indirectly by percolation.

§ 57:

1. See Frazier v. Brown, 12 OS 294 (1861); Logan Gas Co. v. Glasgo, 122 OS 126 (1930); Castalia Trout Club v. Castalia Sporting Club, 8 OCD 693 (1893), aff. 56 OS 749; Wyandot Club v. Sells, 6 ONP 64 (1899).
2. 55 ALR 1487; 109 ALR 415; VI-A Amer. L. of Prop. § 28.55 (1954)

§ 58:

1. 122 OS 126 (1930). The judgment of the Court of Appeals, affirming a judgment for the plaintiff in the trial court, was reversed. The lower courts applied the law of underground streams to the case, apparently solely on evidence that the plaintiff's spring dried up following defendant's opening of a well on higher ground in the vicinity. See Logan Gas Co. v. Glasgow, 9 O L Abs. 336 (1930)
2. Black v. Ballymena Township Commrs., L. R., 17 Ir. 459 (1886)
3. Note 2, above
4. 12 OS 294 (1861)
5. Castalia Trout Club Co. v. Castalia Sporting Club, 8 OCD 693 (1893); aff. 56 OS 749 (1897)
6. 55 ALR 1487; 109 ALR 415

§ 59:

1. *Ohio Rev. Code, Sec. 123.03*
2. *Gavit v. Chambers, 3 O 496 (1828)*
3. *June v. Purcell, 36 OS 396 (1881)*
4. *Lembeck v. Nye, 47 OS 336 (1890)*
5. *Ohio Rev. Code, Chap. 5315*

§ 61:

1. *Hickok v. Hine, 23 OS 523 (1872)*
2. *Coleman v. Schaeffer, 163 OS 202 (1955)*
3. *170 OS 193 (1959)*
4. *State ex rel Brown v. Newport Concrete Co., 44 O App (2d) 121 (1975)*

§ 63:

1. *Pollock v. The Cleveland Ship Building Company, 56 OS 655 (1897)*
2. *Ibid.*
3. *See Sec. 66, below.*

§ 64:

1. *Winous Point Shooting Club v. Slaughterbeck, 96 OS 139 (1917)*
2. *36 OS 423 (1881)*
3. *Ohio Rev. Code, Sec. 1533.17*
4. *Muench v. Public Service Com., 261 Wis. 492 (1952)*

§ 65:

1. *Collins v. Gerhardt, 237 Mich. 38 (1926)*
2. *Nekoosa-Edwards Paper Co. v. Railroad Comm., 201 Wis 40 (1930)*
3. *Am Jur. (2d) Waters 88*

§ 66:

1. *Pollock v. The Cleveland Ship Building Company, 56 OS 655 (1897)*
2. *Ohio Rev. Code, Sec. 2911.21*
3. *Ohio Rev. Code, Sec. 2901.01*

§ 67:

1. *163 OS 202 (1955)*
2. *Mentor Harbor Yachting Club v. Mentor Lagoons, 170 OS 193 (1959)*
3. *Ibid.*

§ 68:

1. *Lembeck v. Nye, 47 OS 336 (1890)*
2. *Ohio Water Service Co. v. Ressler, 173 OS 33 (1962)*

§ 69:

1. *Gilman v. Philadelphia, 3 Wall. 713 (1866)*
2. *United States v. Appalachian Electric Power Co., 311 U.S. 377 (1940)*
3. *33 U.S.C. 407*

§ 70:

1. *Rivers and Harbors Act of 1899, 33 U.S.C. 401 et seq.*
2. *Ohio Rev. Code, Sec. 3767.13*
3. *Hickok v. Hine, 23 OS 523 (1872)*
4. *Ohio Rev. Code, Sec. 3767.03. Also see Sec. 48, above.*
5. *44 O App (2d) 121 (1975)*

§ 71:

1. *Indiana v. Kentucky, 136 U.S. 479 (1889)*