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THE NEED FOR A REFORM OF WATER USE LAW IN ILLINOIS

George Wm. Wolff*

Northeastern Illinois, much like many other urban areas and communities, faces a shortage of water which, unless resolved, may disrupt or limit the patterns of industrial and residential development and adversely affect the economy of the region. Other areas of the state may be subject to similar, if more localized, shortages. Unlike other parts of the country where the supply of water is not sufficient to accommodate the demand, the difficulties in Illinois do not arise out of a physical shortage of water but out of certain inadequacies in the legal and institutional structure responsible for the allocation and conservation of the water resources of this state. It is the purpose of this article to point out the uncertainties and deficiencies inherent in the present system of allocation, and to suggest legislative changes which may minimize the possible disruptions or misallocations which are likely to result if the present system remains in force. To accomplish this the nature and magnitude of the problem in general will be discussed, specific limitations on increases in diversion of water from Lake Michigan will be examined and the law of water allocation in Illinois will be discussed. Statutory systems for water resource regulation will be considered and constitutional problems presented by the concept of water use regulation will be analyzed.

THE NATURE AND MAGNITUDE OF THE PROBLEM

There is seemingly no limit to the water resources which have been bestowed upon Illinois and most of the Eastern States. Illinois has abundant rainfall, numerous rivers, abundant surface water and much ground water. Lake Michigan itself is one of the largest reservoirs of fresh water in the world. Often the problem seems to be too much water rather than too little. The waters of Lake Michigan rise and fall in cycles and at times (such as the present) reach elevations which threaten shoreline development and engulf the state's beaches. Away from the lake, homes and businesses are often flooded when they are developed too near a natural watercourse. When

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natural ground water recharge areas have been covered by pavement and structures, water which normally would have been stored in natural depressions or have seeped into the ground is diverted to rivers and streams, multiplying the flood problems there.

The high levels of Lake Michigan and of local rivers and streams are only temporary occurrences. Such high water levels, therefore, do not reflect a permanent, dependable supply of water presently available for use. There are legal restrictions on the amount of water which may be withdrawn from Lake Michigan, and no effort has been made to utilize floodwaters as a permanent source of supply which can be depended upon in the future. Therefore the state must draw its water supply from the normal level of Lake Michigan and the ordinary flow of its rivers, streams and ground water.

In some areas, particularly in northeastern Illinois, the state’s waters are being unnecessarily depleted. The per capita consumption of water in northeastern Illinois is relatively high in comparison to other jurisdictions. This high per capita use of water is the result of high industrial and domestic use. The concentration in this geographical location of industries such as steel and petroleum refining which require profuse quantities of water has brought about the current industrial use level. The high domestic use per capita has been occasioned by the plentiful supply and low cost of water and by a relatively antiquated distribution system characterized by a high level of leakage. This large per capita consumption of water and the resultant depletion of the present water supply is aggravated by the growth in population and the tendency of that population to inhabit areas in the suburbs which are less densely distributed than has been the pattern in the state.

These factors have led to an increase in both the rate and total quantity of water consumption and have occasioned an alarming decrease in the ground water levels in areas west and northwest of the city of Chicago. Suggested proposals to combat that decline have included increasing the diversion of lake water, utilizing waters of the state’s rivers for domestic consumption, promoting the conservation of water by direct recycling or by recharging ground water reservoirs with storm water, lake water or with the waste water of treatment plants. To some extent the implementation of all of these proposals is influenced, inhibited or controlled by the law and the legal system.

LIMITATIONS UPON AN INCREASE IN THE DIVERSION OF WATER FROM LAKE MICHIGAN

The obvious answer to any water supply question which might arise in northeastern Illinois at first glance would appear to be an increased reliance upon Lake Michigan as a permanent source of supply. State statutes allow the city of Chicago to provide lake water to any municipality within thirty-five miles of its borders and require the city to supply lake water to any municipality within the geographical boundaries of the Metropolitan Sanitary District of Greater Chicago if that community constructs a pipeline to the borders of the city.

Although the state could allow other communities to be furnished with lake water, there are legal obstacles to an enlarged diversion. These obstacles arise out of the fact that the lake waters are not the property of the state of Illinois or its citizens. Lake Michigan is considered to be part of the navigable waters of the United States subject to the regulation and control of the United States Congress, pursuant to its commerce, navigation, and foreign relations powers. The previous attempts of state agencies to use lake water led to a protracted and colorful series of United States Supreme Court cases which define the rights of the states in that respect.

Late in the nineteenth century, the city of Chicago, along with other municipalities along the lake, was in the habit of drawing water for domestic and industrial uses from Lake Michigan. These same political units also discharged their sewage into the lake. It eventually became clear that this discharge of sewage into the potential drinking waters of the citizenry constituted a threat to the public health. The city and the state, through the Metropolitan Sanitary District of Greater Chicago, attempted to alleviate this threat by diverting the discharge of sewers from the lake into the Chicago River and the newly constructed Chicago Sanitary and Ship Canal. It was partly for this purpose that the Sanitary and Ship Canal was constructed and the flow of the Chicago River was reversed causing the waters to flow into the Chicago, Illinois and Mississippi rivers instead of into Lake Michigan. In order to dilute this flow, approximately 10,000 cubic feet of water per second was diverted from Lake Michigan into the Chicago Sanitary and Ship Canal.

The Secretary of War of the United States had previously authorized the

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5. Id.
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district to divert 4,167 cubic feet per second into the Sanitary and Ship Canal in order to maintain its navigability.\(^9\)

In the case of *Sanitary District of Greater Chicago v. United States*,\(^10\) the federal government brought suit to enjoin that portion of the diversion which was in excess of the amount authorized by the Secretary of War. As grounds for the action it was alleged that the excess diversion and the consequent lowering of the levels of Lakes Michigan, Huron, St. Clair, Erie and Ontario would be an obstruction to the navigable capacities of such waters and the ports located thereon. In ordering a decrease in the district’s diversion to the rate allowed by the Secretary of War, Mr. Justice Holmes, speaking for the Supreme Court, held that the United States possessed sovereign interests in the lake and that those interests were paramount to those of any state.\(^11\) The Court noted that this was “not a controversy between equals”\(^12\) and held that states did not have the right to divert water in amounts in excess of that authorized by Congress.

When the Metropolitan Sanitary District failed to abide by the Court’s decree, the states of Wisconsin, Michigan, Minnesota and Pennsylvania filed several original actions in the United States Supreme Court, alleging that the then prevailing diversion of 8,500 cubic feet per second (which had been temporarily authorized by the Secretary of War while new diversion and treatment structures were being developed by the sanitary district) would result in lowering the levels of the Great Lakes by amounts of up to six inches.\(^13\) The special master appointed by the Court, Charles Evans Hughes, found merit in these allegations. The Court held that improvement in local sanitary conditions could not constitute a basis for a continuing or permanent diversion of lake water, and that such a diversion would only be allowed to maintain or improve navigation in the Port of Chicago or the Chicago River.\(^14\) Therefore the Court ordered the sanitary district to devise methods for providing sufficient money to finance, construct, install and put into operation with “all reasonable expedition ‘adequate facilities’ for the disposition of sewage through means other than the lake diversion.”\(^15\)

The diversion by the sanitary district was the subject of a third United States Supreme Court decision in 1930.\(^16\) Wisconsin and several other states filed another original action to compel the sanitary district and the State of

\(9\) Id. at 429-30.
\(10\) 266 U.S. 405 (1925).
\(11\) Id. at 425-26.
\(12\) Id. at 425.
\(14\) Id. at 410, 417-18.
\(15\) Id. at 420-21.
Illinois to comply with the schedule for completion of sewage treatment facilities as suggested by the special master and ordered by the Court in the previous case. The district and the State of Illinois asserted as their defense that a rise in the level of Lake Michigan had removed the threat that the diversion would influence the level of water or the navigability of the Great Lakes. In rejecting this contention the Court noted the speculation involved regarding the duration of the rise and the fact that the delays authorized by the Secretary of War because of "immediate" health considerations were illegal under the statute pursuant to which he had acted. The state and the sanitary district were found to have infringed upon the constitutional rights of the plaintiff states. For this wrong, Mr. Justice Holmes said that the defendants "must find a way out at their peril" and that "[i]f [the State's] constitution stands in the way of prompt action it must amend it or yield to an authority that is paramount to the State." In so ruling the Court adopted the master's schedule for compliance which required a decrease in the diversion to 1,500 cubic feet per second by December 31, 1938. The diversion allowed under the order, however, was to be in addition to any diversions made for the purpose of "domestic pumpage." The amount of water withdrawn by the state and its political subdivisions for domestic purposes thus was not curtailed by the Court, which, nevertheless, noted that if the amount withdrawn was excessive it would be open to complaint.

In 1933 the same diversion was the subject of an original action filed in the United States Supreme Court by the states of Wisconsin, Ohio, Michigan and Minnesota. The plaintiffs there requested the Court to appoint a commissioner to execute the Court's 1930 decree with respect to the reduction in the diversion of water from Lake Michigan. At the time of the 1933 decree the sanitary district had been unable to sell its bonds to finance the construction of facilities which were necessary to decrease its diversion. In response to this circumstance the Court held that the state was the primary and responsible defendant in the action and enlarged its decree to require the state to take all necessary steps. These steps included the raising, appropriation and application of the money needed to complete adequate sewage treatment and disposal works, sewers and other structures and facilities. This time the Court noted that a statute adopted by Congress in 1930 authorized lake diversion but explicitly limited use of the diversion to navigational purposes. The statute further provided that the Secretary of War was to study and report to Congress

17. Id. at 197.
18. Id. at 199-200.
19. Id. at 200.
21. Id. at 410.
by January 31, 1938 on the minimum amount of flow that would be required
annually to meet the navigational needs of the waterway without interfering
with existing navigation on the Great Lakes. Under the terms of this act, the
district's diversion was specifically limited to the total amount authorized in
the Court's previous decree. Therefore the Court ordered the state to carry out
whatever action was necessary to limit flows to that amount. 23

In Wisconsin v. Illinois, 24 the fifth case in the series, the United States
Supreme Court, in 1967, reopened its previous decree and limited total
diversion from the lake and its watershed into the waterway, whether by
domestic pumpage or otherwise, to 3,200 cubic feet per second. The new
decree further provided that this quantity might be apportioned by the state for
domestic use or for diversion into the canal to maintain reasonably safe,
sanitary conditions subject to whatever regulation might be imposed by
Congress in the interests of navigation or pollution control. The Court
indicated as well that an application for modification of the decree to allow for
additional water for domestic use would be timely only:

. . . when and if it appears that the reasonable needs of the Northeast-
er Illinois Metropolitan Region . . . for water for such use cannot be
met from the water resources available to the region, including both
ground and surface water and the water permitted by this decree to be
diverted from Lake Michigan, and if it further appears that all feasible
means reasonably available to the State of Illinois and its
municipalities, political subdivisions, agencies, and instrumentalties
have been employed to improve the water quality of the Sanitary and
Ship Canal and to conserve and manage the water resources of the
region and the use of water therein in accordance with the best modern
scientific knowledge and engineering practice. 25

The Court resolved the doubts raised in a previous decision 26 as to whether the
term "domestic pumpage" allowed the diversion to be used to supply
commercial and industrial users by holding that such uses were permitted. 27

Pursuant to the authority given to the state under the 1967 decree and
under authority delegated by the state, 28 the Division of Water Resources of
the Illinois Department of Transportation, after informal public hearings in
1972, did apportion the 3,200 cubic feet per second among the various
municipalities and political subdivisions of the state. Because demands were
made by so many communities and units of government for Lake Michigan
water, and because of dwindling ground water supplies in the region, the
decision of the division was vigorously contested in the Circuit Court of Lake

23. 289 U.S. at 402-03.
25. Id. at 429-30.
26. See note 18 supra, and accompanying text.
27. 388 U.S. at 427.
County. The division’s allocation was set aside by that court because adversary hearings had not been conducted as required by section of the statute and the required notice for the hearing had not been supplied. At present, the division is holding a new series of hearings which were commenced in 1974 pursuant to the court’s order. At this juncture, it appears that the allocation allowable will not be sufficient to satisfy the needs of nearly municipalities and special districts which have applied for a portion of the allocation. It thus can be expected that whatever the outcome of the administrative decisions, additional litigation over the propriety of the division’s allocation will result and demands will again be raised for an increase in the total diversion by the state from Lake Michigan.

Unless “all feasible means reasonably available” to treat sewage and conserve water are utilized, however, an increase in the total diversion will apparently not be forthcoming under the Supreme Court’s 1967 decree. While the upgrading of the facilities of the Metropolitan Sanitary District, the decreased reliance on dilution as a means of sewage treatment and the imposition of various water conservation measures in the city of Chicago and elsewhere may free an increasing proportion of the cubic feet per second for domestic uses, it is doubtful that these measures will significantly affect the amount of water available to supply water-short communities.

THE LAW WITH RESPECT TO WATER ALLOCATION IN ILLINOIS

Unlike the situation regarding the diversion of Lake Michigan water, the allocation of other ground and surface waters of the state is accomplished in a much more informal and less comprehensive manner. The allocation of such waters is presently governed largely by the common law of Illinois which is sparse and amorphous at this stage. Under the decisional law the relative rights of competing water users of the same water source, whether it be ground or surface water, are uncertain and undefined. Since the supply has always been adequate for the needs of most individuals, except in a very few isolated and local instances, there have been few appellate decisions rendered on the subject.

Illinois, like other Eastern States, follows the common law doctrine of “reasonable use” rather than prior appropriation, in judicially allocating surface water supplies. The Illinois case announcing this doctrine, Evans v.

30. ILL. REV. STAT. ch. 19, § 120.4 (1975).  
32. THE LAW OF WATER ALLOCATION IN THE EASTERN UNITED STATES (Haber and Bergen, eds. 1956). The introductory essay of this compilation of papers contains a summary of the differences in eastern and western water law and the origin of those differences.
Merriweather, is also the leading American decision on the subject. In Evans a mill owner had used the waters of a stream to power his mill. Subsequent to the initiation of this use, another individual constructed a similar mill upstream. Shortly after the construction of the second mill, a drought occurred and the waters of the stream were inadequate to continuously power the upper mill. An employee of the upstream mill owner, Evans, constructed a dam across the stream just below the upper mill and diverted all the water from the stream on to Evans' property and into his wells. As a consequence, the lower riparian owner was deprived of water which would have flowed to him in the absence of the dam. The lower owner brought an action seeking to have the obstruction removed. In holding that an action would lie for obstruction of the stream, the Illinois Supreme Court, quoting Mr. Justice Story, noted that the property interest which one has in water "is in its nature usufructory and consists in general, not so much of a right in the fluid itself as of the advantage of its impetus." Therefore, an individual who desires to use the water for manufacturing purposes must do so "as to do no injury to any other riparian proprietor."

In distinguishing between "natural" and "artificial" uses of water, the court defined natural uses to be those which are absolutely necessary to be supplied in order for human beings to exist. Examples of such natural uses are supplying drinking water, water for household purposes and providing water for cattle. Artificial uses were defined as those not essential to man's existence, and included water used for the irrigation of land, for the propulsion of machinery and for manufacturing. Where an upper riparian owner uses water for natural or domestic purposes, that person may use the entire flow of the stream if all of it is necessary in order to satisfy his natural wants. Where the stream is small and would not be adequate to supply the natural needs of various riparian owners, however, none of the riparian owners can use the water for artificial purposes. Only when all natural needs are satisfied may riparian owners use the remainder for artificial purposes. Thus, the decision arguably said nothing regarding the relative rights of domestic users who must compete either with other domestic users or with those who would use water for artificial purposes. Nevertheless, the court's discussion of the principles to be applied in those situations has been accepted as the law

33. 4 Ill. 492 (1842).
35. 4 Ill. at 495.
36. Id.
37. Id.
38. Id.
39. Id. at 496.
40. Id.
in many jurisdictions in the Eastern States and elsewhere.\textsuperscript{41} It thus may be safe to assume that the same conclusion would be reached in Illinois should situations other than those that were directly before the court in \textit{Evans} arise in the future.

The only other Illinois case dealing with the rights of a riparian owner to withdraw water from a flowing stream of the state was \textit{City of Elgin v. Elgin Hydraulic Company}.\textsuperscript{42} In that action, certain riparian owners in the city of Elgin had constructed a dam across the Fox River for the purpose of providing their mills with an adequate and continuous supply of water. Subsequent to the construction of this dam, the city of Elgin built a water intake upstream so as to draw down the level of the water impounded behind the dam. The water was drawn by the city through its pumps to a pumping station situated on a parcel of land approximately one acre in size which the city had purchased along the river. Water was used by the city to furnish its inhabitants with domestic, fire and sanitary services. Several years after the city pumping station had been in operation, the Elgin Hydraulic Company, a company organized by a number of the mill owners along the river to keep the dam and millraces in repair, brought suit to recover damages for the use and appropriation by the city of the waters impounded behind the dam. The court rejected the plaintiffs' claims on several grounds, one of which dealt with the nature of the city's right to use the water of the river:

\begin{quote}
The city of Elgin, by reason of its purchase of the property along the river, where its water-works are located, became a riparian owner, and even if Fox river, as contended for by counsel for appellee, is to be treated in every way as a private stream, then the city is entitled to the use of its proportionate share of the waters of the river. There is no evidence in the record to show that the city has at any time taken more than its lawful share of such waters, and such being the case, no action would lie against it \ldots on account of any diminution in the volume of the water, by reason of the fact that the city had diverted a portion of the same.\textsuperscript{43}
\end{quote}

\textit{Elgin Hydraulic} is unusual in several respects. First, the case is apparently an exception to the rule that in the event of a shortage riparian waters diverted may only be used on riparian lands.\textsuperscript{44} Here, the city of Elgin was diverting water for use upon land within the city, presumably at non-riparian locations. Not only was water transferred to and used upon non-riparian lands, but those lands were not \textit{owned} by the city.\textsuperscript{45} \textit{Elgin Hydraulic} could be

\textsuperscript{41} See \textit{7 E. Clark, Waters and Water Rights} § 614, at 77 (1976).
\textsuperscript{42} 85 Ill. App. 182 (1899).
\textsuperscript{43} \textit{Id.} at 191.
\textsuperscript{44} See, \textit{e.g.}, Scranton Gas & Water Co. v. Delaware L. & W.R. Co., 240 Pa. 604, 88 A. 24 (1913); Stratton v. Mt. Herman Boys School, 216 Mass. 83, 103 N.E. 87 (1913); Purcellville v. Potts, 179 Va. 514, 19 S.E.2d 700; \textit{Restatement (Second) of Torts} § 855B (1971).
interpreted as recognition that special riparian rights accrue to a city. If this were true, then the holding of the case would run counter to the well accepted rule in other states that a city's riparian rights are no greater than those of other riparian owners.46 It may be possible to contend that this decision can be reconciled with previous decisions elsewhere based upon the fact that the Fox River, at the time of this decision, had been declared to be a navigable river of the state.47 If this contention were accepted it would follow that navigable waters would be subject to use for whatever purpose the state might, either directly or through a political subdivision, choose. This argument is not persuasive, however, because the navigable waters of a state are held by it in trust for all its citizens only to protect navigation48 and not to allow diversions for consumptive uses.

The case probably can safely be said to stand for the proposition that a municipality which uses water for domestic, sanitary and fire purposes may have rights to withdraw water from a navigable stream which are superior to the rights of other riparian owners who withdraw such waters for artificial or manufacturing purposes. However, the question of whether a city would be allowed to use the water thus diverted to furnish water to industrial users in its system and to thereby allow those users to prevail over other industrial users who are riparian to the stream from which the city draws its water still remains unanswered. Such a result would be most inequitable, particularly if the industrial properties serviced by the city lie on lands which are not riparian or which fall outside the watershed of the particular body of water in question.

The common law of surface waters in Illinois is thus somewhat unclear. Only two conclusions can be reached with any certainty. One is that where two artificial users of water are in conflict, neither has the right to appropriate the entire flow, and the flow must be apportioned between them. The second is that where a city withdraws water for domestic, fire and sanitary purposes for its inhabitants, it has the right to do so only if it does not injure artificial downstream users of water by withdrawing more than its lawful share of water from a navigable stream. Thus far there has been no case which has dealt with the riparian rights of domestic users in competition either with other domestic users or with industrial or manufacturing users. It is safe to speculate,

47. In Laranger v. Flint, 185 Mich. 454, 152 N.W. 251 (1915), the court agreed that the state had the power to alter riparian rights in a navigable stream but was divided over whether the city had power to do so in the absence of a specific statute.
however, that domestic uses would prevail over industrial uses and that courts would favor private domestic users over private industrial users.

The law regarding apportionment of ground waters in Illinois is less clear and more sparse than the law concerning surface waters. As was the case with surface waters, there is only one Illinois Supreme Court decision dealing with ground water apportionment, and that case arose in the nineteenth century. In Edwards v. Haeger, the common grantor of both the plaintiff and the defendant conveyed away a portion of his property to plaintiff’s predecessor in title, subject to an easement contained in the grant which provided that the defendant’s predecessor would be allowed to extend and maintain a ditch to certain “wet, springy land” on the plaintiff’s property for the purpose of diverting water therefrom for the running of his mills. Nearly thirty years subsequent to this grant the plaintiff sank various wells into his property, one of them on high, dry land. From this well, the plaintiff constructed a tile across his land and beneath the defendant’s ditch to his dairy barn. The defendant contended that the pipe or the well diverted water from the wet, springy ground where he was entitled to draw his water, and he severed the pipe leading from the well. Plaintiff filed an action for injunctive relief and for an accounting for the damage done by the defendant. The plaintiff alleged that the water coming into his well was underground, percolating water, whereas the defendant alleged that the water reaching the well was not percolating water, but was water which he was entitled to draw upon for supplying his mill under the terms of the grant. The defendant also alleged that under the terms of the grant the plaintiff was prohibited from intercepting percolating water which would have otherwise reached the wet, springy ground. The court rejected the defendant’s contentions and, in the course of doing so, said:

Water which is the result of natural and ordinary percolation through the soil is part of the land itself and belongs absolutely to the owner of the land, and, in the absence of any grant, he may intercept or impede such underground percolations, though the result be to interfere with the source of supply of springs or wells on adjoining premises. Upon this proposition there is, so far as we are advised, no dissension in the decisions of courts or in the writings of the authors of text books. (Emphasis supplied).50

The language employed by the court appears to be overbroad. Edwards concerned only the terms of a grant and the rights of defendant thereunder. Since the defendant took his rights to any percolating water only by terms of the reservation in the grant, the court’s discussion of the relative rights of adjoining land owners and its language as to the absolute ownership of percolating waters appear to be dicta. Language elsewhere in the opinion supports this interpretation.

49. 180 Ill. 99 (1899).
50. Id. at 106.
After stating the above-quoted proposition, the court proceeded to observe that:

The grant here under consideration does not in terms vest the person entitled to the benefit thereof with the right to any water except that in the "wet land," and we are unable to perceive that an implication of any other or further right arises from the language employed in the instrument creating the grant.\(^{51}\)

It is, therefore, not certain precisely what effect this decision has upon ground water law in Illinois. If the first-quoted statement cannot be classified as dicta, it is unclear whether the court there was apportioning or defining rights of an artificial user as opposed to a domestic user (the dairy farm) or whether both uses would be considered to be artificial. In other words it is not apparent whether the doctrine regarding absolute ownership applies to a domestic and an artificial user or only to two artificial users.

The precedential value of a more recent ground water case is less clear than *Edwards*. In *Behrens v. Scharringhausen*,\(^{52}\) the plaintiff owned a farm on which was located a well used to water livestock and crops on the farm and to supply the owners with water for their personal, domestic requirements. Adjacent to plaintiff’s land was a large gravel pit which was dry except in rainy periods, at which time water would flow into the gravel pit making it difficult to mine the gravel therefrom. To cure this problem during wet periods, the defendant pit owners installed two pumps which would remove the excess water and discharge it into a creek flowing through plaintiff’s land. The plaintiff brought suit to enjoin this practice, alleging that he had to sink deeper wells, install additional pipe, and acquire larger pumps to obtain necessary farm water because the use of defendants’ pumps had lowered the ground water table on his farm.

The court appointed a master to review the facts who found that the defendants’ use of the pumps was not a *reasonable use*. The chancellor overruled the master’s recommendation and decided that the defendants must prevail in the matter regardless of whether the court applied the English rule of absolute ownership, as arguably enunciated in *Edwards*, or the American reasonable use rule. This result followed from the plaintiffs’ failure to establish that they were irreparably injured by the pumping. The appellate court upheld the chancellor’s decision. In so doing the court noted that there was a trend away from the English or common law rule of absolute ownership of percolating waters to the American rule of reasonable use\(^{53}\) and questioned whether *Edwards* actually adopted the English rule.\(^{54}\)

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\(^{51}\) *Id.*


\(^{53}\) *Id.* at 329, 161 N.E.2d at 45-46.

\(^{54}\) *Id.* at 330, 161 N.E.2d at 46.
Again, it is unclear under Illinois decisional law what the result would be if two competing users of water, whether municipal or private, natural or artificial, were to come into court faced with a shortage of water. As a result it is difficult for communities and individuals who are dependent upon such sources of supply to adequately plan their growth and development. In previous eras, a community could plan its expansion and individuals could rely on the availability of surface and ground waters. That is no longer the case. If development is to occur, some rational means must be found for apportioning a dwindling water supply among an expanding number of potential users before a crisis develops.

Illinois statutes provide little additional assistance or guidance to those in search of a rational means of allocation. The statutory provisions are few and narrow. Among them are provisions relating to the Department of Transportation’s authority to allocate the waters of Lake Michigan.55 Other statutes provide for the creation of a State Natural Resources Commission,56 the State Water Survey,57 the delegation of responsibility to the Environmental Protection Agency for the supervision of the control of water quality,58 and the regulation of well drilling.59 Additionally, the Illinois Pollution Control Board has apparent authority to adopt regulations concerning the location, design, construction and operation of public water supply facilities. Section 1760 of the Environmental Protection Act indicates that the board has authority to adopt regulations governing the operation and maintenance installations which may affect the "adequacy" of the public water supply. Thus, the board appears to have the authority to regulate one public water supplier if another public water supply will be affected either in terms of the quality or quantity of water available. Nevertheless, the board has held in Citizens-For-A-Better-Environment v. Family Leisure Center, Inc.,61 that it does not have authority under this Act to regulate the draw-down of water.62

Illinois does, however, have one piece of legislation which provides for the regulation of water use. Under the Water Authorities Act of 1951,63 any contiguous territory may be formed into a water authority if a petition signed by more than five hundred voters within the territory requesting that the issue of the establishment of an authority be submitted to the voters is filed with the

56. Id. at ch. 19, §§ 1071 et seq.
57. Id. at ch. 122, § 62.
58. Id. at ch. 111 1/2, §§ 1015, 1019.
59. Id. at ch. 111 1/2, §§ 116.76 et seq.
60. Id. at ch. 111 1/2, § 1017.
61. 18 Ill. Pollution Control Bd. Opinions 81 (1975).
62. Id. (abst., semble).
63. ILL. REV. STAT. ch. 111 2/3, § 223 (1975).
circuit court. The board of trustees has the power to make inspections of wells, to require information from well owners, to require the registration of all wells or withdrawal facilities or to require the deepening, extending or enlarging of existing wells or withdrawal facilities. The trustees may also regulate the use of water by establishing limits on or priorities with respect to the use of water during any period of actual or threatened shortage. Additionally, the trustees have the power to own and construct facilities for additional sources of water supply and to sell water to municipalities or public utilities. In order to finance such facilities, the board also has the power to tax and the power to issue both general obligation and revenue bonds. The act indicates that the board may confer with the state Water Survey, the state Geological Survey, the Board of Natural Resources and Conservation and the Water Resources and Flood Control Board or any other board or commission of the state in the exercise of its powers and responsibilities over water.

While the board does have apparent authority to regulate new uses of water and to control existing sources in a time of shortage or threatened shortage, its specific powers are not clear. Since the machinery for the establishment of an authority is overly cumbersome and is of such a nature as to be easily thwarted, many areas in serious need of regulation of water supply and use may be unwilling to delegate some of their present authority to such a board. Therefore local interests may prevail and prevent the achievement of rational, region-wide solutions.

With the exception of the emergency controls provided for under the Water Authorities Act, the Illinois system of statutory and common law allocation does not provide a predictable means for regulating municipal and private users or for the prevention of waste. Nor is there a system for establishing a priority of use in times of shortage. Should a serious shortage develop, it may be anticipated that decisions would be made on a case-by-case, ad hoc basis with little overall, long-range planning entering into the decision. In other words, decisions will be made in a crisis atmosphere upon criteria which are suited only for such circumstances. The present uncertainty of the law encourages competition among various users of water in determining the depth, location and power of pumping systems. Decisions as to the

64. Id. at ch. 111 2/3, § 223.
65. Id. at ch. 111 2/3, § 227.1.
66. Id. at ch. 111 2/3, § 228.
67. Id.
68. Id. at ch. 111 2/3, §§ 233, 237.
69. Id. at ch. 111 2/3, § 228.
location and depth of drilling are not designed to ensure the optimal resource use in the area. Even the system for allocating Lake Michigan water among the various communities is a system without statutory standards or guidelines and without any assurance that the allocation made will be consistent with the best interests of the region as a whole or of the communities individually. What is needed is an overall system for assessing the water resources and demands of the region and for allocating to each user of water the appropriate quantity of water from the most appropriate source for service to that community.

The present system is designed not for times of scarcity but for times of plenty when only minor problems arise. These are not times of plenty, however, and continuing high lake levels and stream flows cannot be depended upon to serve as a permanent source of supply in the future. The Department of Transportation statute does not recognize that there are other water sources which could be used by the various applicants for Lake Michigan water. The statute requires the division to operate with half the power necessary and with blinders upon its vision. In short, the present mixture of common law and statutory provisions is a piecemeal system which does not allow courts or administrative agencies attempting to solve the problems of water shortage to acknowledge the size of the problem or to develop a rational, long-range solution which would recognize the relationships among the various sources of water in the area and would permit their optimal apportionment among competing users.

STATUTORY ALLOCATION SYSTEMS IN OTHER JURISDICTIONS

Illinois is not the only state with an inadequate system of water allocation. Many of the Eastern States of the United States have similar systems. But economic growth relative to water supply in many of those areas has not reached the limits it has in Illinois. Furthermore, most of those jurisdictions do not have the large urban population or the concentration of water-intensive industries that Illinois possesses. Heretofore, most of the states that have suffered from water shortages were located in the western part of the United States. In response to such shortages those jurisdictions either initially adopted the appropriative system\(^\text{70}\) of water use or have converted from the riparian system of water use allocation to either a combined or a total appropriative system.\(^\text{71}\) There is a trend toward an appropriative system now in the Eastern States much like the trend toward such a system that took place

\(^{70}\) The "appropriative system" of determining water rights "is based on the principle of priority or seniority, under which rights accrue to users in the order in which they first put water to beneficial use. The principle is not equal right of use but paramount right in the earlier user." United States v. Willow River Power Co., 324 U.S. 499, 504 n.2 (1944).

\(^{71}\) I. E. CLARK, WATERS AND WATER RIGHTS § 18, at 74 (1967).
near the turn of the century in the West.\textsuperscript{72} In the East many states are moving away somewhat from the common law approach toward some form of a statutory, administrative system for the allocation or control of water use.\textsuperscript{73}

Most of the statutory systems now in use in Eastern States are not as extensive or all-encompassing as those in the Western States. Almost all jurisdictions provide for the creation of an administrative agency with the power to require permits with respect to new or expanded uses of water resources. Some states provide for more comprehensive systems of planning and regulation which cover both ground and surface water and control both existing and new or expanded uses. For purposes of comparison, the statute of a western state will be discussed and contrasted with a model legislative proposal and recent enactments in several Eastern States.

\textit{Oregon Statute}

Under a statute adopted in 1909 Oregon imposed a permit system upon any person desiring to acquire the right to beneficial uses of water.\textsuperscript{74} In order to obtain such a permit, an applicant must submit information about the nature and amount of the proposed use of surface waters, the location and description of the proposed diversion structure and data about the time within which it is proposed to construct that structure and commence diversion or appropriation. The statute provides that if, in the judgment of the state engineer, a proposed use may prejudicially affect the public interest, he shall refer the application to the state Water Resources Board, which is required to hold a hearing on the application.\textsuperscript{75} After a hearing the board may determine that the proposed use may be detrimental to the public interest. Upon such a finding the board may enter an order rejecting the application or modifying it to conform to the highest public benefit.\textsuperscript{76} In determining whether the proposed use would impair or be detrimental to the public interest the board is required to consider the conservation of water, other beneficial uses to which the water may be applied, the maximum economic development of the waters involved, the amount of water available for appropriation, prevention of wasteful or unreasonable use of water and all vested and inchoate rights to the use of the waters of the state as well as the Water Resources Policy formulated by the board under the Oregon Revised Statutes.\textsuperscript{77} Permits issued under this proce-

\textsuperscript{73} Plager & Maloney, \textit{Emerging Patterns for Regulation of Consumptive Use of Water in the Eastern United States}, 43 INDIANAPOLIS L.J. 383 (1968).
\textsuperscript{74} ORE. REV. STAT. §§ 537.110 \textit{et seq.} (1975).
\textsuperscript{75} Id. at § 537.40.
\textsuperscript{76} Id. at § 537.170.
\textsuperscript{77} Id. at § 537.170(3)(g).
dure may be cancelled for failure to construct the structure within the time provided by law.\textsuperscript{78}

A similar statute for appropriation of ground waters was adopted by the Oregon legislature in 1955.\textsuperscript{79} Under that act the General Assembly provided that actual and lawful applications of ground water to beneficial uses prior to the effective date of the act were to be recognized as rights to appropriate ground water to the extent of the maximum beneficial use at any time within two years prior to the effective date of the act, provided that that use had been registered under the applicable provisions of the Oregon statutes.\textsuperscript{80} Like the surface water statute,\textsuperscript{81} the Ground Water Use Act requires that any person desiring to acquire a new right to appropriate ground water or to enlarge on any existing right to appropriate ground water apply to the state engineer for a permit.\textsuperscript{82} If the application for the permit discloses a probability of wasteful use or undue interference with existing wells, or indicates that the proposed use or well could interfere with existing rights of others to appropriate surface waters, the engineer may impose certain conditions and limitations on the permit so as to prevent these conditions from occurring or may, in his discretion, initiate a proceeding for the determination of "critical ground water areas."\textsuperscript{83}

If a dispute arises over the extent of the right to appropriate ground water, the state engineer, upon petition of one of the appropriators or on his own motion, may make a final determination of the relative rights.\textsuperscript{84} The engineer, either on his own motion or after receipt of a petition by a ground water claimant, may initiate a proceeding for determination of a "critical groundwater area."\textsuperscript{85} Such a proceeding may be initiated whenever the engineer has reason to believe that ground water levels in the area are declining or have declined excessively or when the wells of two or more claimants or appropriators within the area interfere substantially with one another, or when the ground water supply in the area is about to be overdrawn. The state engineer is required to hold a hearing on the question of whether such a critical ground water area will be established in a certain location.\textsuperscript{86} If, after this hearing, the engineer decides that the public health, safety and welfare require that one or more corrective controls be adopted, he may declare the area to be a critical ground water area, set the boundaries of the

\textsuperscript{78} Id. at §§ 537.250, 537.410.  
\textsuperscript{79} Id. at § 537.505. The act is known as the Ground Water Use Act of 1955.  
\textsuperscript{80} Id. at §§ 537.585, 537.605, 537.610. See also id. at § 537.545.  
\textsuperscript{81} Id. at § 537.135.  
\textsuperscript{82} Id. at § 537.615.  
\textsuperscript{83} Id. at § 537.620(2).  
\textsuperscript{84} Id. at § 537.670(1).  
\textsuperscript{85} Id. at § 537.730.  
\textsuperscript{86} Id. at § 537.730(2).
area, and indicate which water reservoirs within the area are included within the designation.\textsuperscript{87}

The engineer may order any of a number of corrective control procedures. Among them are a closing of the area to any future appropriation, a limitation upon the total withdrawal of ground water in the area and apportionment of such permissible withdrawal amounts among the various appropriators holding valid rights to the ground water.\textsuperscript{88} The priorities established as to rights to withdraw ground water in an area must place use for domestic and livestock purposes first and thereafter other beneficial purposes in such order as the engineer thinks advisable.\textsuperscript{89} The engineer’s order may also include a provision reducing the permissible withdrawal of ground water by any one or more appropriators of wells in the area, and may include other provisions to implement and control the ground water shortage and the threat to the public health, welfare and safety.\textsuperscript{90} The engineer’s powers under this emergency provision apparently include the power to regulate existing uses as well as new uses and to diminish uses without regard to their priority of establishment.

The Oregon statute creates a strong administrative agency, provides for rigorous enforcement of its restrictive allocation regulations, and sets out some guidelines to the administrative agency regarding priorities in the establishment of water resource use.

\textit{Model Water Use Act}

Prompted by certain drought conditions which occurred in the East in the 1950's,\textsuperscript{91} the National Conference of Commissioners on Uniform State Laws undertook to devise a model or uniform water use act for adoption by the states.\textsuperscript{92} The statute, which incorporates certain aspects of western water law, was adopted in 1958 by the commissioners. Many of its provisions have subsequently been adopted piecemeal in a number of eastern jurisdictions.

The suggested statute contains a declaration that the policy of the adopting state is for all water resources to be used so as to make a maximum contribution to the public benefit.\textsuperscript{93} The act further states that all water resources of a state are subject to regulation under its provisions and contains a prohibition against the use of any of the water resources of the state unless

\textsuperscript{87} \textit{Id.} at § 537.735(2).
\textsuperscript{88} \textit{Id.} at § 537.735(3).
\textsuperscript{89} \textit{Id.} at § 537.735(3)(c).
\textsuperscript{90} \textit{Id.} at § 537.735(3)(d), (e), (g) & (h).
\textsuperscript{91} \textit{Handbook on the National Conference of Commissioners on Uniform State Laws} 174-218 (1958) [hereinafter cited as Model Water Use Act].
\textsuperscript{92} \textit{HAWAI'I REV. STAT. ch. 177} (1961).
\textsuperscript{93} Model Water Use Act § 101 (1958).
the use is carried out in accordance with the provisions of the act.\(^ {94}\) The act would establish a Water Resources Commission composed of members serving five-year terms.\(^ {95}\) Under the authority granted in the act the Water Resources Commission would have the power to adopt comprehensive plans for the utilization, conservation and regulation of the state’s water resources.\(^ {96}\) Additionally, the commission would be empowered to undertake or contract for scientific investigations, experiments and research and to provide for the accumulation of data necessary for the execution of its functions.\(^ {97}\)

The act contains a provision which would preempt the home rule powers of local units of government and would prohibit any other state agency from exercising concurrent or conflicting powers in the area of water resource use regulation\(^ {98}\) should the commission specifically disapprove of an ordinance, regulation or rule of such a local unit or agency.\(^ {99}\) In addition to this prohibition of local regulation, the model statute also provides that no state or local government or agency which has the power of eminent domain could exercise that power in order to acquire rights to water use unless written consent is obtained for the exercise of that power from the commission.\(^ {100}\)

Domestic uses of both contained water and ground water are afforded special treatment under the act. Those uses would be allowed to continue if they were in existence at the effective date of the act.\(^ {101}\) New domestic uses of both surface and ground water could be initiated without the user being required to certify his use or to apply for a permit.\(^ {102}\) The act also creates a special category of “preserved uses.” Those uses are defined as lawful and beneficial uses of water made at the time of the adoption of the act or through use prior thereto, other than a domestic use.\(^ {103}\) New domestic uses could be initiated even though they would reduce the supply of water available to a person holding or undertaking a preserved use.\(^ {104}\) Similarly, new domestic

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94. Id. at § 103.
95. Id. at § 201. This section of the statute also suggests three alternative approaches to the composition of the board and the qualifications of its members.
96. Id. at §§ 202(1), 204.
97. Id. at § 202(2).
98. Id. at § 205.
99. The Hawaii statute, which is in most other respects identical to the Model Act, provides that all local ordinances are invalid unless specifically approved by the commission. HAWAI REV. STAT. §§ 177-78 (1961).
100. Model Water Use Act § 205(b) (1958). In Illinois a great deal of unnecessary confusion has arisen over the home rule powers of municipalities to act in such areas as environmental matters where the state has enacted a comprehensive statute. See, e.g., Metropolitan Sanitary Dist. v. Des Plaines, 62 Ill.2d 406, 347 N.E.2d 716 (1976); Carlson v. Worth, 62 Ill. 2d 406, 343 N.E.2d 493 (1976). A specific provision such as that in the Model Water Use Act would be helpful.
101. Id. at §§ 301(a), 401.
102. Id.
103. Id. at § 303.
104. Id. at § 301(b).
sources or uses may be instituted even though the new domestic use would interfere with a user who had been granted a specific permit under the provisions of the act. The preference given to domestic uses is apparently based upon the assumption that the quantity of water taken by individual domestic users is and will be small.

Individuals desiring to initiate a use of water other than a preserved use or a domestic use would be required, after the effective date of the act, to apply to the commission for the issuance of a permit. Under the act the commission could require the applicant to submit such information as it deems necessary to fulfill the purposes of the act. In the issuance of permits the commission is directed to bear in mind that its objective in such issuance is the beneficial use of the water resources of the state. The commission is required to take into account the amount of water available, the extent to which the use would be beneficial and the extent to which the proposed use would interfere with the preserved uses, domestic uses or uses previously permitted under the authority of the act. The permits granted by the commission could be either individual or general in nature and extend for a duration not in excess of fifty years. Each permit may contain conditions necessary to effectuate the provisions and purposes of the act. A permit could be granted which interferes with preserved and domestic or other permitted uses if the commission subjected that permit to the condition that the holder furnish a quantity of water to the person holding the use interfered with. After a permit has been granted the commission may order its relinquishment if other applicants exist who would devote the water to a higher or more beneficial use, provided such applicants would be willing to furnish reasonable compensation to the permit holder.

If it should become apparent that there is an insufficient quantity of ground or surface water to supply all lawful uses under the act or that the ground water table in any area of the state is declining, the commission would have the power to issue rules or orders with respect to the use of such waters, could forbid the initiation of new water uses or modifications of existing uses, and would be permitted to apportion, limit or rotate the uses of water or

105. Id.
106. Id. at § 401.
107. Id. at § 404(a).
108. Id. at § 407(a).
109. Id. at § 407(b).
110. Id. at § 406.
111. Id. at § 408.
112. Id. at § 409.
113. Id. at § 410.
prevent the continuation of uses which had ceased to become beneficial.\textsuperscript{114} If the shortage of water, in the judgment of the commission, had become a threat to the public health, safety and welfare within any area of the state and if the commission’s powers of regulation were inadequate to protect the public health, the commission could prohibit use of certain water resources and authorize any public agency to enter private or public lands to remove any water located thereon to the extent that that removal is necessary for the protection of the public health.\textsuperscript{115}

The statute also provides that if the commission should become aware that any person has violated or threatens to violate the provisions of the act or any rule or regulation of the commission, the commission would have the authority to bring an action to enjoin that violation or threatened violation in the appropriate court.\textsuperscript{116} Violations of the act would be subject also to criminal penalties.\textsuperscript{117}

The model statute, like that of the State of Oregon, makes a provision for the development of a comprehensive state plan for water resource allocation, sets up an administrative agency to carry out its provisions and imposes a permit system for new and existing uses. Unlike the Oregon statute, the model act specifically would prohibit local government units or state agencies from acting in conflict with the water resource agency under specific circumstances. The scope of regulation of the use of all water sources is broad, but special, less stringent, treatment is afforded to domestic and preserved uses. There are also special provisions for the exercise of the administrative agency’s power in emergency situations. Strong and effective remedies are available to the agency to counter violations of the act’s provisions.

The Oregon statute and the model act both establish a comprehensive method of planning, regulating and allocating the surface and ground water resources of a state. To some extent they have served as a guide to Eastern States which are currently grappling with the same problems. The degree of success of such efforts in the Eastern States has been varied, as is indicated by the following discussion of some of the Eastern State statutes.

\textbf{Statutes of Eastern States}

The Iowa statute, the broadest of the "Eastern" State statutes was based to a large extent upon the appropriative statutes of the Western States.\textsuperscript{118} The

\textsuperscript{114} Id. at § 501(a)(2). An alternate provision here would allow preference to be given to similar users according to the date on which the particular use was established.

\textsuperscript{115} Id. at § 502.

\textsuperscript{116} Id. at § 605(d).

\textsuperscript{117} Id. at § 701.

state's policy requires that its water resources be put to a beneficial use to "the fullest extent of which they are capable."\textsuperscript{119} The 1957 statute created an agency similar to those discussed above to administer the act's provisions, the Iowa Natural Resources Council.\textsuperscript{120} One important difference between the Iowa statute and that of Oregon and the model statute, is that the Iowa act requires that the council adopt and enforce a comprehensive, state-wide plan for the utilization and protection of the water resources of the state\textsuperscript{121} and all permit applications must affirmatively establish that proposed water resource uses will be consistent with that plan.\textsuperscript{122}

The Iowa statute requires that both new and existing uses of water, other than "non-regulated" uses, must be made in accordance with a permit obtained from the council.\textsuperscript{123} The significance of the Iowa system lies in the definition of non-regulated uses. A non-regulated use refers to the use of water for ordinary household purposes or for supplying water to livestock and domestic animals.\textsuperscript{124} Also included within the definition of non-regulated uses are the beneficial use of surface flows of the state's boundary rivers, existing beneficial uses of water within a municipality as of the effective date of the act and the beneficial use of small quantities of water.\textsuperscript{125} The preference afforded to domestic uses in the Oregon and model statutes is evidenced also in the Iowa statute by the fact that the council, in considering applications for permits, is required to grant priority to uses for households, livestock and domestic animals.\textsuperscript{126} In most other respects the Iowa statute is similar to the two discussed earlier.\textsuperscript{127}

\textsuperscript{119} IOWA CODE § 455A.2 (1975).

\textsuperscript{120} The council consists of nine members appointed for terms of six years each. IOWA CODE §§ 455A.3, 455A.4 (1975).

\textsuperscript{121} Id. at § 455A.17. The council in addition has the power to approve and construct flood control works and structures, id. at §§ 455A.18, 455A.34, and to regulate flood plain development, id. at § 455A.35.

\textsuperscript{122} Id. at § 455A.18.

\textsuperscript{123} In order to obtain a permit an applicant must submit an application to the council setting forth the proposed use and the quantity, time, place and rate of diversion thereto. IOWA CODE § 455A.19 (1975). A hearing is held before the water commissioner on the permit application, after which he makes a determination as to whether the permit should be granted and files that determination with the council. Id. Any party aggrieved by that determination may appeal the decision to the full council. Id. at § 455A.20. The decision of the council is reviewable in the circuit court. Id. at § 455A.37.

Permits generally continue in force for a period of ten years or less under such terms and conditions as are contained in the permit. Id. at § 455A.20.

\textsuperscript{124} Id. at § 455A.1.

\textsuperscript{125} Id.

\textsuperscript{126} Id. at § 455A.21. The Iowa act also provides that priority must be given in the order applications are received and that, in the case of a use which commenced prior to the effective date of the act, priority shall be given according to the actual date of diversion or withdrawal.

\textsuperscript{127} Permits may be modified or cancelled by the water commissioner if the terms or conditions therein are breached, if the permitted use is not fully utilized or in those circumstances deemed by the commissioner to be necessary to protect the public health or public interest in lands or waters. IOWA CODE §§ 455A.28, 455A.29 (1975). Special restrictions or cancellations may apply also in emergency periods. Id. at § 455A.28.

The commission has the power to initiate actions to enjoin violations of its orders or regulations in the
Less comprehensive, less restrictive statutory approaches have been developed for the purpose of water use regulation in other eastern states. Recent Georgia legislation permits the regulation of both existing and new uses, but of ground water only. The Ground Water Use Act contains several significant exceptions to the regulations. Permits are required only for persons who withdraw or utilize ground water in excess of 100,000 gallons per day. In addition to this exemption for smaller users of water, the act also provides that when a permit applicant is able to provide sufficient evidence that the water drawn or used is not consumptively used, a permit shall be issued pro forma without a hearing and without the conditions otherwise applicable to permits. A "non-consumptive" use refers to those uses of water which return the water to the ground water system or aquifer from which it was withdrawn without substantial diminution in quantity or substantial impairment in quality at or near the point from which it was withdrawn. Thus, if water effluent from a water supply system is used to recharge ground water or aquifers in the area at or near the point of withdrawal, a permit is not required.

The Division of Environmental Protection of the Georgia Department of Natural Resources is charged with the responsibilities of administering the permit system and promulgating regulations concerning ground water use. In addition to the establishment of the usual permit requirements and

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1. GA. CODE ANN. ch. 17-11 (1972) [hereinafter cited as the Ground Water Use Act].
2. Id. at § 17-1106(a). Compare this with the "small use" exemption for users of less than 5,000 gallons per day under the Iowa statute. IOWA CODE § 455A.1 (1975).
3. GA. CODE ANN. at § 17-1106(b).
4. Id. at § 17-1103(a).
5. Id. at § 17-1103(b).
6. Specifically, the division may require that users submit reports with respect to the quantity of water used or withdrawn, GA. CODE ANN. § 17-1105 (1972), and may regulate the timing of ground water withdrawals and act to prevent or abate unreasonable effects on other water users within the area. Id. at § 17-1105(1)(2). It may also regulate well depth and spacing, pumping rates, pumping levels and may adopt such other regulations as are necessary to accomplish the act's purposes. Id. at § 17-1105(a)(3). The division has the authority to grant permits with such conditions as it deems necessary, to issue temporary permits and to modify, revoke or deny the issuance of any permit. Id. at § 17-1106(c). In exercising its powers with respect to permits and in adopting regulations, the division is required to consider the number of persons using a particular aquifer, the size and the nature of the aquifer and the extent to which various uses of the aquifer may be necessary or desirable. Id. at § 17-1106(g). Permits issued by the division may not be issued for periods in excess of ten years or the period necessary for the reasonable amortization of the
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regulations, the division may establish special permit requirements for persons locating in "capacity use areas." Even individuals, other than domestic water users, who are not required to obtain a permit in such a capacity use area are required to follow such procedures as are established by the division to protect and manage the area's water resources.

Although most of the enforcement provisions of the Georgia statute are similar in nature to those of most other states, the statute contains one unique feature. When the director of the Division of Environmental Protection has reason to believe that a violation of the act or the regulations has occurred, he is required to attempt to obtain compliance by conciliation. If such efforts fail, an order directed to the violator may be issued which, unless appealed from or complied with, may be the basis of the entry of an order in the circuit court compelling compliance.

While the Georgia statute regulates only ground water use, a comparable Mississippi statute only regulates the state's surface waters. Surface waters are defined as waters found in a body or channel having defined banks. Like most water use acts, the Mississippi statute declares that private water rights are subject to appropriation as resources of the state. The Board of Water Commissioners is charged with the administration of the permit provisions of the act. Certain existing beneficial uses are exempt from the act's permit provisions as is domestic use of water.

Permits may be issued for the appropriation of water only to the extent of the excess of the actual flow over the established minimum flow of a particular stream or other body of water, but exceptions may be made to this applicant's water withdrawal and water-using facilities. Such permits are not transferable except with the approval of the division. All permits are required to take into account the extent of prior use and the investment in prior use, but the granting of a permit must not have unreasonably adverse effects upon other water uses in the area, including the public water use. 

134. Id. at § 17-1107(b).
135. Id.
136. For example, a direct application may be made to the circuit court for injunctive relief for violations of the act. GA. CODE ANN. § 17-1108 (1972). Violators are also subject to civil penalties of $1,000 for each initial violation and $500 for each day in which that violation continues or in which that individual fails to comply with an order of the director. Id. at § 17-1108.1. Civil monetary penalties have received wide use in regulatory statutes in recent years. See, e.g., 2 ADMINISTRATIVE CONFERENCE OF THE UNITED STATES, AN EVALUATION OF THE PRESENT AND POTENTIAL USE OF CIVIL MONEY PENALTIES AS A SANCTION BY FEDERAL ADMINISTRATIVE AGENCIES 896 (July 1, 1970-December 31, 1972).
137. GA. CODE ANN. at § 17-1107.1 (1972).
138. MISS. CODE §§ 51-3-1 et seq. (1972).
139. Id. at § 51-3-3(b).
140. Id. at § 51-3-1.
141. Id. at § 51-3-15.
142. Id. at § 51-3-7(1). The beneficial uses exempted under this section are those commenced as of the effective date of the act or three years prior thereto, to the extent of the actual beneficial use. Such existing users, however, are required to file their claim with the Board of Water Commissioners within approximately two years of the effective date of the act.
143. Id. Domestic uses are also exempt from the claim provision described in note 142 supra.
rule for domestic and municipal users of water. The board may also issue permits for appropriation which allow the holder to withdraw water below the established minimum flow levels upon written assurance that the water will be immediately returned to the source in substantially the same amount as withdrawn in order to ensure that average minimum flow levels are maintained. The appropriator of a water right under the act takes his rights subject to termination for non-use for a period of three consecutive years or for non-compliance with the terms and conditions of the permit.

Recently enacted amendments to existing New York legislation indicate that water use regulation in New York is based on a very different premise from those statutes discussed previously. The new legislation provides that any alterations in the flow of a stream or waterway of the state caused by the use or withdrawal or obstruction of a natural water course is reasonable and lawful unless such alteration would cause interference with present use of water by a riparian user or would cause a decrease in the market value of riparian land. Another unique feature of the new legislation is the provision for a form of comprehensive planning. Under the act a local unit of government may petition the state Department of Environmental Conservation for a survey and study of the water resources of an area of the state, requesting the preparation of a plan for the conservation, development and beneficial use of the waters in that region. After following certain elaborate procedures, the department may appoint a regional planning board for that particular area which would have the authority and duty to develop a water resources plan for the area. In the development of such plans particular consideration is required to be given to the impounding and retention of floodwaters for their future use and distribution, the elimination of wastes and the promotion of conservation of the water resources of the state consistent with the beneficial interests of all the people of the state. The plan is required to estimate the minimum annual amount of water which would be available for all purposes, to estimate present and projected uses for water in the area and the demand for water and to describe the extent to which public works or regulatory actions may contribute to the expansion of the source of supply in a particular area. Upon its completion by the regional planning board the area plan is submitted to the department for approval.

144. Id. at § 51-3-7(3).
145. Id.
146. Id. at §§ 51-3-11, 51-3-13.
148. Id. at §§ 15-1101 et seq. See also §§ 15-1301 et seq. (public water supply planning).
149. Id. at § 15-1103.
150. Id. at § 15-1105.
151. Id. at § 15-1105(12).
152. Id. at § 15-1107.
adopted it must be "given consideration" by the department in any future applications before it.\textsuperscript{153}

This approach has the positive characteristic of providing localities the opportunity to initiate the process of comprehensive planning for a given area. However, the effectiveness of developing such plans would seem to depend on the degree to which the plans for different localities coincide, which may in turn depend upon the vigor with which the administrative agency puts the provision to use.

In two states regulation of water use is confined to certain designated geographical areas. Early New Jersey legislation created a Water Policy Commission having general supervision over all potable sources of public water supply, including subsurface and percolating waters as well as surface waters.\textsuperscript{154} The commission has the power to make investigations of water resources and prepare a comprehensive study designed to ensure an adequate supply of water to municipalities and to provide for the disposal of wastes, to prevent floods, to promote drainage, irrigation, water power and navigation.\textsuperscript{155} Although there is no permit system per se, any individual condemnation of new water rights and any construction and diversion plan of a local government unit or corporation supplying a public water system must be approved by the commission.\textsuperscript{156}

A second New Jersey statute was adopted by the legislature in 1947 which provides for more specific regulation of percolating waters and ground waters.\textsuperscript{157} The emphasis in this act is also on definition of particular areas in the state in need of regulation, where the diversion of percolating waters threatens or exceeds the natural replenishment of such waters.\textsuperscript{158} In these delineated areas no public or private agency may divert or obtain water in excess of 100,000 gallons per day for any purpose unless a permit has been granted by the division.\textsuperscript{159}

Essentially this same approach was taken in the Indiana statute which regulates the use of ground water.\textsuperscript{160} The Indiana Natural Resources Commission has the authority to designate certain areas of the state as "restricted use

\textsuperscript{153} Id. at § 15-1107(4).
\textsuperscript{154} N.J.S.A. §§ 58:1.1 et seq. (1945).
\textsuperscript{155} Id. at §§ 58:1-9, 58:1-11.
\textsuperscript{156} N.J.S.A. §§ 58:1-17. These sections provide for a system by which a petition for the proposed condemnation is filed with the commission. If the petition is approved, the commission may impose any conditions it deems necessary.
\textsuperscript{157} Id. at §§ 58:4A-1 et seq.
\textsuperscript{158} Id. at § 58:4A-1.
\textsuperscript{159} Id. at § 58:4A-2. Provisions are made in the act for exceptions for existing uses. Any person or agency diverting at a rate in excess of 100,000 gallons per day at the time of the act's passage, or when an area is delineated under the act may continue to take from that source the quantity of water which is the rated capacity of the existing equipment without obtaining a permit.
areas' based on surveys of the water resources of the state and upon a determination as to the yield of those ground water sources. In such an area a permit is required to increase consumption 100,000 gallons per day over the quantity used at the time the area was designated as a restricted use area. In issuing the permit the state may impose such stipulations and conditions as may be necessary to conserve ground water and may, as part of such conditions or stipulation, require that ground water be returned to the ground through wells, pits or spreading grounds.

Although only new uses are subject to the permit requirement, existing users of over 100,000 gallons per day in a restricted area are required to file certified statements of the amounts used prior to the time the area was designated a restricted use area. Failure to file such a statement invalidates the individual's claim that it was withdrawing water prior to the designation of the area. In addition, once a restricted use area has been designated, all new well users, regardless of the size of the well, must file reports of the extent and nature of the proposed ground water withdrawal. Finally, those committing waste in a restricted use area may be required to return water to the ground.

With the exception of the Iowa statute, it is clear that the statutes of Eastern States are far less comprehensive than those of most Western States. The Eastern States seldom make provisions for state-wide planning for water use and often leave the initiative for developing area plans to local government units, creating a possibility of conflict and confusion in the administration of the plans. Several of the statutory schemes regulate only one type of water source, such as ground water or surface water, leaving other large and important water sources open to abuse and waste. Another area of weakness in many of the statutes is the lack of effective enforcement and remedial provisions which may diminish the effectiveness of any regulatory efforts. The piecemeal approach to regulation, the overly broad exemptions provided from application of the regulatory provisions for different categories of uses and the fact that the extent of regulatory power may depend upon the existence of a water shortage or a specific emergency are all factors which weaken the ability of even the most foresighted Eastern States to effectively plan for the use and consumption of water resources.

Although there are historical, geographical and political reasons for the absence of comprehensive water use regulation statutes in some states,

161. Id. at § 13-2-2-3.
162. Id. at § 13-2-2-5.
163. Id.
164. Id. at § 13-2-2-6.
165. Id. at § 13-2-2-7.
166. Id. at § 13-2-2-10. The statute specifically states that the use and discharge of water for cooling purposes may constitute waste if the water discharged is not put to further beneficial use.
another deterring factor may be the false specter of other legal problems, some of which are discussed in the following section.

THE CONSTITUTIONALITY OF REGULATING WATER USE

Although a landowner does not own the water beneath his property or that flowing over it, it is clear that he may acquire or possess a right to use a portion of that water. Because of this, an individual's rights in water are known as usufructory rights rather than property rights. Since these usufructory rights are an incident of the ownership of real property, it is arguable that any infringement upon a landowner's right to use such water is also an infringement of his property rights. In order to ascertain whether a statute regulating water use unconstitutionally interferes with a landowner's usufructory or property rights, it is first necessary to determine the extent of those rights and then to examine the precise manner and extent to which those rights have been affected or limited by the particular legislation in question.

As was discussed briefly in an earlier section, the owner of property bounded by a stream has a right to the reasonable use of that stream water for his own purposes. This right to use such water is, by its very definition and nature, not an absolute right. The extent of this right must be determined by reference to the available quantity of water in the stream and whether the water is used for domestic or artificial purposes. The amount of water available is important because if the number of riparian owners increases each individual's rights diminish correspondingly. Therefore, as the flow of the stream rises or falls, so also does the individual's right to its use. The use made of the water is important in determining whose rights are superior because of the priority generally accorded to domestic users. An individual's right to use stream water is further restricted by the rule that no right to use navigable waters exists if the use will interfere with an interest of a state in navigation.

A similar analysis must be made with respect to rights to use ground waters. While it has been held in some jurisdictions that an overlying owner has an absolute right to use the ground water beneath his property, it is clear that this cannot be the case in practice. Two adjoining land owners cannot

170. See text accompanying notes 39-40 supra.
have simultaneous absolute rights to use all of the water which flows beneath their respective properties. The rights of each are determined to some extent by the other's ability to physically withdraw the water from the ground. While this is not a legal restriction on the doctrine of absolute use, it is a physical and practical qualification of the legal doctrine. Even if the doctrine of reasonable use applies to rights in ground water, however, it is clear that no one has an absolute ability to use all the ground water.

Thus, in the case of both stream and ground water it is clear that one's rights are to some extent always defined or limited by the concomitant rights of others and are in no sense rights of absolute ownership or use. Therefore, in considering the validity of water use regulations, the extent to which such controls interfere with rights which are not absolute or measureable to a specific degree must be evaluated. As a result it may be possible to contend that a water use statute accomplishes no more than an administrative definition of the natural limits to which those water rights are subject. Similarly, it may be argued that when a court undertakes to define such limitations, these water rights are not being interfered with or "taken" in a constitutional sense. If, however, it can successfully be contended that a water use regulation statute does more than merely define more precisely the legal limitations upon water use, it then becomes necessary to examine the extent to which the statute has interfered with or regulated that use and to measure that interference against the constitutional standard.

There are two types of constitutional limitations upon the exercise of the police power in property matters. The first of these limitations is found in the 14th amendment to the United States Constitution which prohibits the taking of property without due process of law. A similar provision is found in most state constitutions. The second limitation is the confinement of a state's police power to the promotion and protection of the public health, safety and welfare of its citizens.

This second limitation presents no real obstacle inasmuch as it has been held that the state has an interest in ensuring that the waters lying within its jurisdiction are used for the public benefit and that regulation of such use serves a public purpose.
Since it is clear that the regulation of water use and supply serves a public
purpose, the remaining question which concerns the first limitation is
whether a particular regulation constitutes the taking of private property
within the meaning of the constitutional prohibition. Even if it is assumed that
a land owner has some definable property right to use water and that the
regulation adopted by the state limits, to some extent, the owner’s right to use
the water, it is still difficult to draw the line between a lawful exercise of the
police power and one which constitutes an unconstitutional taking of
property.

This difficulty is illustrated in Goldblatt v. Town of Hempstead,176 and
Hadcheck v. Sebastion.177 In Goldblatt, a city brought an action to enjoin
further mining of gravel by the defendant on the ground of non-compliance
with an ordinance which prohibited excavations below the water table. The
defendant’s land had already been mined to such an extent that it would have
been impossible for him to continue mining if excavation were not allowed
below the water table. In upholding the ordinance in question, the court noted
that there was no evidence that the ordinance’s prohibition would reduce the
value of the lot or render it useless for all purposes.178 In Hadcheck,179 a Los
Angeles ordinance prohibited the operation of brick yards in the area where
the defendant had, for some years, operated such a facility. In upholding the
ordinance, the court held that other uses could reasonably be made of the
property and that there was, therefore, no taking of it.180 Under Goldblatt and
Hadcheck the test applied in distinguishing between a proper exercise of the
police power and an unconstitutional taking depends to some degree upon the
extent to which the regulation in question deprives the owner of all reasonable
uses of his property. If the extent of the deprivation of use is large, a taking
will be held to have occurred. This is especially true where the purpose of the
enactment is to provide some positive benefit to the public rather than to
prohibit some harm to or to resolve some conflict within the private sector of
the society.181 It has been held in Illinois that an enactment which only
imposes burdens upon an individual or prevents the most beneficial or

great foundations of its public welfare and health.” Hudson County Water Co. v. McCarter, 209 U.S. 349
(1908). Similarly, many courts have held that the state has an interest in seeing that none of its stream water
is wasted. Rancho Santa Margarita v. Vail, 11 Cal. 2d 501, 81 P.2d 533 (1938); Iowa Nat’l Resources
Council v. Van Zee, 261 Iowa 1287, 158 N.W.2d 111 (1968); Knight v. Grimes, 80 S.D. 517, 127
N.W.2d 708 (1964); Vermont Woolen Corp. v. Wacherman, 122 Vt. 219, 167 A.2d 533 (1961). See also
In re Willow Creek, 74 Ore. 592, 613-17, 144 P. 505, 515-16 (1914).

177. 239 U.S.394 (1915).
178. 369 U.S. at 594.
179. 239 U.S. 394 (1915).
180. Id. at 408-12.
181. Sax, Takings and the Police Power, 74 YALE L.J. 36, 67 (1964). See also Pennsylvania Coal
Co. v. Mahan, 260 U.S. 393, 415-16 (1922) and 260 U.S. at 417-18 (Brandeis, J., dissenting).
profitable use of the property does not, by itself, render the legislation invalid.182

Under these principles the establishment of a permit system, which prohibits the diversion of water in the absence of a permit, does not constitute an unconstitutional taking of property. All that the permit system does is provide an administrative system for furnishing information to the government regarding water use. Unless there is a showing that permits are denied unreasonably on an individual or actual basis, there has been no taking. Since courts will not speculate as to the manner in which a permit system will be administered, it can be expected that until a permit is alleged to have been improperly denied, the question of the constitutionality of the state’s statute will not be reached and the constitutionality of a state’s action will be assessed on an individual, case by case, permit by permit basis.1

In California-Oregon Power Company v. Beaver Portland Cement Company184 a statute which provided for the explicit destruction of riparian rights was challenged. Prior to the adoption of the Oregon Water Code, the water resources of the state had been administered under the common law riparian rights doctrine. The code, however, required any person intending to acquire beneficial uses in water to obtain a permit from the state engineer and abolished the rule of "continuous flow," except to the extent that water had been applied to a beneficial use prior to the code’s adoption. In upholding the water code, the appellate court cited the state court’s decision on the same issue.185 It recognized that riparian and property rights are held subject to the police power of the state, stating:

It has long been generally recognized that the establishment of an administrative system for the regulation and determination of water rights, such as that adopted by Oregon Water Code of 1909, is a legitimate exercise of the police power of the state. [Citations omitted]. The intensity of the public interest involved is indicated by the provisions in the constitutions and statutes of western states declaring the waters of natural streams and lakes to be the property of the public or of the state.

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183. Omernik v. State, 64 Wis. 2d 6, 21, 218 N.W.2d 734, 743 (1974); Just v. Marinette County, 56 Wis. 2d 7, 201 N.W.2d 761 (1972). An analogous situation prevailed after the courts in an earlier era upheld the concept of regulating land use. Euclid v. Ambler Realty Co., 272 U.S. 365, 386 (1926); Aurora v. Burns, 319 Ill. 84, 149 N.E. 784 (1925). There, because zoning ordinances could be developed or administered so as to take into account the specific characteristics of each piece of property, subsequent zoning litigation turned on the question of whether the particular regulation was unconstitutional in its application to a particular parcel. See the discussion of this point in Pacesetter Homes, Inc. v. South Holland, 18 Ill. 2d 247, 252, 163 N.E.2d 464, 467 (1959).

184. 73 F.2d 555 (9th Cir. 1934).

Under the common law, the right of the riparian owner is to the usufruct of the water and not to the water itself. Legislation limiting the right to its use is in itself no more objectionable than legislation forbidding the use of real property for certain purposes. [Citations omitted]. To argue, as plaintiff does, that riparian rights are real property rights which attach to the land, does not put such rights beyond the reach of the police power. [Citations omitted].

* * * *

The modification of riparian rights which the act of 1909 has effectuated is not so drastic a change as to amount to taking of property without due process of law. [Citations omitted]. At common law, the usufruct of the riparian owner was not absolute; it was conditioned on the equal right of every other riparian owner to the use of the water. 186

One of the judges dissented to a part of the majority opinion, but stated:

If a court can apply the rule of reason in defining the rights of a riparian owner, and declare that changed conditions demand a change in the rights of a riparian owner, it would seem to follow that the legislative branch of the government could also declare and define the rights of a riparian owner so long, and, I think, only so long as the legislation is a reasonable adaptation of the common-law rule to the conditions obtaining in the state, assuming of course that the state has followed the common law in defining the rights of riparian owners. 187

Other state statutes regulating water use have also been upheld. 188

In light of the water use statutes adopted in other jurisdictions and the constitutional limitations upon such statutes, this article concludes by suggesting provisions for such a statute in Illinois.

186. 73 F.2d 555, 567, 568.
187. Id. at 570.
188. For example, in State ex rel. Emery v. Knapp, 167 Kan. 546, 556, 207 P.2d 440, 447-48 (1949), a statute similar in nature to that contested in Oregon was upheld by the Kansas Supreme Court. However, a Nebraska statute that nullified riparian rights was held invalid in Clark v. Cawbridge & Arapahoe Irrigation & Improvement Co., 45 Neb. 798, 807-08, 64 N.W. 239, 241 (1895) on the ground that other cases had held that the inchoate or vested right to use state waters is not subject to state regulation and charge. Other cases have held that the state may abolish the rule of absolute ownership and substitute therefor the doctrine of prior appropriation under state supervision without need for showing that irreparable damage has already been done. In re Opinion of the Justices, 99 N.H. 532, 114 A.2d 327 (1955); Ivanhoe Irrigation Dist. v. All Parties and Persons, 47 Cal. 2d 597, 306 P.2d 824 (1957); Jersey City v. State Water Policy Comm'n, 118 N.J.L. 172, 191 A. 456 (1937); North Jersey Dist. Water Supply Comm'n v. State Water Policy Comm'n, 129 N.J.L. 326, 29 A.2d 617 (1943). See also Annot., 56 A.L.R. 277 (1928). A code allowing the designation of critical ground water areas and limiting withdrawals from such areas was also found to be constitutional. Southwest Eng'r Co. v. Ernst, 79 Ariz. 403, 291 P.2d 764 (1955).

Similarly, it has been held that a regulation which provided for the determination of riparian rights in advance of a crisis is permissible and that water rights are subject to regulation. Warren v. Westbrook Mfg. Co., 80 Me. 58, 66, 33 A. 665, 667 (1895).

One Illinois case, Clark v. Lindsay Light Co., 405 Ill. 132, 142 (1950), held that there is no property right in the water of a natural stream, that there is only a usufruct, and that the right to use water is only an incident of property ownership and does not itself constitute property.
SUGGESTED PROVISIONS FOR AN ILLINOIS STATUTE

In drafting a statute which provides for water allocation it is necessary to bear in mind the deficiencies in the present system of judicial resolution of water disputes on an ad hoc or piecemeal basis only after some harm has already been caused by a shortage. In most instances this judicial solution will not prevent larger, area-wide shortages from occurring in the future. Nor is the judicial solution necessarily a comprehensive one. One writer has noted that:

[A] basic shortcoming of current Illinois water law is that there is no inherent mechanism for protecting what may be considered the broader public interest in matters of water use. In the past, when water supplies were considerably more abundant in relation to demand, few problems arose. However, greater population and economic development have substantially increased demand, and competition for the available supply has intensified. With respect to ground water particularly, competing uses and users have sought to draw upon the resource without regard to the possible adverse effects imposed upon one another or the acquifers themselves.189

Such a system does not facilitate adequate planning by communities and has led those communities that have no control over their water resources to assume that such resources will always be plentiful. Because most communities make this assumption, few attempts are made to protect against waste or to conserve the use of water. There is no incentive to impose such regulations locally because their imposition in the absence of some serious, immediate crisis is bound to engender local furor. Because of these political considerations, it is imperative that the authority which requires conservation measures be less parochial in nature. There is no doubt that a comprehensive regulation of an entire acquifer or other water source would facilitate more rational planning by communities.

It is suggested that since an agency with authority to control water allocation should be established in Illinois, this state should follow the example of almost every other state which has adopted legislation of this nature and provide for the creation of an independent board with state-wide powers. Such a board need not be a full time one inasmuch as the development of a plan for the allocation of water need only be done as the need arises. The board should have jurisdiction to allocate ground as well as surface water lying wholly or partly within the state of Illinois. It should have the power to conduct such studies as it deems advisable and should be able to impose restrictions upon water use and institute a permit system where necessary. When the board finds that it is necessary to impose regulations on water use or

to institute a permit system for future use, such regulation and the issuance of such permits should be done only after public hearings and in accordance with a comprehensive plan for the development of the water resources of an area.

Public scrutiny and judicial review of an area-wide allocation plan could be facilitated by requirements that the board present its plan for public hearings prior to its adoption and state the reasons for the adoption of that particular plan. At the public hearings the individuals present should be allowed to testify or submit alternative plans. If such plans are sufficiently supported and remained unrebutted by the board, a judicial reversal of the board's plan adopted in the face of such reasonable alternative allocation plans would be justifiable.

Since the promulgation of an area-wide plan is only an occasional—albeit substantial—task, the board should be allowed to contract with appropriate private or public agencies for the development of such a plan. If a particular shortage area lies entirely within an area served by a regional or county planning commission created under the authority of a state statute, the board should be required to contract with that commission for the development of an area-wide allocation plan consistent with any existing land use plans. The reliability of such plans would be aided by a requirement that the board utilize data developed by the State Water Survey and the State Geological Survey in their development.

The board should have authority to classify water users by type of use and, in order to avoid constitutional problems, to provide that domestic users of water, whether private or municipal, be given highest priority. Small domestic users should be exempt from any permit requirement. In order to administer the plan or permit system the board should have the authority to impose conservation measures within municipalities and unincorporated areas, requiring the recharge of used water, the total or partial recycling or reuse of industrial and other waste water, and to require communities to provide areas in which to construct recharge pits for the recharge of ground water aquifers with storm, lake or other waters available in excess. Most of these provisions are not novel since they are contained in the Model Water Use Act or are found in statutes in other jurisdictions.

The regulation of water use is no longer a controversial subject. It is necessary if a rational and efficient use is to be made of the water resources of an area, particularly highly urbanized, industrialized areas such as exist in the state of Illinois. Unless some attempt is made now to provide for the allocation and conservation of water in the state it can be anticipated that the state's economic stability may be severely, and adversely affected as crises arise in the future. Since crises are most efficiently resolved before, not after, they occur, an adequate statutory mechanism is necessary to resolve problems
rationally while a full range of options is still available. Even if this were not reason enough to adopt a water allocation and conservation statute, the enactment of such legislation in Illinois is essential because the United States Supreme Court has conditioned any increased use of Lake Michigan water upon the state's employment of all feasible means reasonably available to conserve and manage its water resources. While it is possible to ignore temporarily the warnings of disaster which result from persistent local shortages, it would be rash to ignore the Court's admonition. Absent a comprehensive statutory provision for the rational management, allocation and conservation of water resources in Illinois similar to legislation adopted in other states, it will be difficult to contend that Illinois has complied with the guidelines set out by the Court, or with the best interests of present and future users of the state's water resources.