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*A Decade of
Experience
under the
Iowa Water
Permit System*

N. William Hines

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Agricultural Law Center

COLLEGE OF LAW
THE UNIVERSITY OF IOWA
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A DECADE OF EXPERIENCE UNDER THE IOWA WATER PERMIT SYSTEM

INTRODUCTION

In this time of practically continual water crises around the country, it is almost impossible to overstate the importance of water resources. Scientists, philosophers, and poets vie with one another in their endeavors to capture in words the many properties of water. Physically, economically, and esthetically water is essential to a great range of human activities. Such being the case, it must be counted among nature's planning miracles that our water is relatively inexhausted, unlike so many of our other vital natural resources. Through what is known as the hydrological cycle, the overall water supply is continually replenished.¹

So it must be understood that the majority of today's water problems do not stem from an overall lack of water on the planet; it is rather a continuing lack of accommodation between nature's distribution patterns and man's need patterns that is responsible. Yet, most would agree the fault lies chiefly with man and not with nature. As Secretary of the Interior Udall recently pointed out—"Most of our water crises are man-caused."² Man-caused in the sense that our extravagant uses of this precious resource are straining the available supplies, even in areas once considered water rich. An increasing population coupled with greater per capita consumption is much of the story, but industrial, agricultural, and recreational demands for water are also expanding rapidly. However, in the words of Secretary Udall, "It is not that finite supplies aren't, in most cases, adequate, it's rather a case of infinitely poor management of these supplies."³ Efficient allocation of our water resources, coupled with competent management, are commonly recognized as the essential ingredients to any realistic solution of the problem of water shortages. How to achieve these goals is the critical question. Reported in this monograph is one state's experience with its ten-year-old statutory plan for regulating the use of the state's water resources in the public interest.

Ten years have elapsed since the Iowa Study Committee on Water Rights and Drainage Laws drafted and submitted to the Iowa Legislature the Water Rights Bill that revolutionized the allocation of Iowa's water resources. The Iowa permit system is a unique experiment in regulating a natural resource

1. Ecclesiastes 1:7 describes this phenomenon in a somewhat more eloquent fashion. "All the rivers run into the sea; yet the sea is not full; unto the place from whence the rivers come, thither they return again."

2. Udall, Ending the water Crisis, Saturday Review, Oct. 23, 1965, p. 46.

3. *Ibid.*

where scarcity is as yet chiefly a potential threat. Now that the administration of the permit system created by this legislation is completing its first decade of operation, the occasion seems ripe for surveying the Iowa experience.

The workings of the Iowa system are of interest to several audiences. All Iowans are affected by the means chosen for allocation of the state's water resources; but to those who must comply with the system to satisfy their water requirements, the details of its operation are of most importance. As the demand for water increases in this country, it is likely that many of the nearly thirty eastern states currently allocating their water resources on the basis of riparian rules will have occasion to reconsider their allocation systems. An awareness of the Iowa experience in water use regulation should provide valuable insight to any state contemplating abandonment of the riparian system in favor of a more modern and efficient water allocation mechanism.

THE STUDY

The idea of a benchmark study of the Iowa permit system was first raised with the Water Commissioner in the fall of 1964. The Commissioner's reaction to the project was one of immediate enthusiasm. The Natural Resources Council shared the Commissioner's views, so a promise of full cooperation was quickly forthcoming from the Council. It would be difficult to overstate the importance to this study of the Council's cooperation and the enormous assistance received from the Water Commissioner's office.

The investigators relied almost exclusively on three sources of information: library materials, records in the Water Commissioner's files, and personal interviews with the Water Commissioner and his staff. Although the library materials were essential to afford the study a full perspective, the empirical information obtained from the Water Commissioner's office constituted the lifeblood of this study. The Water Commissioner and his staff not only cooperated fully in answering the researchers' many questions, they also provided invaluable assistance in collecting and processing the information from their files.

The Water Commissioner's staff recorded on specially prepared schedules the essential facts from each of the over 2,400 water permit applications (exclusive of highway applications) received up to June 30, 1965. This information was then coded and transferred to computer punch cards for processing. Thus prepared, the water data was tabulated and analyzed by computer through use of a program specially developed for this purpose. When this data is combined with the information gathered through extensive interviews with the administrators themselves, a relatively complete picture of the operation of the Iowa system emerges.

Although the most important contribution of this monograph probably lies in its exposition of the administration of the Iowa system, effort has been

made to make this work as definitive as practicable on all aspects of Iowa's water use law. Thus, the presentation opens with a discussion of the riparian principles under which Iowa water users operated exclusively prior to the enactment of the permit system. Next follows a description of the events leading up to the passage of the regulatory legislation. The water statute itself is next examined and an effort is made to compare the Iowa legislation with the water allocation systems of other jurisdictions. Upon this broad background are explored in detail the ten years of experience in administering the new system. The quantity of information gathered from the Water Commissioner's office is assembled with a view toward highlighting the problems solved and unsolved that provide the best insights into the Iowa operation. The nagging question of constitutionality is examined in its several facets. Finally, some conclusions are drawn from the Iowa experience and a few recommendations are advanced.

IOWA'S WATER LAW(S)

As the demand for water continues to accelerate, both private and public water users have become increasingly concerned about the character and permanence of their rights in this valuable resource. Traditionally, water rights law has been derived from the principles applied by the state courts in isolated cases adjudicating the rights of two parties in conflict. The bodies of law developed through this method have assumed two general shapes that are identified respectively by the labels "riparian doctrine" and "appropriation doctrine."⁴ The broad contours of these doctrines are easily discoverable, but any effort to measure with precision the extent of the water rights recognized under them generally falls far short of the goal. This lack of precision is more true of the riparian doctrine which prevails in the thirty-one so-called eastern states than it is of the appropriation doctrine utilized in the west.

The lack of certainty which characterizes these common-law water doctrines has led a number of states to attempt to legislate a measure of definite-

4. In essence, the difference between the two common-law doctrines stems from the geographical differences in the regions in which they arise. In the humid east, apportioning water rights on the basis of land ownership bordering the water source was practical; in the arid and semi-arid west, such a luxurious system was not. A "first-come, first-served" rule was more feasible. The reader who is not already familiar with the essential features of these systems should read Adams, *Water Rights Under Riparian and Appropriation Doctrines*, in *IOWA WATER RESOURCES - SOURCES, USES, AND LAWS* (Timmons, O'Byrne & Frevert ed. 1956) 99 [This book hereafter will be cited simply as *Iowa's Water Resources*]. For more sophisticated treatments see Ziegler, *Water Use Under Common Law Doctrines*, in *WATER RESOURCES AND THE LAW* 49 (1958); McCormick, *The Adequacy of the Prior Appropriation Doctrine Today in WATER RESOURCES AND THE LAW* (1958) 33; Trelease, *Coordination of Riparian and Appropriation Rights to the Use of Water*, 33 *TEXAS L. REV.* 24 (1954).

ness into their water rights.⁵ Usually this legislation does not replace the local common-law water rights rules, but it simply takes effect as a veneer, changing a few of the surface characteristics of the existing system.⁶ The result is too often a confused layering of statutory rights on common-law rights that has the overall effect of compounding the uncertainty of water rights. The one redeeming feature of most such legislation lies in its creation of an administrative agency to operate and enforce the statutory scheme. If this agency is granted sufficient power, and its personnel are both competent and imaginative, and it is willing to tackle the hard problems of water allocation, some hope exists for bringing order out of the present chaos.

Iowa water rights law has generally followed the pattern outlined above. Up to 1957 and to a considerable extent since that date, Iowa water rights have been governed by riparian principles. A comprehensive water rights law was enacted in 1957 following a period of serious dissatisfaction with the vagueness of the riparian rights, but there is great uncertainty concerning the exact effect of the statute. The administrative agency created by the act has been laboring to create a rational and effective program for water use allocation, and has, from all appearances, enjoyed a considerable measure of success in the venture.

In this section a brief look will first be taken at the riparian rights law as it has developed in Iowa. Next the events leading up to the statute will be reviewed. Then the statute itself will be examined in detail, and finally some effort will be devoted to comparing the Iowa law to that of other jurisdictions.

COMMON-LAW RIPARIAN RIGHTS

Common-law rights to use water turn on two basic factors, the nature of the water source and the nature of the use. At common law, water sources are divided into four different types; diffused surface water, surface watercourses, underground watercourses, and percolating ground water. Other than vague proscriptions of waste, the nature of the use is a factor in determining water rights only in connection with water moving in a watercourse. Uses under the riparian system are classed under one of two general headings, natural uses and artificial uses.

Diffused Surface Water

Diffused surface water is the term used to describe water on the ground, usually as a result of precipitation, which is spread at random and not yet being lost by percolation into the soil, by evaporation, or by runoff into a sur-

5. See Ellis, *Some Current and Proposed Water-Rights Legislation in the Eastern States*, 41 IOWA L. REV. 237 (1956).

6. See Ellis, *Some Alternative Types of Water Legislation Enacted or Proposed in Eastern States* in IOWA WATER RESOURCES 119.

face watercourse.⁷ It generally appears that the landowner has the absolute right to use the diffused surface water on his land by allowing it to be absorbed into the soil or however else he chooses, so long as he doesn't waste it.⁸ Exactly what constitutes waste in this context is unclear. Historically, the major problem concerning diffused surface waters has not been its use, but getting rid of it. Litigation most often involves questions concerning the right of one individual to discharge diffused surface waters onto the land of his neighbor and the right of the neighbor to protect himself from that discharge.⁹

Surface Watercourses

Common-law riparian use rights attach to natural watercourses. A natural watercourse has been described as a natural line of flowage.¹⁰ It is usually thought of as having a channel and banks; however, all that is actually required is that the "water uniformly flows in a certain line within reasonable limits."¹¹ In a case in which water moved within a well-defined channel, then spread out over grassland, and again returned to its narrow confines, the Iowa court quoting an earlier Massachusetts decision enunciated this definition: "If the whole of the stream had sunk into the defendant's soil, and no water remained to pass to the plaintiff's land except under the surface, it would have ceased to be a watercourse. . . ."¹² A natural watercourse will retain its natural char-

7. *Thompson v. New Haven Water Co.*, 86 Conn. 597, 603-04, 86 Atl. 585, 587-88 (1913); *Woods v. Incorporated Town of State Center*, 249 Iowa 38, 85 N.W.2d 519 (1957); *Hunt v. Smith*, 238 Iowa 543, 555, 28 N.W.2d 213, 218-19 (1947); *Fenmode, Inc. v. Aetna Cas. & Sur. Co.* 303 Mich. 188, 192, 6 N.W.2d 479, 481 (1942); *Jack v. Teegarden*, 151 Neb. 309, 319, 37 N.W.2d 387, 391 (1949).

8. *Livingston v. McDonald*, 21 Iowa 160, 167 (1866). See generally, Dolson, *Diffused Surface Water and Riparian Rights: Legal Doctrines in Conflict*, 1966 WIS. L. REV. 58; Fisher, *Western Experience and Eastern Appropriation Proposals*, THE LAW OF WATER ALLOCATION, 95-104 (1958).

9. *Schmitt v. Kirkpatrick*, 245 Iowa 971, 63 N.W.2d 228 (1954); *Hunt v. Smith*, 238 Iowa 543, 28 N.W.2d 213 (1947); *Livingston v. McDonald*, *supra* note 8; *Snyder v. Platte Valley Pub. Power and Irrigation Dist.*, 144 Neb. 308, 13 N.W.2d 160 (1944). There are three basic approaches to the problem of draining rights. These are known as the Civil-Law Rule, the Common-Enemy Rule, and the Reasonable Use Rule. See generally, *Note, Surface Water Drainage in Iowa*, 50 IOWA L. REV. 818 (1965).

10. *Bellville v. Porter*, 256 Iowa 1119, 130 N.W.2d 426 (1964); *Durst v. Puffett*, 181 Iowa 14, 163 N.W. 201 (1917); *Hull v. Harker*, 130 Iowa 190, 106 N.W. 629 (1906).

11. *Durst v. Puffett*, *supra* note 10, at 15, 163 N.W. at 202. If surface water uniformly flows over a given course having reasonable limits as to its width, line of flow, and amount of discharge, it is a watercourse. *Hull v. Harker*, *supra* note 10, at 193, 106 N.W. at 630. Contrary to the older law, 2 Farnham, *WATERS AND WATER RIGHTS* §456 (1904), cases now uniformly deny the requirement of a definite channel and banks to constitute a watercourse. *Stouder v. Dashner*, 242 Iowa 1340, 1348, 49 N.W.2d 859, 864 (1951); *Hunt v. Smith*, 238 Iowa 543, 557-58, 28 N.W.2d 213, 220 (1947); *Heinse v. Thorberg*, 210 Iowa 435, 437, 230 N.W. 881 (1930). *But see Doney v. Beatty*, 124 Mont. 41, 220 P.2d 77 (1950), 3 BAYLOR L. REV. 473 (1951).

12. *Hinkle v. Avery*, 88 Iowa 48, 54, 55 N.W. 77, 79 (1893).

acter for purposes of riparian law even though deepened or straightened by man.¹³

Access to stream water may have been the single most important factor in determining the use rights of the riparian owner. Indeed, by definition, a landowner had to have access to the water in order to be considered riparian and thus to have any rights to the water at all.¹⁴ Under the riparian doctrine, water rights are special property rights accorded to persons owning land, containing or bordering a natural watercourse, to make use of the water therein. These rights are not common to the citizenry at large, but exist as an incident of ownership of land contiguous to the stream.¹⁵ Such rights extend only to the smallest tract of land bordering the stream. If a riparian owner subsequently acquires additional land contiguous to his first tract but not abutting the stream, riparian rights will not attach to the new land.¹⁶ Similarly, water from the watercourse

13. *Logsdon v. Anderson*, 239 Iowa 585, 30 N.W.2d 787 (1948); *Falcon v. Boyer*, 157 Iowa 745, 142 N.W. 427 (1913). See also *Vannest v. Fleming*, 79 Iowa 638, 641, 44 N.W. 906, 907 (1890).

14. Lauer, *The Riparian Right as Property*, in *WATER RESOURCES AND THE LAW*, 131, 182-83 (1958) [hereinafter cited as Lauer, in *WATER RESOURCES*]. See also *Munninghoff v. Wisconsin Conservation Comm'n.*, 255 Wis. 252, 259, 38 N.W.2d 712, 715 (1949) where the court stated, "The riparian's exclusive right to use the water arises directly from the fact that nonriparians have no access to the stream without trespass on riparian lands." "Riparian" is from the Latin "riparius," pertaining to or belonging to the bank of a river. *Mobile Dry Docks Co. v. Mobile*, 146 Ala. 198, 40 So. 205 (1906).

[A] riparian owner is one whose land abuts upon a river. If his land abuts upon a lake, he is deemed to be a littoral owner. The distinction is wholly immaterial for the purpose of this case. The case law is the same whether the ownership be riparian or littoral, and such case law has been developed largely in riparian cases. It is more convenient to the discussion, therefore, to ignore the distinction and to treat both classes of cases as though they were riparian. *Peck v. Olsen Constr. Co.* 216 Iowa 519, 533, 245 N.W. 131, 137 (1933).

15. Speaking of a nonnavigable stream, the Iowa court has said, "The law recognizes a water-course as a subject of property, and guards the rights of owners thereof with the same care that it extends to all other things that are the subject of exclusive ownership. The right which an owner of lands has to a water-course flowing over them is in the nature of a freehold right. . . ." *McCord v. High*, 24 Iowa 336, 342 (1868). See also O'Connell, *Iowa's New Water Statute - The Constitutionality of Regulating Existing Uses of Water*, 47 IOWA L. REV. 549, 581 (1962) [hereinafter cited as O'Connell, *Iowa's New Water Statute*]. The state has certain rights incident to navigable and meandered streams and lakes. *Cf.* *Rand v. Miller*, 250 Iowa 699, 95 N.W.2d 916 (1959); *Holmes v. Haines*, 213 Iowa 634, 1 N.W.2d 746 (1942); *Shortell v. Des Moines Elec. Co.*, 186 Iowa 469, 172 N.W. 649 (1919); *Noyes v. Collins*, 92 Iowa 566, 61 N.W. 250 (1894); *Steamboat "Globe" v. Kurtz*, 4 Iowa 433 (1854). See also 1 Farnham, *WATERS AND WATER RIGHTS* pt. 2 at 100-277 (1904); Lauer, *supra* note 14, at 211-54.

16. Davis, *Water Rights in Iowa*, 41 IOWA L. REV. 216, 220 (1956); Ziegler, *Water Use Under Common Law Doctrines*, in *WATER RESOURCES AND THE LAW*, 49, 56-58 (1958). Riparian rights do attach, however, to land built up by natural accretion. See, *Rand v. Miller*, 250 Iowa 699, 95 N.W.2d 916 (1959); *Bennett v. National Starch Mfg. Co.*, 103 Iowa 207, 72 N.W. 507 (1897); *Cook v. City of Burlington*, 30 Iowa 94 (1870).

cannot be used on nonriparian land or on land outside the watershed.¹⁷ Although some courts have ignored this strict rule and allowed water use on nonriparian land, most jurisdictions have held close to the spirit, if not the letter, of the rule.

The right of a riparian owner to prohibit the use of the watercourse by his nonriparian neighbors is obviously important. However, that right in no way makes the water in the watercourse his property. His access to the watercourse gives him only a right to use it, and that right is limited considerably by the similar rights of other riparian owners. The classic statement of the nature of a riparian right is that "the owner of the land through which a stream of water runs has a right to have it flow over his land in the natural channel, undiminished in quantity, and unimpaired in quality, except insofar as diminution or contamination is inseparable from a reasonable use of such water."¹⁸ The extent of a particular riparian's interest in water depends on the legal protection given his fellow riparians. Thus, a great deal of the riparian law concerns the development of specific rules that assure equal rights in a watercourse to all riparians thereon.

The issues litigated in earlier riparian cases usually involved nonconsumptive uses of water such as the construction of a dam and the resulting temporary interruption in the downstream flow or the raised water level upstream from the impoundment. A temporary interference without diminishment of the flow of a stream for a legitimate purpose is usually within the rights of the riparian owner. For example, if a riparian user temporarily blocked the flow of a stream to form a reservoir to provide water power, the fact that it deprived a downstream mill owner of the flow for a few days was held not to constitute an unreasonable influence.¹⁹ However, it has been held that where a riparian user places his impoundment only a short distance downstream from another dam, thereby seriously impairing the effectiveness of the upper dam, the lower dam is an unreasonable impediment of stream flow.²⁰

The situations described above involve nonconsumptive uses of water, the quantity of the water in the watercourse was not impaired. Where the quantity of water is diminished, the problems become more acute since the water is not available to downstream users for any purpose. In dealing with these problems, the courts have distinguished between natural uses and artificial uses. Natural uses have also been called ordinary or domestic uses and

17. Storey, *A Study of the Riparian and Prior Appropriation Doctrines of Water Law*, Institute of Law & Government, University of Georgia, 16-17 (Oct. 1955); Ziegler, *id.* at 59-61.

18. *Gehlen Bros. v. Knorr*, 101 Iowa 700, 704, 70 N.W. 757, 758 (1897).

19. *Id.* at 710, 70 N.W. at 760.

20. *Harp v. Iowa Falls Elec. Co.*, 196 Iowa 317, 191 N.W. 520 (1923); *Watt v. Robbins*, 160 Iowa 587, 142 N.W. 387 (1913).

include the use of water for domestic purposes such as drinking, washing, and supplying an ordinary number of horses and stock with water.²¹ All other uses of water which are not recognized as natural are labeled artificial or extraordinary uses.²²

A riparian can take from a stream and consume all the water he needs for his ordinary or natural uses even to the exclusion of other riparians.²³ The Iowa court has stated:

each riparian owner has a right to use the water of a surface stream for ordinary or natural uses, . . . and the better law seems to be that he may use the water for his natural and ordinary wants, regardless of the effect upon other proprietors on the stream; that is, as we understand the rule, one riparian proprietor may, for his natural wants, if necessary, use all of the water in a surface stream, to the exclusion of every other such proprietor, certainly so as against the other proprietor using the water for artificial purposes. . . . If there is not water enough to more than supply the natural wants of the several riparian owners, none can use the water from the stream for artificial purposes.²⁴

All artificial uses are completely subordinate to the natural uses of other riparian owners.²⁵ While no artificial use can be made of the water if it will deprive another riparian of needed water for his natural uses, between two different artificial uses, the right of each is based on its reasonableness.²⁶ "What is or constitutes such reasonable use must be determined in view of the size and capacity of the stream, the wants of all other proprietors, the fall of the water, the character of the soil, the number of proprietors to be supplied, and all other circumstances."²⁷ Artificial uses include irrigation, consumptive industrial use, and municipal water systems.

Some uses are, by their nature, more reasonable than others in terms of their effect on stream flow. Whether a given use is reasonable may depend upon its degree of consumptiveness. While a partially consumptive industrial

21. *Willis v. City of Perry*, 92 Iowa 297, 303, 60 N.W. 727, 729 (1894); Gould, *WATERS* §205 (1891); Wiel, *WATER RIGHTS IN THE WESTERN STATES* §740 (3d ed. 1911).

22. *Gehlen Bros. v. Knorr*, 101 Iowa 700, 704, 70 N.W. 757, 758 (1897); *Willis v. City of Perry*, *supra* note 21, at 303, 60 N.W. at 729; 6-A *AMERICAN LAW OF PROPERTY* §28.57 (Casner ed. 1954).

23. *Willis v. City of Perry*, *supra* note 21, at 302-03, 60 N.W. at 729; *Spence v. McDonough*, 77 Iowa 460, 462, 42 N.W. 371 (1889); 3 Tiffany, *REAL PROPERTY* §724 (3d ed. Jones 1939).

24. *Willis v. City of Perry*, *supra* note 21, at 302-03, 60 N.W. at 729.

25. *Id.* at 303, 60 N.W. at 729. See also *Gehlen Bros. v. Knorr*, 101 Iowa 700, 70 N.W. 757 (1897); Gould, *WATERS* §206 (1891).

26. *Willis v. City of Perry*, *supra* note 21, at 303, 60 N.W. at 729; Cribbet, *PRINCIPLES OF PROPERTY* 311-12 (1962); *RESTATEMENT, TORTS* §852 (1939).

27. *Willis v. City of Perry*, *supra* note 21, at 303, 60 N.W. at 729. The Iowa court has also stated, "But in determining whether a use is reasonable we must consider what the use is for; its extent, duration, necessity, and its application; the nature and size of the stream, and the several uses to which it is put; the extent of the injury to the one proprietor, and of the benefit to the other; and all other facts which may bear upon the reasonableness of the use." *Gehlen Bros. v. Knorr*, 101 Iowa 700, 705, 70 N.W. 757, 758-59 (1897).

use or a similar municipal use may be reasonable during a water shortage, totally consumptive irrigation probably would not be.²⁸ No truly reliable criteria can be formulated for evaluating the reasonableness of a use, however, because this is a fact question which may ultimately require determination by a jury in each case presented.²⁹

Underground Watercourses

Rules similar to the riparian doctrine apply to underground watercourses. There must, therefore, be a natural watercourse and access to it, just as with surface watercourses.³⁰ The underground stream must flow within a reasonably defined channel which is capable of being traced. Where such a channel is shown, the owners of the land above the stream have riparian rights in it.³¹ The only significant difference between the rights to an underground watercourse and to a surface watercourse is due to the difference in accessibility. An owner riparian to a surface watercourse may divert the entire stream so long as he returns the water in substantially the same amount and quality before the stream leaves his property, but the owner riparian to an underground watercourse has no means of returning the water. Underground riparian rights do not arise, however, until it is proved that the water is flowing in an ascertainable channel. Until that time, the underground water is presumed to be percolating water.³²

Underground Percolating Water

Except for the problem of drainage,³³ percolating water and the common-law treatment of it are very similar to diffused surface water and the common-law rules applicable to it. The Iowa court has recognized the right of a landowner to draw out all of the percolating water that he can put to a beneficial use.³⁴ He cannot waste the water, but what constitutes waste is again unclear.³⁵ This results in a greater freedom in the use of percolating water than is present in the use of water from a surface or underground watercourse.

28. See Farnham, *WATERS AND WATER RIGHTS* §467 at 1582 (1904).

29. Gould, *WATERS* §208 (1891); Ziegler, *supra* note 14, at 64.

30. See Lauer, *supra* note 14.

31. *Willis v. City of Perry*, 92 Iowa 297, 60 N.W. 727 (1894); *Burroughs v. Saterlee*, 67 Iowa 396, 25 N.W. 808 (1885). See also 6-A *AMERICAN LAW OF PROPERTY* §28.55 (Casner ed. 1954).

32. *Barclay v. Abraham*, 121 Iowa 619, 96 N.W. 1080 (1903).

33. For a more specific analysis of the problems relating to drainage, see Dobbins, *Surface Water Drainage*, 36 *NOTRE DAME LAW*, 518 (1961); Note, 50 *IOWA L. REV.* 818 (1965).

34. See *DeBok v. Doak*, 188 Iowa 597, 176 N.W. 631 (1920); *Barclay v. Abraham*, 121 Iowa 619, 96 N.W. 1080 (1903); *Hougan v. Milwaukee & St. Paul Ry.*, 35 Iowa 558 (1872). *But cf.* *Huber v. Merkel*, 117 Wis. 355, 94 N.W. 354 (1903).

35. O'Connell, *Iowa's New Water Statute*, 568-69. There is no distinction here between natural and artificial uses as is present concerning the use of water from a watercourse. See 6-A *AMERICAN LAW OF PROPERTY* §28.66 (Casner ed. 1954).

Allocation of water rights under riparian principles frequently has been criticized as being inequitable, irrational, and inefficient. Inequitable because the right to use is restricted to persons owning land contiguous to the water supply to the exclusion of other deserving users.³⁶ Irrational because the different rules that govern uses from different water sources are scientifically unsupportable.³⁷ Inefficient because the uncertainty, inherent in any system where each user's right is dependent on every other user's use, retards the long term investments necessary to obtain maximum benefit from available water.³⁸ Therefore, it is little wonder that the dry years in the early 1950's stirred many states operating under the riparian system to begin casting about for a more desirable method of allocating water.³⁹

BACKGROUND OF THE STATUTE

Iowa's present water law is the product of an evolutionary development involving the work and study of a series of legislative committees and the capable assistance of the water agencies of various levels of government. In 1947, the Iowa legislature appointed the Interim Flood Control Committee. One of the stated purposes of this Committee was to study Iowa's need for laws on the control and use of water, and to submit drafts of any recommended legislation pertaining to this area.⁴⁰ A primary aspect of the report submitted by this Committee was a recommendation that a State Water Control and Resources Council be established. The Committee further recommended that a function of the new Council be to study the problem of the preservation of ground water in the state, and to correlate the action of the federal, state, and local governments in all activities relating to flood control and water supplies.⁴¹

In 1949 the Iowa legislature established the Iowa Natural Resources Council and assigned to it duties in accord with the recommendations of the Interim Flood Control Committee.⁴² In addition, the Council was given the authority to establish a comprehensive state-wide plan for the control of water and the protection of the water resources of the state. In the language of the statute, the Council's charge is to, "establish and enforce an appropriate com-

36. Fisher, *supra* note 8, at 78-79.

37. O'Connell, *Iowa's New Water Statute*, 569-71; Thomas, *Hydrology vs. Water Allocation in the Eastern United States*, in *THE LAW OF WATER ALLOCATION* 164 (1958).

38. Fisher, *supra* note 8, at 79-81. Lauer, in *WATER RESOURCES* 131, 164.

39. See, e.g., Report, North Carolina Board of Conservation and Welfare, *STATE AND FEDERAL WATER LAWS AND CONSIDERATIONS AFFECTING FUTURE LEGISLATION* (1956).

40. IOWA ACTS, 52d G.A., Extraord. Sess. ch. 4 (1947). Three senators, three representatives, and six at-large members appointed by the Governor comprised the Committee. Until 1963, water was the only natural resource regulated by the Council. IOWA ACTS, 60th G.A. ch. 84 (1963) added oil and gas regulation to the Council's domain.

41. Iowa Interim Flood Control Committee, *REPORT TO GOVERNOR ROBERT D. BLUE FOR SUBMISSION TO THE FIFTY-THIRD GENERAL ASSEMBLY* 10 (1948).

42. IOWA ACTS, 53d G.A. ch. 203 (1949).

prehensive state-wide program for the control, utilization, and protection of the surface and ground-water resources of the state."⁴³

The nine members of the Natural Resources Council are appointed by the governor for overlapping six year terms. Selection for memberships is made from the electors of the state at large solely with regard to their qualifications and fitness to discharge the duties of office and without regard to their political affiliation.⁴⁴ Thus far this procedure for selection has resulted in an administrative agency operating around a core of persons highly qualified in water resource development and management.

The Council is required to meet at least four times annually and may meet as many times as are necessary fully to implement the provisions of Iowa's water laws.⁴⁵ In practice, the Council attempts to meet at least once a month and averages about thirteen meetings per year. The quarterly meetings specifically required by statute are held in Des Moines, and the others are held at various convenient locations around the state. The Council, at these meetings, formulates and reviews the policies and programs for the administration of the laws under its jurisdiction.

During the years 1952 to 1958 the Natural Resources Council made inventories of Iowa's water resources and problems. By showing, in general terms, the amount of water being used and the amount available, the inventories confirmed the existence of potential water shortages in several areas of the state.⁴⁶ In 1950, prior to starting the inventories, and again in 1954, the Natural Resources Council recommended that consideration be given to changing Iowa's water allocation law.⁴⁷ Though specific changes were not suggested, the Council expressed the fear that the riparian system would hinder the expansion of beneficial use of water in Iowa.

A series of dry years during the period from 1949 to 1955 brought a marked increase in farmers' use of supplemental irrigation in Iowa. Under the vagaries of the existing riparian system, this increased irrigation meant that cities whose main source of water supply was a river were in possible danger of being cut off if a few upstream irrigators made withdrawals at the wrong time.⁴⁸ By 1955 the competition for water in certain areas of the state had be-

43. IOWA CODE §455A.2 (1962).

44. IOWA CODE §455A.4 (1962).

45. IOWA CODE §455A.8 (1962). The statute uses the quaint phrase "at the seat of government" to designate the quarterly meeting place.

46. Iowa Natural Resources Council, AN INVENTORY OF WATER RESOURCES AND PROBLEMS, Bulls. 1-8 (1953-1959).

47. Iowa Natural Resources Council, REPORT FOR THE BIENNIUM ENDING JUNE 30, 1950, 27; Iowa Natural Resources Council, REPORT FOR THE BIENNIUM ENDING JUNE 30, 1954, 10.

48. Irrigation in Iowa increased from 76 irrigators irrigating 7,500 acres in 1949 to 250 irrigators irrigating over 25,000 acres by 1955. Predictions were for further marked increases. These predictions have to some extent been fulfilled even in the absence of

come so potentially serious that the legislature saw fit to create an Iowa Study Committee on Water Rights and Drainage Laws.⁴⁹ The primary purpose of this Committee was to present a comprehensive report which would include a consideration of all water problems or potential problems, existing legislation, court decisions, and any federal laws which would provide assistance in the area.

After several meetings and careful study, the committee drafted a bill in the form of an amendment to the 1949 legislation which created the Natural Resources Council.⁵⁰ This proposed water rights law was submitted along with the Committee's report in 1956.⁵¹ Following, as it did, several years of serious water shortage, the idea of regulating the state water resources in the public interest so appealed to the Iowa legislature that the bill swept through both houses of the 57th General Assembly without a dissenting vote.⁵²

THE STATUTE

On reading closely the Iowa water permit statute two distinct impressions are created. First, the act never makes clear precisely what sort of regulatory policy it is that is being legislated. Apparently, certain types of water uses are going to be regulated through the requirement of a permit, but the nature of the rights conferred incident to receiving a permit are never spelled out. The early declarations of general policy contain passages from which a structured system of permits, ordered on the basis of the relative beneficialness of the in-

any particularly dry years since 1955. In 1965 permits in effect authorized the irrigation of nearly 79,000 acres. See O'Connell, *Iowa's New Water Statute*, 551-57 for a detailed discussion of the alarm caused by burgeoning use of Iowa's waters for irrigation. See also Browning, *Water Requirements of Agriculture in IOWA'S WATER RESOURCES* 65.

49. IOWA ACTS, 56th G.A., H. J. R. 4, ch. 326 (1955). The precise charge to this Committee was "to make a comprehensive study of drainage problems, drainage laws, underground and surface waters within the borders of the State, the present and prospective use of irrigation in farming operations, water rights, existing legislation and court decisions affecting such matters, and Federal laws providing for Federal assistance in such matters." The Committee was composed of two senators, two representatives, two at-large members and three persons who served in an ex-officio capacity—the Chairman of the Conservation Commission, the Natural Resources Council, and the Soil Conservation Committee. Some of the Committee's findings are discussed by Chairman Pendelton in *Some Findings of the Iowa Water Rights and Drainage Law Study*, in IOWA'S WATER RESOURCES 192.

50. In studying Iowa's water problems the Committee held public meetings in each congressional district and met with representatives from many public and private organizations.

51. Iowa Study Committee, *REPORT ON WATER AND DRAINAGE LAWS* (1956).

52. IOWA ACTS, 57th G.A. ch. 229 (1957). The legislature was sufficiently impressed by the importance of the new law that it made it effective immediately upon publication in two newspapers. The law went into effect May 16, 1957.

tended use, may be inferred.⁵³ However, other sections of the act suggest a system analogous to the issuance of fishing licenses.⁵⁴ The licensee-permittee receives a permit to carry on an activity illegal without the permit. Some restrictions are placed on his conduct of the licensed activity (daily creel limits) but there is no notion of competition for the right to carry on the regulated activity. No real inquiry is made concerning whether the applicant is more or less deserving of his permit than other applicants.

The second impression gathered from the act is that the legislature strived valiantly to create an allocation scheme uniquely suited to Iowa conditions, but ended up instead with a piece of what Roscoe Pound once called "agglutinative legislation." Excellent ideas and provisions were excised from several relevant sources but in the process of drawing them together into a unified regulatory plan, the diversity and inconsistency of the various ingredients were never effectively smoothed out. The act not only lacks internal consistency, but some of the provisions actually seem to contradict others.⁵⁵ As will be developed later, the agency designated to administer the statute certainly had its work cut out for it in resolving these basic ambiguities and internal conflicts.

The statute begins by defining the essential terms used in development of the regulatory framework. As is often true in regulatory statutes, the essential features of the regulation are primarily determined by reference to the definitions section of the act. Most of the main characteristics of the Iowa act are discoverable by reading the definitions. The basic scope of the regulatory coverage is indicated by the definition of "non-regulated use."⁵⁶ The stringency of the standards applicable to the granting of permits is inferable from the definition of "beneficial use."⁵⁷ The concept of protecting stream flows and the procedure for setting such protection are articulated in the definition of "established average minimum flow."⁵⁸ To its credit, the definition section includes only terms that are fairly important to giving meaning to the subsequent provisions, although a few of the terms are later used in the act in a limited fashion which renders their specific definition rather unnecessary.⁵⁹

53. See IOWA CODE §455A.2 (1962), and text *infra* accompanying footnotes 167-172.

54. See IOWA CODE §§455A.1 and .20 (1962), and text *infra* accompanying footnotes 173-77.

55. Compare IOWA CODE §§455A.1, .18, .20, .21, and .29 (1962).

56. IOWA CODE §455A.1 (1962).

57. *Ibid.*

58. *Ibid.*

59. For example, "depleting use" is used only in §455A. 32 to create a distinction which seems unnecessary. Either a use is regulated or it is nonregulated. Depleting seems to add nothing to this basic dichotomy. Also, §§455A.1 and .25 both spell out in detail the nature and extent of the exemption of municipalities and certain industrial users.

Next the statute declares the interest of the state concerning its water resources.

Water occurring in any basin or in any watercourse, or other natural body of water of the state, is hereby declared to be public waters and public wealth of the people of the state of Iowa and subject to use in accordance with the provisions of this chapter, and the control and development and use of water for all beneficial purposes shall be in the state, which, in the exercise of its police powers, shall take such measures as shall effectuate full utilization and protection of the water resources of the state of Iowa.⁶⁰

The policy declaration continues by pronouncing that it is in the interest of the people of the state to regulate the water resources of the state so that they are "put to beneficial use to the fullest extent of which they are capable. . . ."⁶¹ To effectuate this policy of regulations, the statute confers on the Iowa Natural Resources Council the power and the duty to adopt a state-wide plan for the control of the state's water resources. A framework for this plan is then set up in the form of a water use permit system which regulates the taking of water from any surface or underground source for any purpose other than a nonregulated use.⁶²

Nonregulated uses are defined to include the use of water for:

- (1) ". . . ordinary household purposes, use of water for poultry, livestock and domestic animals, . . ."
- (2) ". . . any beneficial use of surface flow from rivers bordering the state of Iowa, . . ."

60. IOWA CODE §455A.2 (1962).

61. *Ibid.*

62. IOWA CODE §455A.26 (1962) contains the nub of the regulation. It provides "No person shall take the water from any natural watercourse, underground basin or watercourse, drainage ditch, or settling basin within the state of Iowa for any purpose other than a non-regulated use except upon compliance with §455A.19 to 455A.32, inclusive, provided that existing uses may be continued during the period of the pendency of an application for a permit."

The statute then provides for the creation by the Council of a special staff to administer the permit system. The chief administrative officer of this staff is to be designated the Water Commissioner, §455A.9(2). The duties of the Water Commissioner are generally prescribed by the Council, but he is specifically to serve "in a quasi-judicial capacity" as the trier of fact questions in the processing of applications for permits. Deputy Water Commissioners are authorized who "have all the duties, responsibilities, and powers of the water commissioner when acting in his stead." §455A.9(3). The Water Commissioner and his deputies are to be qualified in their positions by training and experience. All serve at the pleasure of the Council. The Water Commissioner since the creation of that office has been Richard Bullard, a professional engineer. Bullard was formerly Acting Director of the Council, but he resigned that post to become Water Commissioner because it was decided that the two positions should not be filled by the same person. See Letter Opinion from Office of Att'y Gen. of Iowa to Iowa Nat. Res. Council dated June 17, 1957, in the Council's office. The two current Deputy Water Commissioners are Clifford Peterson, an attorney, and Louis Gieseke, an engineer. Both of these men have served in their position for a number of years.

(3) “. . . use of ground water on islands or former islands situated in such rivers, . . .”

(4) “. . . existing beneficial uses of water within the territorial boundaries of municipal corporations on May 16, 1957, except that industrial users of water, having their own water supply, within the territorial boundaries of municipal corporations, shall be regulated when such water use exceeds three percent more than the highest per day beneficial use prior to May 16, 1957, . . .”

(5) “. . . any other beneficial use of water by any person of less than five thousand gallons per day. . . .”⁶³

Additionally, it is provided that the statute will not deprive any person of the right to use diffused waters, or to drain land by use of tile, open ditch or surface drainage, or to construct an impoundment on his property or across a stream that originates on said person's property.⁶⁴

The exemption of water used for ordinary household and other domestic purposes is very similar to the rights of riparian owners under that doctrine to the use of water for their domestic purposes.⁶⁵ In fact, it is arguably larger in two ways. The statutory exemption is not limited to riparian owners but is applicable to all users. The vitality of this expansion is diminished, however, due to the lack of access to the water supply. A second possible expansion stems from a strict reading of the statute. The word ordinary appears to pertain to household purposes only and not to poultry, livestock, and domestic animals. Probably a better interpretation policywise is the view of the Attorney General and the Natural Resources Council that the word ordinary does modify both household purposes and livestock.⁶⁶

Relevant here also is the doctrine of “established average minimum flow,” to be discussed later,⁶⁷ which establishes a minimum point below which regulated consumptive users cannot withdraw water. This has the effect of guaranteeing water to the nonregulated users if any water is available.

Users taking water from border rivers are also exempted. This affects those users along the Mississippi and Missouri Rivers and those users along the lower ends of the Big Sioux and Des Moines Rivers. One possible reason for this exemption is the obvious difficulty in regulation when there is no similar action in the neighboring state. The disadvantages of the exemption are

63. IOWA CODE §455A.1 (1962).

64. IOWA CODE §455A.27 (1962).

65. The Iowa court has defined domestic use as “the use for domestic purposes, including household purposes, such as cleansing, washing, and supplying an ordinary number of horses or stock with water. . . .” *Willis v. City of Perry*, 92 Iowa 297, 303, 60 N.W. 727, 728 (1894).

66. See 1960, IOWA ATT'Y GEN. REP. 217.

67. See discussion *infra* accompanying footnotes 185-207.

also reduced due to the relatively large amounts of water available there.

The exemption for those users on islands or former islands of the border rivers is limited to ground water unless the user can also withdraw from the border river itself. This provision was put into the statute on the insistence of several irrigators on former islands along the Mississippi.⁶⁸

Water uses existing on the effective date of the statute inside the corporate boundaries of municipalities are initially exempt. As these uses grow, they may become subject to regulation.⁶⁹ This provision will be discussed more fully later with the regulated uses. The statute appears to refer to the location of the water source as opposed to the location of the industrial user if the two are different. Such a choice would seem consistent with the intent of the statute to regulate the taking of water as opposed to the actual use of the water. This may be a bit confusing as a central area of inquiry is often the intended use to which the water will be put, but the final determination is whether water may be taken from a particular source.

The last exemption from regulation pertains to users of only a minimal amount of water. The use of water in amounts of less than five thousand gallons of water per day is exempt from regulation. This is no magic figure and could probably be much larger without reducing the effectiveness of a water rights law.⁷⁰ Five thousand gallons per day is approximately the amount of water which a garden hose would discharge at moderate pressure if allowed to flow continuously for twenty-four hours.

All depleting uses not enumerated as nonregulated uses are regulated uses and subject to the prohibition against taking water without a permit.⁷¹ Depleting use is defined so broadly as to effectively place all conceivable uses under regulation.⁷² The statute has given the Council the authority to grant permits for the withdrawal, diversion, or storage of water for beneficial uses.⁷³ The statute further provides an affirmative duty to grant permits for proposed diversion, storage, or withdrawals if it is found that such proposed uses will not be detrimental to the public interests or to the interests of property owners with prior or superior rights.⁷⁴

68. These parties later had cause to regret their success at obtaining an exemption. Since the date of the act, several large industries have moved into this area and have lowered the water table to the point that many of the irrigation systems are inoperative. Bullard, "Continuing Needs for Water Law Administration," paper presented at the 19th Annual Meeting, Soil Conservation Society of America, Jackson, Miss., Aug. 26, 1964, at p. 7 (Mimeo).

69. IOWA CODE §455A.25(1) (1962).

70. See Bullard, *supra* note 68, at 6.

71. IOWA CODE §455A.26 (1962).

72. IOWA CODE §455A.1 (1962).

73. IOWA CODE §455A.18-.19 (1962).

74. IOWA CODE §455A.20 (1962) provides that the Commissioner or Council "shall grant a permit" unless certain conditions exist.

Beneficial use is defined as the application of water to a useful purpose that inures to the benefit of the water user, but does not include the waste or pollution of water.⁷⁵ Pollution is not defined, but waste is defined as the use of water in a manner so that it is not put to its full beneficial use, transporting water so that there is an excessive loss in transit, and permitting or causing the pollution of ground water.⁷⁶

The statute then limits the authority granted by providing that all permits authorizing the withdrawal and use of water in a watercourse must be subject to an established average minimum flow.⁷⁷ Other limitations protect navigability of streams⁷⁸ and pollution control.⁷⁹

It should be noted that although the Iowa statute makes several references to pollution and pollution control laws, this subject is not within the domain of the Natural Resources Council. Since 1965, the Iowa Water Pollution Control Commission has had jurisdiction over water quality regulation.⁸⁰ Before that date pollution control was handled by the State Health Department.⁸¹ Many observers, including the drafters of the Model Water Use Act, believe that problems of water quantity and water quality are so closely related as to be inseparable. Therefore, they argue all such problems should be handled by a single agency.⁸²

This suggestion was made during the discussions prior to the enactment of the recent water pollution control act,⁸³ but it was not favorably received by the proponents of the 1965 legislation. Hence, Iowa water resource management has something of a split personality, water allocation policy set by the Council and water quality policy set by the Commission. This situation seems contrary in many respects to the legislative declaration of policy announced in creating the Council: ". . . it is hereby declared to be the policy of the state to correlate and vest the powers of the state in a single agency, the Iowa nat-

75. IOWA CODE §455A.1 (1962).

76. *Ibid.*

77. IOWA CODE §455A.22 (1962).

78. IOWA CODE §455A.24 (1962).

79. IOWA CODE §455A.23 (1962).

80. IOWA ACTS, 61st G.A. ch. 375 (1965).

81. See IOWA CODE §§135.18 *et seq.* (1962).

82. See Commissioners of Uniform State Laws, MODEL WATER USE ACT, §601 *et seq.* (1958). The Comment to §601 states, "The waste assimilation capacity of a body of water is determined greatly by its quantity. The intelligent regulation of waste disposal necessitates a consideration of all uses made of the water. The interrelation of waste assimilation, consumptive use, and nonconsumptive uses, such as wildlife preservation, requires that, for the most beneficial use and development of water resources of a state, pollution control be vested in the Commission [the Model Act's equivalent of the Iowa Council] administering other water uses."

83. See Report to Governor Hughes, Governor's Public Health Advisory Committee, February 2, 1965; Nelson, Proposed Water Pollution Bill Needs Careful Study, Cedar Rapids Gazette, Feb. 21, 1965, p. 12B, col. 1.

ural resources council, with the duty and authority to establish and enforce an appropriate comprehensive state-wide program for the control, utilization, and protection of the surface and ground-water resources of the state."⁸⁴

Some measure of coordination is assured between the state's two water regulation agencies by provisions in the new water quality act specifying the Director of the Natural Resources Council as a member of the Control Commission⁸⁵ and requiring the concurrence of the Council in the setting of water quality standards where quality is interrelated to quantity.⁸⁶ In theory, this latter provision would seem to require the consent of the Council to all water quality standards because of the impossibility of divorcing quality and quantity considerations. In practice, the two agencies have been working well together and there seems no cause to believe that this bifurcated approach to water problems will be unduly deleterious to Iowa's water management program.

A water use permit is required for the following uses, withdrawals, or diversions:

(1) Any municipal corporation or person supplying a municipal corporation which increases its per day water use by one hundred thousand gallons or three percent, whichever is greater, above its highest per day beneficial use prior to the effective date of the statute.

(2) "Except for a nonregulated use, any person using in excess of five thousand gallons of water per day, diverted, stored, or withdrawn from any source of supply except a municipal water system or any other source specifically exempted . . ."

(3) "Any person who diverts water or any material from the surface directly into any underground watercourse or basin. Provided, however, that any diversion of water or material from the surface directly into any underground watercourse or basin existing upon [the effective date of the statute] . . . shall not require a permit if said diversion does not create waste or pollution."

(4) "Industrial users of water having their own water supply, within the territorial boundaries of municipal corporations, shall be regulated when such water use exceeds three percent more than the highest per day beneficial use prior to . . ." the effective date of the statute.⁸⁷

Municipal corporations are not automatically regulated under the statute. Before municipalities become subject to regulation they must increase their per day water use by the greater of one hundred thousand gallons or an amount more than 3 percent greater than their highest daily use before the date of the enactment of the statute. Thus, if the maximum amount of water used per

84. IOWA CODE §455A.2 (1962).

85. IOWA ACTS, 61st G.A. ch. 375 §4 (1965).

86. IOWA ACTS, 61st G.A. ch. 375 §9(4) (1965).

87. IOWA CODE §455A.25(1), (2) & (4) (1962).

day prior to May of 1957 was more than three and a third million gallons, an increase of even more than one hundred thousand gallons is required to cause regulation.

The second group of regulated users includes all water users who are not included in one of the other three groups and who are not specifically exempted from regulation. Typical of this group are irrigators, storage users, industrial users located outside the territorial limits of municipal corporations, and highway builders. This is by far the largest and most significant of the four groups of regulated water users.

A permit is also required to introduce water or other substances into underground watercourses.⁸⁸ The most obvious example of this is a drainage well used to drain swampland. The five-thousand-gallon floor has no applicability to this type of use. Regulation of this activity is not restricted to water, but includes the pumping of "any material" into the ground.⁸⁹

The final group of users who eventually may become regulated are those industries that are located inside the territorial boundaries of a municipal corporation and that have their own water supply. They may be required to obtain permits under the same 3 percent rule that is applicable to municipalities, but there is no one-hundred-thousand-gallon minimum increase.

The procedure for securing a permit to divert, store, or withdraw water is as follows:

(1) An application must be made in writing to the Council setting out the designated beneficial use for which the permit is sought and the specific limits as to quantity, time, place, and rate of diversion, storage, or withdrawal.⁹⁰ A fee of fifteen dollars must accompany the application.⁹¹ It will be used to help pay for the costs of published notice.

(2) Upon receipt of the application, the Water Commissioner schedules a hearing which is usually held in the county where the permit is sought.⁹² Notice of hearing is published by the Water Commissioner "once each week for two consecutive weeks in a newspaper of general circulation in each county in which the property affected is located."⁹³ The date of the last publication must be between ten and thirty days before the hearing. Notice is also sent by ordinary mail to interested state departments and to any other person who has filed a written request for notification of any hearings affecting a designated

88. IOWA CODE §455A.25(3) (1962).

89. Several gas companies have obtained permits to pump natural gas into natural underground reservoirs for storage. This operation results in the displacement of large quantities of water contained in the rock formations.

90. IOWA CODE §455A.19(1) (1962).

91. IOWA CODE §455A.19(5) (1962).

92. IOWA CODE §455A.19(2) (1962).

93. IOWA CODE §455A.1 (1962).

area. The mailed notices must be sent prior to the date of last publication.⁹⁴

(3) Any interested person may appear and present evidence at the hearing. He may also be represented by counsel who can cross-examine others who present evidence.⁹⁵ The Council has promulgated more particularized rules for the conduct of the hearings.⁹⁶ After the hearing, the Water Commissioner files a written determination with the Council which states his findings. A copy of the determination is mailed to the applicant and to any other person who appeared at the hearing and requested a copy in writing.⁹⁷

(4) Any party aggrieved by the determination of the Water Commissioner may appeal to the Council within thirty days of the date the determination is filed.⁹⁸ The Director will then schedule a hearing before the Council and send notice to all those who appeared at the hearing before the Water Commissioner. The Council hears the appeal, files its determination, and mails copies of it to the applicant and others who request it.⁹⁹ Further appeal is possible to the district court of the county where the property affected is located.¹⁰⁰ The statute calls for a trial *de novo* with the burden of proof on the Council to show that its acts and orders are reasonable and necessary. After a decision by the district court the normal rights of appeal to the Iowa Supreme Court apply.

For use at the hearing and in making the determination, the Commissioner's office must make an investigation of the effect of the new withdrawal, diversion, or storage upon the natural flow of the watercourse, the effect of any such withdrawal on the owners of land which might be affected, and the effect on the state's comprehensive plan for water resources.¹⁰¹ If the Commissioner finds, after due investigation, that such withdrawal, diversion, or storage will not be detrimental to the public interests or to the interests of property owners with prior or superior rights who might be affected, then the Water Commissioner shall grant a permit for such withdrawal, diversion, or

94. IOWA CODE §455A.19(3) (1962).

95. IOWA CODE §455A.19(4) (1962).

96. IOWA CODE §455A.19(6) (1962) authorizes the promulgation of such rules. These rules have been adopted and are available from the Natural Resources Council office in Des Moines. The published two-page statement is known by the catchy title of *General Procedures for the Conduct of Hearings before the Water Commissioner on Applications for Permits to Divert, Store, or Withdraw Waters of the State of Iowa*.

97. IOWA CODE §455A.19(7) (1962).

98. IOWA CODE §455A.19(8) (1962).

99. IOWA CODE §455A.19(9) (1962).

100. IOWA CODE §455A.37 (1962). Reading the statute literally, it would appear that those persons or public bodies aggrieved by, but not parties to, the granting of the permit by the Commissioner may appeal directly to the district court sitting in the county where the land affected is situated and thereby bypass the appeal to the Council. It is doubtful the legislature intended such a result. Once in the district court, the procedure would be the same in either case. See IOWA CODE §455A.20 (1962).

101. IOWA CODE §455A.18 (1962).

storage. The permit may be for any period of time not to exceed ten years. It may provide for less diversion, storage, or withdrawal of water than set forth in the application.¹⁰²

Until it expires or is revoked, the granted permit remains as an appurtenance to the land.¹⁰³ A permittee may transfer his permit by conveying, leasing, or otherwise transferring the ownership of the land.¹⁰⁴ However, the permit does not constitute complete ownership of the waters which remain subject to principles of beneficial use and the powers of cancellation and modification in the Council.

A permit may be renewed any number of times for any period not to exceed ten years.¹⁰⁵ Permits can be modified or canceled under the following circumstances:

(1) With the consent of the permittee.¹⁰⁶

(2) In case of any breach of the terms or conditions of the permit, in the case of the violation of any pertinent law, in the case of continual non-use for a three-year period, or in case such modification or cancellation is found necessary to protect the public health and safety, the public interests in lands or waters, or the private interests of persons. Notice and a hearing are guaranteed before this action is effective.¹⁰⁷

If it is found necessary in an emergency to protect the public health and safety, to protect the public interest in lands or waters, or to protect persons or property, the Commissioner may suspend operations under the permit.¹⁰⁸ As this power involves only temporary suspension of operations, no provision is made for an immediate hearing.

Enforcement powers of the Council extend to detecting and forbidding unauthorized uses. If any person files a complaint that any other person is making a depleting use of water not exempted without a permit to do so, the Council shall investigate and if the facts stated in the complaint are verified, the Council shall order the discontinuance of the use.¹⁰⁹ Whoever is convicted on a charge of diverting or withdrawing of water in violation of the law may result in a fine of up to \$100 or imprisonment for up to thirty days. Each day of continued unlawful use is considered a separate offense.¹¹⁰

102. IOWA CODE §455A.20 (1962).

103. *Ibid.*

104. IOWA CODE §455A.30 (1962).

105. IOWA CODE §455A.20 (1962) as amended by IOWA ACTS 61st G.A. ch. 372 §3 (1965).

106. IOWA CODE §455A.28(1) (1962).

107. IOWA CODE §§455A.28(2) & .29 (1962).

108. IOWA CODE §455A.28(3) (1962).

109. IOWA CODE §455A.32 (1962).

110. IOWA CODE §455A.39 (1962) as amended by IOWA ACTS 61st G.A. ch. 372 §6 (1965).

RELATION TO OTHER WATER LAWS

Because irrigation, one use closely regulated by the Iowa system, has historically been a problem of concern in the western states,¹¹¹ it would not be surprising to discover that the drafters of the Iowa statute looked for guidance to some elements of the appropriation doctrine indigenous to that region. Under the appropriation doctrine, water rights are determined on basis of the time water is diverted to a beneficial use.¹¹² The essential elements of a valid appropriation are an actual diversion of the water with the intent to apply it to a beneficial use followed by an actual application of the water to the intended use.¹¹³ For purposes of making an appropriation, beneficial uses include the diversion of water for domestic, agricultural, municipal, industrial, recreational, and power production purposes.¹¹⁴

The first user to fulfill these requirements is said to have developed an appropriative right in the water supply diverted to the extent of the amount of water beneficially used.¹¹⁵ Unless lost for some cause,¹¹⁶ this right has priority

111. See Fisher, *Western Experience and Eastern Appropriation Proposals*, in *THE LAW OF WATER ALLOCATION IN THE EASTERN UNITED STATES* 75 (1958); Beuscher, *Appropriation Water Law Elements in Riparian Doctrine States*, 10 *BUFFALO L. REV.* 448 (1961). Evidence of the concern in Iowa relating to the rights of irrigators is shown by a proposed water bill sponsored and circulated by the Iowa State Vegetable Grower's Association in 1956. This bill drafted by C. L. Fitch, Secretary of the Association reflected Mr. Fitch's long experience with Colorado water law. Among other things the bill provided for the prompt termination of riparian rights and the shift to a prior appropriation system, with the following priorities fixed: 1. Domestic uses, 2. Municipal uses, 3. Irrigation, 4. Industrial, 5. Air Conditioning and production of water power. History does not record the precise fate of Mr. Fitch's bill, but for some reason it apparently never reached the floor of the legislature.

It is significant to note that the original draft of the Iowa water permit law used appropriation language in defining the nature of a water use right. For example, "Appropriator" was defined as "the person who obtains a permit from the Council authorizing such person to take possession by diversion or otherwise and to use and apply an allotted quantity of water for a designated beneficial use, and who makes actual use of the water for such purpose." Preliminary Draft of Proposed Water Law (1956) (unpublished document in Iowa Law School Library). These references to appropriation were subsequently omitted from the draft, reportedly due to the fear that they might unduly alarm people. In many cases "permittee" was substituted for "appropriator" but the thrust of the provisions was left unchanged. One remnant of the original draft apparently overlooked when the appropriation language was being excised is the phrase "appropriation permits" used in §455A.9(2).

112. See generally 6-A *AMERICAN LAW OF PROPERTY* §28.58 (Casner ed. 1954); Hutchins, *SELECTED PROBLEMS IN THE LAW OF WATER RIGHTS IN THE WEST* (1942).

113. See Adams, *Water Rights Under Riparian and Appropriation Doctrines*, in *IOWA'S WATER RESOURCES* 99, 105 (1956).

114. See Trelease, *Preferences to the Use of Water*, 27 *ROCKY MT. L. REV.* 133 (1955).

115. See *Big Moose & Beaver Ditch Co. v. Wallop*, 382 P.2d 388 (Wyo. 1963); *Turner v. Cole*, 31 Ore. 154, 49 Pac. 971 (1897); *Koon v. Emprey*, 40 Idaho 6, 231 Pac. 1097 (1924).

116. See *CAL. WATER CODE ANN.* §§1410-15 (Deering Supp. 1954); Hutchins, *supra* note 112, at 389-97.

over the right of any subsequent appropriator.¹¹⁷ In all of the western states the procedure for perfecting an appropriative water right is specified by statute,¹¹⁸ and in all but one of these states a central administrative agency has been created to bring some order to the system.¹¹⁹

The Iowa permit system bears many superficial similarities to western water law. The employment of an administrative agency in the water allocation field is primarily a western phenomenon, for example. Recognition that the right to use water should not be the exclusive prerogative of owners of land bordering the water is a western idea, as is the loss of water rights through non-use. Perhaps the most important apparent borrowing from the west is the utilization of the broad standard of "beneficial use" to determine the legitimacy of a use. Beneficial use is a criterion admitting of considerably more latitude for judging the legality of a use than the riparian concept of "reasonable use."¹²⁰

Before the analogy to western law is pursued too far, it should be pointed out that two of the central features of western water law, permanence of the right and established priorities, are not a part of the Iowa law. Iowa permits are for a maximum of ten years and except for the consumptive — nonconsumptive dichotomy discussed later,¹²¹ no permittee is accorded a priority. Occasionally commentators have alleged that these differences constitute the real weaknesses in the Iowa system.¹²² Iowa administrators deny that such has been the case in reality. This issue will be much more fully developed later.¹²³

Further widening the hiatus between the Iowa act and western law is the concept of a protected minimum stream flow, basic to the Iowa system but entirely foreign to the appropriation doctrine. In the arid west the notion of always allowing a certain quantity of water to flow out of the region unused would not be received with great enthusiasm.

It would seem reasonable to assume that some inspiration for the Iowa statute must have come from the flood of water use regulation bills introduced

117. See *Arizona v. California*, 83 Sup. Ct. 1468 (1963); *Zannaras v. Bagad Cooper Co.*, 260 F.2d 575 (9th Cir. 1958).

118. See STATE ADMINISTRATION OF WATER RESOURCES, Council of State Governments 29-31, 38-45 (1957).

119. In Montana under its statute an appropriative right is perfected by posting notice at the point of appropriation and filing notice of the appropriation in the county records.

120. See Fisher, *Western Experience and Eastern Appropriation Proposals*, in LAW OF WATER ALLOCATION IN THE EASTERN UNITED STATES, 75, 78, (1958).

121. See discussion *infra* accompanying footnotes 185-90.

122. See O'Connell, *Iowa's New Water Statute*, 549, 579 (1962). The Iowa Irrigators' Association has gone on record as opposed to the Iowa act because of the impermanence of the rights granted. *Hearings Pursuant to S. Res. 48 Before the Senate Select Committee on National Water Resources*, 86th Cong., 1st Sess., pt. 10, at 1800 (1959).

123. See discussion *infra* accompanying footnotes 214-17.

in eastern state legislatures in the middle 1950's. By 1958, no less than twenty-four of the states under riparian law had taken some serious steps toward effecting a legislative change of their water law.¹²⁴ Strangely, the Iowa system does not have a great deal in common with most of these proposed statutes, or even with the Model Water Use Act¹²⁵ which also came out of this period of feverish interest in water rights. Most of the acts have in common with Iowa's statute the allocation of water under a beneficial use principle to be administered by a regulating agency charged with developing and implementing a comprehensive water policy. But almost all of the other proposed state acts make rather elaborate provisions for the preservation of the rights of existing riparian users,¹²⁶ avowedly on constitutional law grounds. The Iowa act, as administered, recognizes no rights that have attained a degree of vestedness under riparian law as to insulate them from regulation.¹²⁷

Irrigators' rights have caused considerable concern in humid states other than Iowa during the past decade. Many statutes restricting the rights of irrigators to divert water in time of shortage have been proposed and a few have been enacted.¹²⁸ Iowa's handling of the issue differs from that of other states more in method than result.

The one eastern state regulatory plan that appears to have significantly captured the fancy of the Iowa drafters was the Mississippi act passed in 1956.¹²⁹ Several of the Iowa provisions were lifted verbatim from the Mississippi act,¹³⁰ but these are not nearly so important as the protected flow concept borrowed from the southern state's law. Actually, Mississippi had in turn borrowed most of its statute from a bill introduced in South Carolina in 1954 and amended and reintroduced in 1955.¹³¹ The South Carolina bill never did pass in that state, but its provisions attracted a great number of supporters in other states.¹³² The "average minimum flow" idea apparently originated with

124. See King, *Regulation of Water Rights Under the Police Power*, WATER RESOURCES AND THE LAW 271, 347 (1958).

125. Approved by the Commissioners on Uniform State Laws at their annual conference August 18-23, 1958.

126. See Ellis, *Some Current and Proposed Water Rights Legislation in the Eastern States*, 41 IOWA L. REV. 237 (1956). Prefatory Note, MODEL WATER USE ACT (1958) where one essential feature of a water use act is stated to be, "Constitutional rights must be recognized and protected."

127. See discussion *infra* accompanying footnotes 143-48.

128. See N.C. SESS. LAWS 1951, ch. 1049; REPEALED N.C. SESS. LAWS 1961, ch. 315; KY. REV. STAT. §262.690 (Supp. 1959); S.B. 69, ARK. 60th G.A. Reg. Sess. (1955); Barlowe, *Proposed Water Rights Legislation in Michigan*, 26 LAND ECON. 300 (1950).

129. MISS. CODE ANN. §5956-01 et seq. (Supp. 1964).

130. Compare IOWA CODE §§455A.1, .2, .19 (1962) with MISS. CODE ANN. §5956-01,-02,-16,17(a) (Supp. 1964).

131. See H. 1095 & S.43, S.C.G.A., Reg. Sess. (1956).

132. See, e.g., S.B. 153 & H.B. 298, N.C.G.A. (1955); S.B. 69, ARK. 60th G.A., Reg. Sess. (1955).

the South Carolina Water Policy Committee.¹³³ Whatever its genesis, Iowa was the first state to both adopt and extensively implement it. Minimum flow protection reflects certain water management decisions with which not all commentators agree,¹³⁴ but sound or not, it is a matter of water policy that Iowa has developed to an unparalleled degree, and it is a highly important aspect of the Iowa permit system.

The idea of a water right limited in its duration is advocated in the Model Water Use Act,¹³⁵ but is accepted in no state other than Iowa. Elsewhere, water rights are granted in perpetuity. The Model Act suggests a fifty-year permit term, so Iowa's ten-year maximum is truly a unique experiment. The theory behind the short Iowa term was to preserve maximum flexibility in the early years of regulation.¹³⁶ Now that a decade of experience has been accumulated, it might be expected that the permit durations might be lengthened, but there seems to be no substantial interest in such a change currently. In part, this is probably due to the relative ease with which permits may now be renewed and modified.

One other facet of the Iowa statute that deserves mention at this point is its uniform regulation of water without regard to the form in which it occurs.¹³⁷ One great deficiency of the common-law rules lay in their attempt to distinguish between different types of water sources for purposes of applying different principles to uses therefrom.¹³⁸ Similarly, rights to ground water have always been a source of great confusion in western states,¹³⁹ and several eastern regulatory statutes confine their scope of control to streams.¹⁴⁰ Such segmented treatments of water resources ignore the validity of the hydrological cycle and are therefore often basically irrational in their application. For example, it is useless to regulate the use of streams for irrigation purposes if the irrigator may freely tap the stream flow by digging an unregulated alluvial

133. See, *A New Water Policy for South Carolina*, REPORT OF THE STATE WATER POLICY COMMITTEE TO THE GENERAL ASSEMBLY OF SOUTH CAROLINA (1954).

134. See, e.g., Hirshleifer, DeHaven & Milliman, *WATER SUPPLY — ECONOMICS, TECHNOLOGY, AND POLICY* (1960).

135. MODEL WATER USE ACT §406 (1958).

136. See Bullard, "Continuing Needs for Water Law Administration," paper presented at the 19th Annual Meeting, Soil Conservation Society of America, Jackson, Miss., Aug. 26, 1964.

137. IOWA CODE §455A.1, .25 (1962).

138. See Ziegler, *Water Use Under Common Law Doctrines*, in *WATER RESOURCES AND THE LAW* 49, 81-82 (1958); O'Connell, *Iowa's New Water Statute* 549, 569.

139. See Harnsbarger, *Nebraska Groundwater Problems*, 42 NEB. L. REV. 721 (1963); Hill, *Groundwater: What Is the Law in North Dakota*, 37 N.D. L. REV. 260 (1961).

140. See, e.g., Mississippi statute *supra* note 129 and Kentucky statute *supra* note 128.

well adjacent to the stream.¹⁴¹ The blanket approach of the Iowa statute generally accords with the thinking of modern hydrologists.¹⁴²

In the final analysis, it is difficult to generalize on the position of the Iowa water law in relation to other states' systems. Iowa still retains a good deal of riparian law in common with most of her neighbors to the east. On the other hand, some aspects of the Iowa permit system resemble the appropriation law of the west. Portions of the Iowa law were borrowed from the untried regulatory schemes of some eastern jurisdictions. The resulting mixture is truly a hybrid that fits comfortably no established category. And, like any hybrid, it should be judged not on the basis of its ancestry, but rather on the basis of its performance. Ten years of that performance is now history waiting to be evaluated.

ADMINISTERING THE PERMIT SYSTEM

When the Water Commissioner and his staff first set about the task of administering the new water statute in the summer of 1957, the initial question confronting them was essentially where to start. As is the case with most newly constituted agencies, dozens of issues seem to compete for primary attention, the resolution of each of which appears a prerequisite to handling the others. The tensions inherent in such a dilemma are heightened further by the pressure on the administrator to show some tangible evidence of accomplishment. In the case of the Water Commissioner, this pressure took the form of a flood of water permit applications that demanded processing. In the following sections an effort will be made to highlight the more important issues faced in the administration of the Iowa permit system and to describe in detail the experience of the Water Commissioner in his endeavor to resolve them.

INTERPRETING THE SCOPE OF REGULATORY POWER

During the early period of administration, the Commissioner and the Council were compelled by necessity to make certain policy judgments concerning the scope of their regulatory power. Several critical matters had to be settled before the Commissioner could meaningfully go about the business of

141. It is by no means certain how this type of case would come out in Iowa under either the statute or riparian principles. The established average minimum flow applies only to streams, so on its face the act would not seem to regulate well withdrawals during times of shortage; however, the Commissioner is invested with considerable discretion in terms of modifying permits for cause. IOWA CODE §455A.28(2) (1962). Under common law it is possible only to speculate whether the rationale of *Willis v. City of Perry*, 92 Iowa 297, 60 N.W. 727 (1894) would be applied to a situation where one user was on stream and another off stream.

142. See Piper & Thomas, *Hydrology and Water Law: What Is Their Future Common Ground*, in *WATER RESOURCES AND THE LAW* 7 (1958); Smith, *Some Steps Toward Solution of Iowa's Water Problems*, in *IOWA'S WATER RESOURCES* 183; Thomas, *Hydrology v. Water Allocation in the Eastern States*, in *LAW OF WATER ALLOCATION IN THE EASTERN UNITED STATES* 165 (1958).

putting the permit system into effect. (One point that requires early clarification is the use of the terms "Commissioner" and "Council" in the description of administrative activity. The Commissioner is the administrative officer designated by the Council to carry out its responsibilities under the permit law. Therefore, except where a distinction is clearly implied by context, as used herein the two terms are synonymous.)

Initially, a decision had to be made regarding the recognition to be accorded riparian rights existing at the time the statute was enacted. Next, policy had to be established concerning the extent to which the agency's regulatory power could be exercised and the extent it would be. Policy questions associated with the latter inquiry include such matters as the types of uses to be regulated, the amount of regulation to impose and the nature of the rights created through issuance of a permit. Although not heralded by any particular ceremony or announced with any fanfare, these policy issues were decided early in the administrative process, and their resolution has had a great impact on the way the permit system has been developed. The attempt is made to separate these matters in the discussion that follows, however, because they are so closely interrelated some overlapping is unavoidable.

Vested Rights

As noted in an earlier section, all of the statutes regulating water rights in other states in which the riparian doctrine prevailed go to elaborate lengths to protect rights that may already be fixed at the time the regulatory plan becomes operative.¹⁴³ Uniformly, this protection is explained as being required to assure the constitutionality of the legislation.¹⁴⁴

The Iowa statute contains no extensive provision dealing with pre-existing interests, but it is far from free of language indicating concern for the problem. Section 455A.18 directs the Council, in connection with a permit application, to investigate, among other matters, "the effect of any such use upon the owners of any land which might be affected by such use. . . ." Section 455A.20 is more specific in stating the findings requisite to issuance of a permit. The requested use may not be detrimental ". . . to the interests of property owners with prior or superior rights who might be affected. . . ." In connection with the right of existing irrigators to obtain a permit, section 455A.21 pro-

143. For example, the Model Water Use Act contains a series of detailed sections, the titles of which suggest their purpose — §303 Preservation of Existing Uses, §304 Certification of Existing Uses, §305 Exchange of Preserved Uses, §306 Extinguishment of Preserved Uses.

144. See Comments to sections of Model Water Use Act cited in note 143 *supra*. Among other statements the Comment to §303 indicates that the protection of existing uses is required because "it may constitute a violation of a state constitution as an unlawful exercise of police power if existing uses of water were substantially regulated by a limitation in their duration."

vides that a permit shall be issued to continue "... unless by the use thereof some other riparian user is damaged." Later on in the same section, the flat declaration is made that "nothing in this chapter shall impair the vested right of any person."¹⁴⁵ Considering all of these provisions in the aggregate leaves the distinct impression that the legislature was painfully aware of the potential constitutional problem, but completely unable to decide what to do about it beyond periodically indicating their concern.

In the face of all of this statutory language implying the vestedness of certain riparian rights and the universal reverence for such rights shown by other jurisdictions, the Water Commissioner has consistently refused to admit the possibility that any uses are beyond the reach of regulation in Iowa, save those specifically excluded in the statute.¹⁴⁶ So strong is this policy of bringing under regulation all uses not specifically made nonregulatable, that the Commissioner has subjected the applications from irrigators whose withdrawals antedated the act to the same review as other applications and has placed the same conditions in all stream irrigation permits without regard to the applicant's initial withdrawal date.¹⁴⁷

The Commissioner's view is that he has yet to see an application in Iowa involving a vested right. A moment's reflection reveals that this is by no means the admission of an administrative blind spot. Considering the fact that domestic uses are exempt from regulation, and that under Iowa's riparian law the status of artificial uses was hopelessly uncertain, it is relatively unlikely that any user could substantiate a claim of a vested right to any particular quantum of water. Further, because "vested right" is merely a label used to describe rights that cannot be abridged constitutionally, as is developed later,¹⁴⁸ the Commissioner's position is probably sound from a constitutional law viewpoint.

However, the likelihood that the decision to disregard "vested rights" would be sustained by the courts today does not detract from the courage and wisdom demonstrated by the Commissioner and Council in arriving at the policy they did. At the time the decision was made the constitutional law was less clear, the practice in other states was uniformly contra, and the language in the Iowa statute was formidable. In many ways the decision to start fresh

145. IOWA CODE §455A.21 (1962).

146. Lest the Commissioner's position be overstated, it should be pointed out that although he doubts the existence of vested common-law rights, he is still apprehensive about the potential havoc a court decision of unconstitutionality would work on the Iowa system. In his talk to the Soil Conservation Society of America in 1964, he gave voice to these anxieties and suggested the possibility of a statute of limitations on claimed vested rights as a possible cure for this problem. See Bullard, *supra* note 136, at 5-6.

147. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, March 14, 1966.

148. See discussion *infra* accompanying notes 262-94.

in the allocation of water rights was almost a prerequisite to the development of a workable system. Elements of vestedness could be found in almost every application to make or continue a use. Any other result might well have reduced administration of the system to hopeless nit picking.

Uses Regulated

A second policy question addressed in the early stages of administration called for an interpretation of the regulatory coverage intended by the act. Deciding to what types of uses to extend the regulatory power was relatively easy, owing to the guidance furnished by the statute. The act makes fairly clear in several places the intent to cast the umbrella of regulation over all water uses except those specifically nonregulated. For example, section 455A.25(2) specifies in broad terms the water uses for which a permit is required, and 455A.26 extends this coverage by providing that "no person shall take water . . . for any purpose other than a non-regulated use" without a permit.

Yet other portions of the act use the term "depleting use"¹⁴⁹ and, although this is broadly defined, there remains some connotation of a use which consumes a portion of the water withdrawn. Likewise, some argument might be made that "taking"¹⁵⁰ water does not refer to situations where the whole amount of the water diverted is returned to the source. The point of this exercise in semantics is to demonstrate that, had the Commissioner so desired, he probably could have justified, within the terms of the act, a regulatory policy that required permits of only those users whose use was source depleting. Precedent for such a decision can be found in the actions of water regulation bodies in other states.¹⁵¹

The Iowa agency did not attempt to pursue a course of restricted regulation, however, and for good reason. First, as indicated above, the statutory language is fairly clear. Secondly, and more important, reading the act as an entity reveals a pervading intent toward comprehensiveness in the handling of the state's water resources. Any other construction would have been unfaithful to one of the major purposes of the statute, obtaining adequate information on the water demands of Iowa users. On a more pragmatic level it might be noted that even if consumptive users only were to be regulated, some sort of investigation would be necessary of other users to determine if their uses are non-consumptive. For whatever cause the decision was made, it is to the credit of the Commissioner and the Council that all users except those within the non-regulated classes are required to obtain a permit to continue their use.¹⁵²

149. See IOWA CODE §§455A.1, .32 (1962).

150. IOWA CODE §455A.26 (1962).

151. See Ellis, *supra* note 126; Fisher, *supra* note 120.

152. In their reports the Council divides uses under regulation into six categories: Highway Construction, Industrial, Irrigation, Recreation, Storage, and other. In the sta-

Another illustration of the drive to bring within the regulatory ambit all water use not expressly exempt is found in the Commissioner's policy in handling municipal and industrial users who, by reason of having increased their

tistical study of Council records the decision was made to exclude Highway Construction applications from consideration entirely. The justifications for this choice are fairly obvious when the nature of the highway construction use is considered. In the first place the total number of highway applications are equal to almost half of the total of applications for all other uses combined. More important, the use involves a very small amount of water for a short period of time. Finally, the Highway Construction permits are granted under somewhat different standards than other permits because of their volume and relatively insignificant impact on the overall water resources. Also, as is discussed later, the Commissioner has considered recommending the exemption of highway construction from the permit requirement.

Another decision made early in the study which affects the statistical materials reported herein was the subdividing of the categories of Industrial and Irrigation into five and three components respectively. Wherever the tabulations of the Council's records are reported by use, a total of twelve categories will be utilized. The classifications are mutually exclusive. Thus, for example, a reservoir used for recreation is classed as recreation and not storage. Most of the classifications are self-explanatory, but two deserve special comment. As is shown by Table 3, Note 157 *infra*, power production is by far the largest use of water. In most cases the water is used for cooling power production machinery. Recreation use refers to diversions of water for recreational purposes. Flooding duck marshes is the most common example of such use.

The tables below show both the volume and distribution of permitted uses in Iowa. The first table shows, by use, the total number of original applications for permits and renewal applications granted up to June 30, 1965; the second table shows the permits actually in effect on that date. The difference in the numbers shown by the two tables is attributable chiefly to the termination of permits through expiration or other cause.

TABLE 1
Original and Renewal Applications Granted
to June 30, 1965

| <i>Use</i> | <i>Orig.</i> | <i>Ren.*</i> |
|----------------------------|--------------|--------------|
| Industrial | | |
| Materials Production | 358 | 63 |
| Power Production | 33 | 7 |
| Food Processing | 28 | 4 |
| Manufacturing | 33 | 8 |
| Air Conditioning | 11 | 2 |
| Irrigation | | |
| Farms | 507 | 360 |
| Golf Courses | 32 | 14 |
| Specialty Crops | 92 | 54 |
| Municipal | 108 | 11 |
| Recreation | 35 | 15 |
| Storage | 526 | 10 |
| Other | 18 | 3 |
| Totals | 1781 | 551 |

*Renewal here includes applications requesting modifications.

use in excess of the statutory minimums,¹⁵³ become subject to regulation. Although some arguments have been made that only the increased use should be regulated, the Commissioner asserts jurisdiction over the entire municipal use.¹⁵⁴ Looking at the question from the perspective of the overall goals of the statute, it is difficult to quarrel with the Commissioner's policy.¹⁵⁵

Very little trouble has been encountered in identifying nonregulated uses. Only once has a question arisen concerning the legitimacy of a user's claim to exempt status. The precise issue was the construction to be given the phrase "livestock and domestic animals" used in the definition of nonregulated uses.

TABLE 2
Permits in Force on
June 30, 1965

| <i>Use</i> | <i>Permits</i> |
|---------------------------|----------------|
| Industrial | |
| Material Production | 298 |
| Power Production | 31 |
| Food Processing | 29 |
| Manufacturing | 29 |
| Air Conditioning | 9 |
| Irrigation | |
| Farms | 422 |
| Golf Courses | 33 |
| Specialty Crops | 73 |
| Municipal | 105 |
| Recreation | 28 |
| Storage | 523 |
| Other | 6 |
| Total | 1586 |

153. IOWA CODE §§455A.1, 25(4) (1962).

154. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, March 14, 1966. Raising some question concerning this policy see O'Connell, *Iowa's New Water Statute*, at 621.

155. Another example of the Commissioner's policy favoring maximum inclusion of uses above the 5,000-gallon floor may be found in the handling of nonregulated industrial and municipal uses. Under the Commissioner's application of the act, exempt industrial and municipal users can become subject to regulation in three ways. They may voluntarily apply for a permit, and they may be required to seek a permit if their daily use increases beyond the statutory limit or if they change the source of their water. This latter rule is apparently premised on the theory that the statutory exemption continues only so long as conditions do not change markedly, but it finds no direct support in the statute. Considering the significant effect on the state's water resource that would result from a large city or an industry requiring large amounts of water changing its water source from wells to a river even if no increased use resulted, the Commissioner's policy seems eminently reasonable.

The statute contains no express provisions for policing the use of municipalities and industries that are initially nonregulated. Municipal increases may be discovered through Health Department records, however, detection of changes in industrial use is generally dependent on the good faith of the industrial user. Complaints from other users might also reveal use changes by nonregulated users.

The potential user involved, who planned a commercial feed lot in which a sizable number of cattle were to be confined, questioned whether his use of water in connection with the livestock was exempt under the statute. The Council sought advice from the Attorney General's office and received a letter opinion ruling in effect that the use was not exempt.¹⁵⁶

Although regulation of all uses appears to be the general policy,¹⁵⁷ there are at least two instances where this is not true in fact or is not desirable from the Commissioner's viewpoint. These two situations are the storage of water and the use of water in highway construction.

The withdrawal or diversion of water for storage requires a water permit under the general provisions of section 455A.25(2). There are thousands of farm ponds in the state that technically fall within this section, yet they are

156. 1960 IOWA ATT'Y GEN. REP. 217.

157. It is difficult to express in meaningful terms the amount of water that might be used if permitted users were to take water to the full extent of their permits. Any attempt is necessarily crude and involves numbers of astronomic proportion. The following table is a modest effort to depict the amount of water that could potentially be used if all permitted users took water to the maximum of their reasonable needs. Calculating this obviously involves some value judgments as to what portion of his authorized use a user is reasonably likely to withdraw at a particular time. For example, an irrigator may reasonably withdraw his entire annual amount in one month, while a food processing industry is likely to have a stable rate of withdrawal throughout the year. The calculations below for the month of June, 1965, show a potential use of approximately 100 billion gallons of water.

TABLE 3
Potential Permitted Use
During June, 1965

| <i>Use</i> | <i>Amount (in millions of gal.)</i> |
|----------------------------|-------------------------------------|
| Industrial | |
| Materials Production | 8,898 |
| Power Production | 40,177 |
| Food Processing | 656 |
| Manufacturing | 2,235 |
| Air Conditioning | 67 |
| Irrigation | |
| Farms | 21,036 |
| Golf Courses | 228 |
| Specialty Crops | 1,302 |
| Municipal | 3,829 |
| Recreation | 175 |
| Storage | 20,484 |
| Other | 5 |
| | 99,092* |
| Total | 99,092* |

*Total does not include two permits for displacing underground water for purposes of natural gas storage involving nearly ½ billion cubic feet of water per day.

much too small to have any significant effect on overall water resources.¹⁵⁸ The Council felt that it would not be practical to require each of these landowners to obtain a permit. They, therefore, initially exempted all impoundments storing less than ten acre feet of water.¹⁵⁹ About a year later the Council increased the regulatory floor to eighteen acre feet of permanent storage.¹⁶⁰

The use of water in connection with highway construction often exceeds five thousand gallons of water per day, and for these projects a water permit is required.¹⁶¹ This is the second situation where the Commissioner has expressed a willingness to forego regulation. These permits are granted for the period of the construction work, which is usually only one year, and within the construction season of April through December. They also call for a relatively small amount of water. Through the first half of 1965, about thirteen hundred highway construction permits were granted allowing a total usage of less than eight thousand acre feet of water.¹⁶² The principal difficulties in the situation stem from the peculiar nature of the contracting business. The contractor making the successful bid on many of these highway projects is eager, if not required, to begin construction almost immediately after winning the contract. Forcing him to wait until a permit is issued which must necessarily be postponed nearly thirty days due to the notice requirement, may result in costly disruptions in the schedules of both the contractor and the highway commission. For this reason the Water Commissioner has developed a streamlined application process for highway construction permits.¹⁶³

158. The 523 storage permits in force on June 30, 1965, involved a maximum storage potential of 63,000 acre feet of water. Thus the average size of the reservoirs under permit is only about 120 acre feet of storage.

159. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, March 14, 1966. When review and approval by the Council of plans for the structure creating the requested impoundment is required by IOWA CODE chs 455A & 469 (1962) the Commissioner's policy is to delay action on the water use permit application until an order is obtained from the Council approving the structure.

160. Natural Resource Council Policy adopted Feb. 13, 1959, limits water use permit requirements to structures which provide permanent storage for more than 18 acre feet. A later statement of policy in the Council's Procedural Guide extends the permit requirement to structures in the drainage area of a municipal or industrial water supply reservoir if the structure has a drainage area of more than 15 acres or provides more than 5 acre feet of permanent storage.

161. IOWA CODE §§455A.1, .26 (1962).

162. This may seem like a substantial amount of water, but when compared with the *monthly* maximum permitted use for the 528 irrigation permits in effect June 30, 1965, of approximately 70,000 acre feet, it can be seen that highway construction uses a relatively inconsequential amount of water.

163. The Highway Commission or county makes the application and obtains the permit which is later assigned to the successful bidder. No investigation is made of the water supply. Instead of the precise source being stated, the contractor is allowed to take water "from any stream or watercourse on the right of way of the road being constructed and roads within one mile of the road being constructed." Provision is made requiring "the natural downstream flow of the stream be maintained a minimum of 10 hours each day if material damages are caused by continuous reduction of the stream flow."

At the time the simplified application procedures were adopted, the alternative of exempting highway construction use completely on the ground that the amount of water involved did not justify regulation was also considered by the Council. At that time it was the Council's judgment that such an amendment would be unwise because it would stimulate requests for exemption from many other users. The Commissioner has since indicated a willingness to consider excluding highway construction users from coverage by the act. However, the amendments proposed by the Council in 1965 included no such exclusion.¹⁶⁴ Although the Commissioner would prefer not to have to regulate highway construction uses, apparently the earlier Pandora's box theory of amendments creating exemptions still prevails.¹⁶⁵

Regulation Imposed

Having decided the range of uses to subject to regulation, the Iowa authorities next had to wrestle with the problem of the amount of regulatory power to exercise in regard to these uses. Basically, two questions were presented: (1) What standards should be applied to determine whether a permit should be issued, and (2) What limitations should be placed on permitted uses. These matters are obviously mutually dependent to a considerable degree. The policy established regarding who will get a permit is directly affected by what sort of limitations may be placed on a permitted use and the extent of limitations required depends in great measure on the relative tightness or looseness of the permit issuing policy. To complicate matters even more, both of these questions are vitally affected by the policy established concerning the "rights" created through granting of a permit.

Standards. The statute is replete with terminology purporting to guide the Commissioner in his decision whether to authorize a regulated use through granting a permit to the user. The most specific direction is found in 455A.21 which provides "In the consideration of applications for permits by regulated users, the declared policies and principles of beneficial use, as set forth in this chapter, shall be the standard for the determination of the disposition of the applications for said permits."¹⁶⁶ Accepting the mandate of this provision,

164. See Bullard *supra* note 136, at 7; IOWA ACTS, 61st G.A. ch. 372 (1965).

165. Another alternative for handling the problem might be to grant a single permit to the State Highway Commission for all water use associated with state highway construction during the course of one construction season. Similar permits could be granted to county road authorities. These master permits would contain the restrictions considered essential in regulating this type of use and then the primary burden of policing these restrictions could be shifted to the agency obtaining the permit. Such a procedure would require a little stretching of the current water law, but liberal construction of the act is not without precedent in its administration.

166. A similar directive is found in the definition of "Permit" in §455A.1 where that term is said to mean a written authorization "limited as to quantity, time, place, and rate of diversion, storage or withdrawal in accordance with the declared policies and

the problem becomes one of determining what are the "declared policies and principles of beneficial use" expressed in the act. Looking first to the declaration of policy portion of the act, the following policy is articulated: "It is hereby declared that the general welfare of the people of the state of Iowa requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable. . . ."¹⁶⁷

Later in the same section, after declaring that the control, development, and use of water are to be regulated by the state, the act states that the state "shall take such measures as shall effectuate *full* utilization and protection of the water resources of the state of Iowa."¹⁶⁸ These policy standards seem to indicate a desire to allocate use of the state's water to those persons who can put it to its fullest or most beneficial use. Even the definition of "waste" seems to reflect this policy. Waste is defined to include the taking or using of water "in any manner so that it is not put to its *full* beneficial use."¹⁶⁹

The patent difficulty with such lofty statements of policy is their failure to provide any hint of the frame of reference by which the beneficiality of a use is to be judged. Is the question of full benefit to be decided solely by economic criteria,¹⁷⁰ or is some notion of seeking maximization in the attainment of recognized societal goals intended? Perhaps purely esthetic standards should be used. The Council is directed at one point in the statute to establish and enforce a comprehensive state-wide plan for the "*optimum*" control, protection, development, allocation, and utilization of the state's water resources.¹⁷¹ Could it be that the statute contemplated that the Council would, in creating such a plan, develop standards for measuring the relative benefit to the state derived from various types of water uses?

Section 455A.18, in assigning the Council jurisdiction over water use applications, directs the investigation of the effect of any regulated use upon the state comprehensive plan for water resources. Coupling the idea of a comprehensive state plan with the policy declarations in favor of optimum water use suggest that a sound argument could be made that the legislature intended the formulation of standards for distinguishing between uses on the basis of their respective beneficialness.

The Commissioner and the Council have elected to place a different in-

principles of beneficial use set forth in this chapter."

167. IOWA CODE §455A.2 (1962).

168. *Ibid.*

169. IOWA CODE §455A.1 (1962).

170. Ciriacy-Wantrup, *Concepts Used as Economic Criteria for a System of Water Rights*, in *LAW OF WATER ALLOCATION IN THE EASTERN UNITED STATES* 531 (1958); Heady & Timmons, *Economic Framework for Planning Efficient Use of Water Resources*, in *IOWA'S WATER RESOURCES* 47; Hirshleifer, DeHaven & Milliman, *WATER SUPPLY — ECONOMICS, TECHNOLOGY AND POLICY* (1960).

171. IOWA CODE §455A.17 (1962), as amended by IOWA ACTS, 61st G.A., ch. 373 §1 (1965).

terpretation on the statute, one that requires practically no discrimination among uses on beneficialness grounds.¹⁷² Although never specifically articulated, the Commissioner has consistently pursued a policy of granting permits on a showing by the applicant that he can put the amount of water requested to a beneficial use. As defined by the act and applied by the Commissioner, beneficial use is a very broad standard. In effect, all uses not wasteful or causing pollution are beneficial. Most revealing of the practical effect of this policy is the fact that in ten years of administration only two applications for permits have been denied, and both of these situations involved the disposition of drainage waters, not the use of water.¹⁷³ Thus, to date, not a single application to divert, store, or withdraw water has been denied.

This liberal policy of permit issuance is not without substantial support in the statute. As mentioned earlier, 455A.21 directs that the standard for determining the disposition of permit applications is one of beneficial use, and beneficial use is specifically defined in a broad fashion. Even stronger support for the Commissioner's approach is found in 455A.20 which directs the Commissioner to grant the permit if certain findings are favorable to the applicant. It is fairly clear that this direction to grant the permit is limited by the provisions of 455A.22-.24 dealing with safeguarding streamflows, but it would seem the Commissioner reasonably takes the position that the regulatory

172. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, March 14, 1966.

173. Both of the applications denied involved the disposal of excess surface waters through the use of drainage wells. Section 455A.25(3) of the IOWA CODE requires a permit for any person who diverts water from the surface directly into any underground watercourse or basin. An amendment in 1965 requires the approval of the Water Pollution Control Commission before a permit to divert water underground can be issued. IOWA ACTS, 61st G.A. ch. 376 §34 (1965).

There have been only four applications for drainage well permits to date, two of which have been denied. The Commissioner has said that the general policy is to refuse such permits because of the danger of contamination of the underground water supplies relied upon by 85 per cent of Iowans for their drinking water. See Bullard, *supra* note 136, at 4.

The permit requirement is limited to new constructions, however, and a drainage well existing at the effective date of the act may continue in operation without a permit if it does not create waste or pollution. This distinction created an interesting situation in one of the two cases in which a permit was denied. It seemed that the applicant had been draining a twenty-seven-acre tract into a drainage well prior to the passage of the act. Later he applied for permission to drain stagnant water from another thirty-acre field. Several adjoining landowners objected at the hearing on the ground that their water wells were in danger of being polluted. Test pumpings from nearby wells revealed no pollution from the current operation, yet the Council found "an imminent danger of pollution of an underground basin or watercourse utilized as a source of public and private water supplies," and upheld the hearing officer's decision to deny the permit. Thus, the old drainage operation was legal because pollution was not proved, but the application for additional drainage was turned down because the diversion was not proved to be fully safe and workable.

scheme contemplated by the statute is effectively negative in its operation. That is, an applicant should be granted a permit unless certain specified conditions exist. The current determinations written by the Commissioner clearly illustrate the policy being followed. After describing the use requested and reciting the applicant's ability to put the water to beneficial use, there follows a recitation negating the existence of four or five factors, which under the act would require denial of the permit.¹⁷⁴

The philosophy of administration represented by the Commissioner's refusal to discriminate among types of users raises some questions. For example, it might be asked, if all the Commissioner does is issue a permit to every user who applies for one, what function does the regulation perform? Are not we spending a good deal of the taxpayers' money and inconveniencing water users to a considerable degree for no apparent purpose? The Water Commissioner has some rather convincing answers to such questions. Substantial regulatory functions are performed by the agency. These are discussed in the next section. Besides these, the regulatory agency is accomplishing three things that more than marginally justify its existence. First, it is establishing firmly among Iowa users the principle of central administration of water resources. Although in absence of real water shortage it may be a little early to tell, it would seem the work of the Commissioner has won complete public acceptance of the idea of water regulation in Iowa. Second, the Commissioner has accumulated and systematically recorded ten years of information concerning the uses made of Iowa's water resources. Looking to the future when more refined regulation may be required, this information will be invaluable.¹⁷⁵ Third, the administration has had a substantial impact on both the development of new supplies of water and the more efficient use of existing supplies. Investigations by the Commissioner have tended to highlight situations where applicants lacked suf-

174. A typical determination by the Water Commissioner will contain a paragraph similar to the following excerpt from a recent determination:

The ability and intent of the applicant to devote a reasonable quantity of water to a beneficial use seems evident. There is no evidence that the use of water pursuant to a permit granted in accordance with the conclusions contained herein (a) will constitute a waste of the water resources of the State, (b) will be incompatible with the state comprehensive plan for water resources, (c) will impair the effect of pollution control laws of this state or the navigability of any navigable watercourse, or (d) will be detrimental to the public interest or to the interests of property owners with prior or superior rights who might be affected.

175. See Bullard, *supra* note 136, at 9. If this study did nothing more than furnish the occasion for systematically recording the data in the Commissioner's files in a form in which they can be readily researched and analyzed, the study was probably worth the energy and money expended. The relevant information concerning the first nine years of application is now contained on a computer tape, available to be retrieved in a matter of seconds.

ficient, reliable water supplies to carry on the activity they contemplated. Similarly, such investigations have revealed defects in water diversion and withdrawal methods that resulted in water waste.¹⁷⁶

In view of the herculean proportions of any program directed toward developing standards for measuring the beneficial use of water, it is understandable why the Iowa authorities shied away from such an undertaking in the early stages of administration. As time passes and water demands continue to increase, the time may be close at hand when reconsideration of this policy will be required. Experience in other areas has shown that such standards are much more easily established before the problem regulated reaches crisis dimensions. It might be noted in this regard that the newly created Water Pollution Control Commission is currently struggling with the problem of establishing water quality standards for Iowa waters.¹⁷⁷

Regulating Permitted Uses. Because examination of the Commissioner's handling of regulated uses reveals a virtually automatic issuance of permits, it should not be assumed that the activity of the Commissioner in the granting of permits is purely ministerial. Although every applicant has received a permit, they have by no means always been allocated their total request. The act specifically directs the Commissioner to exercise his discretion in regard to the duration of the permits granted and the amount of use authorized,¹⁷⁸ and this discretion has frequently resulted in the paring of an applicant's request for water in respect to the total amount of water sought, the requested time of withdrawal, the rate of withdrawal, or any combination of the three. Often the necessity to reduce some aspect of the requested use results from the applicant's ignorance regarding the amount of water his use reasonably requires. In the early days of administration, permit durations were often sharply limited, but this has been relaxed considerably in later years.¹⁷⁹

176. Interview with Deputy Water Commissioner Clifford Peterson in Iowa City, Iowa, January 31, 1966.

177. See Morris, "The Pollution Situation and Controls in Iowa," paper presented at Seminar on Iowa's Water Resources: Pollution Control and Abatement, Iowa State University, November 10, 1965.

178. IOWA CODE §455A.20 (1962).

179. At the outset of administration the Council determined to move ahead slowly in so far as the durations for which permits were granted were concerned. Thus initial irrigation permits were granted for three-year terms. In 1960 the Council by Motion 60-160 adopted a policy extending the term for which irrigation permits could be granted to seven years. At the same meeting, Motion 60-161 authorized the granting of 10-year permits for Municipal and Industrial use. In 1963, by Motion 63-29, the Council decided to authorize 10-year irrigation permits where the water source was ground water or a reservoir.

The table below generally documents the enforcement of the Council's policies concerning irrigation uses. The table shows, in twelve-month ranges, the amount of time requested by applicants for all types of irrigation use and the amount of time actually granted in the permit. In the later years the figures are very close owing to the loosening

Besides this sort of screening process, the Commissioner also normally includes one or more of a variety of conditions in permits, the nature of the conditions depending on the type of use involved.¹⁸⁰ Often these conditions

of the Council's policy toward duration of irrigation permits and effective pre-application counseling by the water authorities.

TABLE 4
Duration of Irrigation Permits
Time Requested and Time Granted (in months)

| | 1-12 | 13-24 | 25-36 | 37-48 | 49-60 | 61-72 | 73-84 | 85-96 | 97-108 | 109-120 |
|------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------|
| 1957 | | | | | | | | | | |
| Req. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Gr. | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1958 | | | | | | | | | | |
| Req. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 |
| Gr. | 0 | 0 | 38 | 0 | 65 | 0 | 0 | 0 | 0 | 1 |
| 1959 | | | | | | | | | | |
| Req. | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 308 |
| Gr. | 0 | 2 | 174 | 0 | 132 | 0 | 0 | 0 | 0 | 1 |
| 1960 | | | | | | | | | | |
| Req. | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 102 |
| Gr. | 0 | 0 | 74 | 0 | 29 | 0 | 0 | 0 | 0 | 0 |
| 1961 | | | | | | | | | | |
| Req. | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 37 |
| Gr. | 0 | 1 | 0 | 0 | 2 | 0 | 37 | 0 | 0 | 0 |
| 1962 | | | | | | | | | | |
| Req. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| Gr. | 0 | 0 | 0 | 0 | 0 | 1 | 130 | 0 | 0 | 1 |
| 1963 | | | | | | | | | | |
| Req. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 175 |
| Gr. | 0 | 0 | 1 | 0 | 0 | 0 | 101 | 0 | 0 | 73 |
| 1964 | | | | | | | | | | |
| Req. | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 149 |
| Gr. | 0 | 0 | 1 | 1 | 2 | 0 | 23 | 0 | 0 | 125 |
| 1965 | | | | | | | | | | |
| Req. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| Gr. | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 33 |

180. Illustrative of such conditions are the requirements routinely inserted in the permits of materials producers. The use and discharge of water in the production of construction materials such as sand, gravel, and rock, has caused several problems for the Commissioner. These uses are basically nonconsumptive, yet they may cause both qualitative and quantitative harm to other users. Where washing operations return water into a stream, damage may be caused if the water has a high content of impurities. These impurities may settle out quickly causing the stream channel to become filled or they may remain in suspension and cause turbidity that is harmful to aquatic life and generally restricts use of the stream water. To guard against this possibility, permits issued to materials producers contain a provision similar to the following clause:

With the exception of reasonable quantities of water lost in processing the materials produced, water withdrawn pursuant to this permit shall be discharged into an unnamed tributary of the Des Moines River on the land described herein, shall be of suitable quality, and shall be so discharged as to preclude flooding or other adverse effects.

A corollary problem occasionally caused by materials is the dewatering of the aquifers

are simply reminders of the obligations imposed by the act such as the duty to file periodic use reports,¹⁸¹ or the duty to avoid violation of the state pollution control laws.¹⁸²

One regulatory prerogative not granted the Commissioner or Council is the power to grant temporary permits in time of emergency. The Commissioner may suspend a permitted use during an emergency,¹⁸³ but he cannot authorize a new use. The Commissioner does not yearn for such a power, in fact he is grateful not to have it.¹⁸⁴ The explanation for this attitude is generally couched in terms of the numerous pressures that would be brought to bear on the administrator to exercise the power if he possessed it. Although it is not difficult to sympathize with the Commissioner's apprehensions, it is less easy to applaud the concept of administration they reveal. To paraphrase a former President, kitchens are designed to be hot places.

Consumptive Use and Protected Flow. All of the regulatory practices that have been mentioned thus far pertain equally to all types of uses. However, the principal thrust of the Commissioner's regulation of permitted uses emanates from a policy decision to differentiate between certain uses on the basis of their relative consumptiveness. "Consumptive use" is a term used by the Commissioner to describe withdrawals from a stream or reservoir of substantially more water than is returned. The statutory term "depleting use" is defined much too broadly to accomplish the desired regulatory result.¹⁸⁵ Section 455A.22 provides the basis for this crucial regulatory distinction. That section

from which the materials are being extracted. Little data is available on the effect of dewatering on ground water supplies in the area, therefore, permits granted to materials producers carrying on dewatering operations require the permittee to keep records on his dewatering.

181. The requirement of reports is made a condition of the permit under the rather vague authority of §455A.28(2). Collection of water use reports is one of the important facets of the Iowa regulatory scheme. Thus far, time and manpower limitations have prevented compilation and analysis of these reports. No formal procedure has been adopted for verifying the accuracy of the use reports.

182. See IOWA ACTS 61st G.A. ch. 375 (1965).

183. IOWA CODE §455A.28(3) (1962).

184. See Bullard, "Continuing Needs for Water Law Administration," paper presented at the 19th Annual Meeting, Soil Conservation Society of America, Jackson, Miss., August 26, 1964, p. 6 (Mimeo). It is somewhat hard to understand how an emergency power to grant permits differs greatly from the power already possessed under §455A.28(3) to suspend permits in time of emergency. Thus far, the only situations in which an emergency power might have been useful have arisen in connection with the discharge of excess water from construction projects. A building contractor who strikes water in excavating a foundation could hardly be expected to wait 30 days to obtain a permit because pumping out the accumulated water involves the discharge of more than 5,000 gallons. To date, the Council's policy in such cases has been to simply overlook this technical violation of the act and allow the contractor to discharge the water.

185. IOWA CODE §455A.1 (1962) includes in the definition of depleting use any use of water that "might impair the natural resources of the state" or "might injure the public welfare" if not controlled.

limits the authority to issue permits for uses of water from a stream to cases where the protected flow of the stream is preserved. The effect of classification as a consumptive use can be appreciated only if the concept of a protected flow is fully grasped. "Protected flow" is the abbreviation used by the Council to describe the concept denominated "established average minimum flow" by the act.¹⁸⁶

According to the Commissioner, the protected flow is designed to provide "adequate protection to the supply of water for ordinary household, poultry, livestock, and domestic animal uses, for fish and wildlife, for recreational and esthetic uses of the river, for pollution control and dilution of wastes, and for other uses of a public nature."¹⁸⁷ In short, the idea is to assure, to the extent possible, that the flow in every stream in the state is maintained at a level sufficient to satisfy demands of the type specified above. In order to accomplish this it is necessary to calculate the minimum stream flow that will satisfy these demands and then protect that flow by preventing withdrawals by any permittee whose use would diminish the flow below the protected level.

It is at this point that the dichotomy between consumptive and nonconsumptive users becomes relevant. It stands to reason that the only permittees whose uses endanger the protected flow of a stream are those who take out substantially more water than they return. The user who temporarily diverts the flow of the stream without lessening the amount of water passing downstream from his diversion poses no threat to the maintenance of the protected flow. Therefore, only permittees making consumptive uses should have their permits conditioned on the continued availability of water above the minimum protected flow. This is the construction the Water Commissioner has consistently given to the 455A.22 requirement through the creation and application of the consumptive use test, with the result that all permits involving such uses are specifically made subject to the requirement of preserving the protected flow.¹⁸⁸

186. IOWA CODE §455A.1 (1962) provides:

"Established average minimum flow" means when reasonably required for the purpose of this chapter, the council shall determine and establish the average minimum flow for a given watercourse at a given point thereon. The "average minimum flow" for a given watercourse as used in this chapter shall be determined by the following factors: (a) Average of minimum daily flows occurring during the preceding years chosen by the council as more nearly representative of changing conditions and needs of a given drainage area at a particular time; (b) minimum daily flows shown by experience to be the limit at which further withdrawals would be harmful to the public interest in any particular drainage area; and (c) those minimum daily flows shown by established discharge records and experiences to be definitely harmful to the public interest. Such determination shall be based upon available flow data, supplement, when available data are incomplete, by whatever evidence is available; . . .

187. Bullard, *supra* note 184, at 3.

188. Interview with Deputy Water Commissioner Clifford Peterson at Iowa City,

Only two problems are apparent in this eminently rational policy. One concerns the standards employed to determine what uses are consumptive. Although one or two cities and an occasional material producer are so classed, to date, irrigation is almost the only use of Iowa waters consistently classified as consumptive. None could realistically question the validity of this classification as irrigation is as nearly consumptive a water use as is made in this region. Yet, is it the only use that deserves the consumptive classification? Municipal consumption of water may run as high as 15 percent, and some processing industries consume substantial amounts of water.¹⁸⁹ Notions of equality of treatment among users would seem to suggest that each use that has a consumptive character should be subjected to the same protected flow requirements, but this begins to touch on the priority questions discussed in the following section.¹⁹⁰

The second potential problem with the policy of regulating consumptive

Iowa, Jan. 31, 1966.

The potential number of consumptive stream uses and their distribution around the state are shown by the map below. The map shows all permits in force on June 30, 1965 by county, with the source of the use indicated by the three numbers in series. The first number represents the total of permits authorizing stream use, the second number is well permits, and the third shows reservoir use. For example, in Lyon county there are in force two permits for stream use, two for wells and none for reservoirs.

189. See Davidson, *Demands for and Uses of Water in Industry*, in *IOWA'S WATER RESOURCES*, 71; O'Connell, *Iowa's New Water Statute* 553-56.

190. A look at the breakdown of permitted uses by sources of water supply shows that most users rely on ground water rather than streams for their water supplies. Still, the number of uses relying on streams is substantial enough that a good likelihood exists for local situations where irrigators, consumptive industries, and municipalities may be in competition for the water of a particular stream when the flow is at a low ebb.

TABLE 5
Permits in Force June 30, 1965
by Use and Source

| Use | Stream | Well | Reservoir |
|-----------------------|--------|------|-----------|
| Industrial | | | |
| Materials Prod. | 69 | 12 | 261 |
| Power Production | 9 | 31 | 0 |
| Food Processing | 0 | 32 | 0 |
| Manufacturing | 5 | 33 | 2 |
| Air Conditioning | 0 | 12 | 0 |
| Irrigation | | | |
| Farms | 160 | 243 | 35 |
| Golf Courses | 6 | 23 | 6 |
| Specialty Crops | 30 | 36 | 11 |
| Municipal | 7 | 105 | 6 |
| Recreation | 12 | 17 | 3 |
| Storage | 1 | 2 | 542 |
| Other | 4 | 4 | 0 |
| Total | 303 | 550 | 866 |

users to preserve a certain protected flow concerns the level at which that flow is set. If the flow is set unreasonably high, the interests of regulated consumptive users are substantially prejudiced. Another of the critical early policy decisions made was the selection of the method to be used to establish the protected flows in all of the streams in the state. Once again, the Council made a valuable contribution to the success of the regulation by devoting to the matter the care and study it deserved and thereby arriving at a readily supportable procedure.¹⁹¹

The procedural guidelines set forth in the act for determining the protected flow permitted the Council a good deal of latitude. In essence the statute directed the Council to consider the available flow data relating to each watercourse and to reckon what level of low flow occurring during typical years is the point below which further withdrawals from that stream would be harmful to the public interest. Established discharge records and available information revealing experience relating to the effect of various low flows were the sources to be primarily utilized, although when these were lacking, any evidence available could be used.¹⁹²

It has been Iowa's good fortune to be extremely well served by the United States Geological Survey. The value of this level of service became apparent in the course of determining the protected flows. The U.S.G.S., in cooperation with the State Geological Survey and other interested groups, maintains flow-gaging stations on about one hundred major Iowa streams. Records from most of these gages extend over at least a twenty-five year period. Low-flow measurements from these records constituted the primary data used in setting the protected flows on these major streams. Following the passage of the Water Rights Law, a program of miscellaneous low-flow measurements at about 450 additional locations was initiated by the U.S.G.S. in cooperation with the Council. Flow information obtained from these gaging points is used to set minimum flows on smaller streams and tributaries comparable to the established protected flows in the major streams.¹⁹³

191. Protected flow requirements should not be confused with the provisions often written into highway construction permits, see note 162 *supra*, nor with the provisions commonly included in storage permits for on stream reservoirs — impoundments created by damming a watercourse. The provision used in storage permits usually reads somewhat as follows: "Permittee shall provide for the downstream discharge of that portion of the natural flow in said unnamed watercourse that is required to prevent material damages to downstream users."

The purpose of both such requirements emanate from the same rationale as that behind the protected flow rule, but they are not directly related to any established level of flow.

192. See definition of "established average minimum flow" set forth in note 186 *supra* which embodies the procedure for setting the flow.

193. See Bullard, "Operation of Iowa's Water Rights Law," paper presented at the 116th Meeting of the Missouri Basin Inter-Agency Committee at Sioux City, Iowa, Dec. 15, 1960, p. 2 (Mimeo).

Generally, the procedure used for setting the base protected flows for major streams involved the development of low-frequency and duration curves for each stream for which adequate low-flow information was available. These calculations were prepared by the U.S.G.S. in cooperation with the Council and published in 1958 as a bulletin entitled "Low-Flow Characteristics of Iowa Streams." The Council then reviewed these figures in cooperation with the state geologist, and representatives from the Department of Health, the Conservation Commission, and other interested bodies. The purpose of the consultations was to achieve consensus on a level of average stream flow that should be protected on a state-wide basis, subject to adjustment for local peculiarities. The level of flow settled upon as adequately protective of the public interest was a flow level equaled or exceeded by the stream involved 84 percent of the time between April and September in the past years determined to be most representative of normal conditions. This 84 percent figure means that in charting on a graph the low-flow records of a particular stream during the April through September period, the discharge rate of the stream would exceed or equal the flow established as the protected flow 84 percent of the time.¹⁹⁴

In applying the 84 percent standard to establish the minimum protected flow of each stream, the individual characteristics of that stream were considered. The 84 percent guide was adjusted up or down according to the demand of the public interest in each case. Before finally setting the stream flows for individual streams, the suggested protected flows were circulated to the various interested agencies for their comments and suggestions. Once substantial agreement was obtained on the reasonableness of the level set for a particular stream, that level was adopted and recorded. A somewhat rough approximation of what the protected flow means as a practical matter is that it is a level of minimum flow which, under natural conditions, has a 50 percent chance of occurrence in any given year.¹⁹⁵

If a consumptive user understands what the protected flow means in terms of the statistical likelihood of his having water when he needs it, he is in a position to make a decision whether to rely entirely on the stream or seek supplemental water sources. Thus, he may determine that the one in six chance of the stream flow diminishing to a point where he cannot make withdrawals does not justify the costs associated with digging a well or constructing storage facilities, or he may arrive at a contrary decision.¹⁹⁶ The important

194. Interview with Sulo Wiitala, United States Geological Survey, in Iowa City, Iowa, May 13, 1966.

195. See Bullard, *supra* note 184, at 3.

196. The one in six chance referred to is derived from the approximately 16 percent chance that the flow in a given stream will recede to or below the established protected flow in any normal irrigation season. Also to be considered is the timing of the

point is that he has some reasonable basis on which to evaluate his alternatives.

Having established the base minimum protected flows in the major streams, the flow-setting work of the Council effectively was ended. However, the work of the Commissioner and his staff was just beginning. It should be understood that the base protected minimum flows set were originally expressed in terms of a measurement taken at the most downstream gage established on the stream. This figure by itself had little meaning in reference to the minimum-flow requirements to be imposed on a user on a tributary many miles upstream. To enforce the protected-flow requirement, the Commissioner must calculate an equivalent protected flow for each consumptive user. The protected flow at any point of withdrawal is determined by comparing the drainage area of the stream at that point with the drainage area at the downstream gaging point, taking into consideration the drainage characteristics of the watershed.¹⁹⁷ These calculations are made easier by the availability of inclusive drainage data on all Iowa streams having a drainage area of more than five square miles.¹⁹⁸ Calculation of the equivalent flow is also aided by information obtained from the many partial-record gaging stations scattered around the state.

In practice, the precise protected flow at a given point of withdrawal is not calculated at the time a consumptive use permit is issued. Rather, the permit expresses the limitation in terms of the minimum low-flow set at an established gaging point downstream from the permittee. Frequently, the permit further requires the permittee to cooperate with the Commissioner in establishing a gage to check his protected flow level.¹⁹⁹

Only in time of water shortage does it become necessary to provide the permittee with some fixed standard for determining the protected flow at his point of withdrawal. The Water Commissioner's office is kept informed of stream gage readings around the state and generally also has first-hand information of regions where potential shortages are likely to occur. Usually the Commissioner's office has several weeks' notice of the likelihood of flows

likely need for supplement irrigation. For example, if the crop for which irrigation may be needed is of a type that matures before the stream ordinarily reaches its low point, the irrigator may be running much less than a 16 percent risk. Another point to be considered is the level of loss likely if supplemental irrigation from the stream is not possible when needed.

197. Interview with Deputy Water Commissioner Clifford Peterson in Iowa City, Iowa, January 31, 1966.

198. Iowa Highway Research Board, Bull. No. 7, DRAINAGE AREAS OF IOWA STREAMS (1957).

199. A typical provision reads as follows:

It shall be the duty and responsibility of the permittee to cooperate with representatives of the Water Commissioner in establishing a convenient staff gage, and to determine by reference to this gage that his withdrawals do not violate the flow restriction imposed herein.

below the minimum protected flow. During this time steps are taken to monitor consumptive uses and to prepare to advise consumptive users to shut down their operations. If the consumptive use is located near an established flow gage, the user is instructed to watch the gage and cease withdrawals when the flow falls to the level calculated as the equivalent protected flow at his withdrawal point.

If no regular gage is handy, the Commissioner will cause the installation of a staff gage at some location convenient to the user. The user will then be advised of the point on the staff gage at which he must stop his withdrawals. As the stream flow drops nearer to the protected flow, supervision is intensified and users are advised of the likelihood they will have to cease withdrawals several days prior to the time the minimum protected flow is expected to be reached. The final notification to suspend withdrawals is communicated to the user personally.²⁰⁰

Thus far this procedure has served to adequately safeguard against incursions into the protected flow. Whether it will function efficiently in a time of major drought is somewhat questionable, at least unless the Commissioner's staff is substantially bolstered.

One final regulatory policy developed to facilitate enforcement of the protected flow concept must be described to fully complete the picture. The Commissioner has created, more or less out of whole cloth, a principle of "summation flow" which he applies to consumptive users. To understand this policy, it first is necessary to know that the streams of the state have been divided administratively into smaller segments or reaches.²⁰¹ The summation flow rule comes into operation anytime more than one consumptive use is located within the same reach of a stream. When this is the case, the summation flow principle requires that the cut-off point for each of these consumptive uses will be the equivalent protected flow within the reach *plus* the combined rate of withdrawal of all other permitted consumptive uses.²⁰²

The justification for this regulation is elementary. If each user's restriction referred only to making no withdrawals below the protected flow, it is possible that unknowing simultaneous withdrawals by two or more of them at a time when the available water was more than the protected flow, but

200. Interview with Deputy Water Commissioner by telephone, May 16, 1966.

201. Streams are divided into general segments for administrative purposes because conditions at the source are obviously different than those far downstream. Natural divisions such as the point where one stream enters another are used to the extent practical. The point where a tributary joins a larger stream might define the end of the lowest reach of the tributary and perhaps the dividing line between two intermediary reaches of the main stream. A reach may, therefore, be quite short or may be as long as sixty miles.

202. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, March 14, 1966.

less than the total of their uses, would penetrate into the protected flow. Through enforcement of the summation flow rule the Commissioner has much more effective control over withdrawals during periods of declining stream flow.²⁰³ To prevent the summation flow rule from causing unnecessary hardships, the Commissioner will allow uses below the summation flow level if the users involved enter into a sharing agreement that assures preservation of the protected flow. A sharing agreement is a contract binding all of the consumptive users within a particular reach of a stream to a predetermined plan for allocating the stream water during periods when the flow is between the protected flow and the summation flow.²⁰⁴ To be recognized by the Commissioner a sharing agreement must be filed with him and receive his approval.²⁰⁵ Professor Jeffery O'Connell provided the following succinct illustration of the workings of the summation flow and the sharing agreement. No reason appears for trying to improve on his description.

Assume a point on a stream where the protected flow has been determined to be one hundred cubic feet per second (cfs). In July, reports to the water commissioner's office indicate the protected flow is being threatened. Consequently, a representative of the Natural Resources Council is dispatched to a point upstream, where X, Y, and Z each has a permit to withdraw one cfs, in order to establish a staff gage at their point of withdrawal. The Council's representative determines that the flow at the point of X, Y, and Z's withdrawal comparable to the protected flow of one hundred cfs downstream at the permanent gage station is five cfs. X, Y, and Z are then advised that they will not be permitted to withdraw water unless the flow is at least 8 cfs, i.e., five cfs (the protected flow) plus three cfs (the total rate of withdrawal of the permittees). If the figure was set below eight cfs, the protected flow would be subject to incursion by simultaneous withdrawals by X, Y, and Z to the full

203. Typical permit provisions advising the permittee of the summation flow limitation read as follows:

Permittee may withdraw water from the Maple River pursuant to this permit only when the natural flow therein exceeds a flow comparable to a mean daily flow of 50 cubic feet per second at the official gage on the Maple River at Mapleton, Iowa, by at least the combined rates of this and all other regulated withdrawals for depleting uses at points on the reach thereof designated by the Water Commissioner for administration of this restriction.

204. Typical permit provisions advising the permittee of the possibility of entering into a sharing agreement with other users read as follows:

Upon the approval by the Water Commissioner of an appropriate plan binding upon this permittee and all other permittees who, when the plan is submitted, are authorized to withdraw water for depleting use from that reach of the Maple River designated by the Water Commissioner for administration of the restriction imposed herein, any permit granted may be temporarily modified so that regulated withdrawals of water may be made from said stream which will not reduce the flow therein to less than a flow comparable to a mean daily flow of 50 cubic feet per second at the official gage thereon at Mapleton, Iowa.

205. The sharing agreement is another administrative wrinkle introduced by the Council that finds no direct basis in the statute. However, it seems to be a rational and necessary extension of the principle of minimum protected flow.

extent of their permits. It is very unlikely, however, that all permittees whose withdrawals are subject to the protected flow at the same point will desire to withdraw continuously during the period of the requested withdrawals. Consequently, the Council has adopted a policy whereby X, Y, and Z may agree to divide up the available flow by time of withdrawal or amount of withdrawal, thus enabling each to withdraw on such a restricted basis down to the protected flow. Thus, when the pertinent protected flow is near five cfs, without any agreement neither X, Y, nor Z could withdraw until the flow reached at least eight cfs. With an agreement to divide the available flow, however, when the flow was six cfs, for instance, each could obviously withdraw one cfs for eight hours a day or one-third for twenty-four hours a day or some other variant thereof.²⁰⁶

The only real difficulty with the summation flow-sharing agreement device is the opportunity it might provide for an obstreperous user to harass his neighbors. The sharing agreement must include all regulated consumptive users in the reach to obtain the Commissioner's approval. However, in any given year not all consumptive users may be making withdrawals. The effect of the requirements of unanimity associated with the sharing agreement is to permit one user, who may have no real interest at stake, to prevent the other users in the reach from voluntarily apportioning needed water among themselves. Except for this one possible reservation, the sharing agreement is a promising regulatory device for the reason that it coerces the users involved to work out their competing demands on a basis of mutual agreement. So long as only irrigators are affected, it is difficult to see how any priority system, other than one based on time of first use, could be instituted to allocate stream flow more pragmatically.

To date only three sharing agreements have been filed with the Commissioner. This paucity is probably attributable to the fact that so far there are relatively few stream reaches containing consumptive users withdrawing water at the same time, and the circumstance that there have been few periods of prolonged low stream flow since the passage of the act.²⁰⁷

206. O'Connell, *Iowa's New Water Statute* 576, n.168.

207. Before passing from the discussion of policy developed for regulating permitted users a word should be said about regulation of ground water uses. Although considerable thinking has been devoted to the matter, the Council has not yet developed a policy for ground water comparable to the minimum protected flow doctrine for streams. The peculiarities of certain ground water aquifers are partially known, but reliable data is lacking concerning cause and effect relationships of various kinds and amounts of ground water withdrawals on other ground water sources. Well logs and numerous other types of basic information are being collected steadily. In a couple of instances protected head requirements have been included in the permits of well users withdrawing from an aquifer also used by a nearby municipality. Also, the Council has authorized test pumpings of wells to be conducted under the supervision of the Commissioner, but by and large, lack of trustworthy knowledge has resulted in a minimum of regulation of ground water withdrawals to date.

Permittee's Rights — Priorities

One policy clearly evidenced by the Iowa act is that the receipt of a permit to use water does not confer on the permittee any permanent rights to generally divert, withdraw, or store water. Not only are permits limited as to the time, purpose, amount, place, and rate at which water may be used,²⁰⁸ but the permit is specifically subject to modification or cancellation by the Water Commissioner on several grounds including violation of the permit terms or the law, protection of the public health, safety or interest, and prevention of substantial injury to persons or property. Cancellation or modification for these reasons requires notice to the applicant and a hearing. The Commissioner may also suspend operations of a permit on the same grounds without a hearing in situations of emergency.²⁰⁹

The emergency power is very common in regulation of this type, but the power in the Commissioner to modify or cancel a permit already limited in duration on grounds relating to either public or private injury reduces the status of the permitted user to little more than a mere tenant at will of his use. Of course, the Commissioner must have sufficient grounds to cancel or modify a permit, but the vague standards provided in the act permit considerable discretion. In practice the Commissioner has exercised his power to cancel only in cases where the permittee has failed to file use reports, thus breaching the terms of his permit. Nevertheless, a full statement of the power to modify and cancel is specifically included in all permits issued.²¹⁰

It might be thought that the purpose of including in the statute such a broad power to adjust existing permits related to the anticipated development of some system of priorities based on factors other than time of application. For example, if priorities were to be established among permits on the basis of the beneficialness of the uses involved, it might be necessary to change the terms of an existing lower-use permit when a competing higher-use permit is granted. Adoption of such a priority policy by the Commissioner would be in no way inconsistent with the policy of issuing permits to all applicants noted earlier. In some ways the combination of the two policies would comprise a very serviceable regulatory plan — issue permits to all applicants who can put water to beneficial use, but in time of shortage assign the permittees priorities based on the relative beneficialness of their uses.

208. See definition of "Permit", IOWA CODE §455A.1 (1962).

209. IOWA CODE §§455A.28(2), (3) (1962).

210. A provision like the following is included in every permit issued by the Council: Permittee is advised that pursuant to Section 455A.28, IOWA CODE 1962, the authority to withdraw water provided by this permit may be modified, cancelled or suspended if the permitted withdrawals result in substantial injury to any private or public interests.

Adoption of such an approach has never been seriously considered by the Commissioner or Council. Rather, the Commissioner has publicly stated the consistent interpretation of the act thusly: "The wide range of conditions in Iowa made it inadvisable to set up any other [than domestic use] priorities."²¹¹ Considering the Council's unwillingness to delve into questions concerning the relative beneficialness of a use at the hearing on application for a permit, the reluctance to attach to the issued permits priorities based on relative standing of the use is not surprising.

The Commissioner supports his position against the establishment of priorities for stream use with the argument that any priorities established would be relatively worthless under typical Iowa conditions. The notion is that when stream flow is dropping, the period of time between the point where all consumptive users can withdraw and the point the protected flow is reached is sufficiently short that a priorities system would be of little practical value in most water shortage situations. This view, based on the typical recession curve of most Iowa streams, is not without merit; however, it is perhaps something of an overstatement. After the usual high flows of the early spring pass, flow in Iowa streams typically diminishes at a decreasing rate, and may stabilize for a period at almost any point on the recession curve. This point of stabilization may well occur somewhere between the protected flow and the point where demands of all users can be satisfied.²¹²

To illustrate, the United States Geological Survey has maintained records on the Middle River near Indianola for over twenty-five years. During that period the maximum recorded flow was 34,000 cfs in 1947 and the minimum was 1.29 cfs in 1955. The protected flow at this point as set by the Council is 14.6 cfs. If we assume that there are 5.4 cfs of permitted consumptive uses in the same reach divided between two users who have not entered into a sharing agreement, the summation flow would be 20 cfs. If the Commissioner's view is sound, this band between 20 cfs and 14.6 cfs should be passed through fairly quickly as the stream drops. A check of the flow records reveals that on six occasions during the last twenty-five years the flow has stabilized for some period within this band. In 1941 for example, the flow varied between 14 and 18 cfs for twenty-seven days out of a thirty-one day period.²¹³

The reason that these relatively infrequent occurrences cannot be passed

211. Bullard, "The New Water Rights Law in Iowa," paper presented at the 98th Meeting, Missouri Basin Inter-Agency Committee at Des Moines, Iowa, January 23, 1958, p. 5.

212. Interview with Sulo Wiitala, U.S. Geological Survey, in Iowa City, Iowa, May 13, 1966.

213. Information obtained from U.S. Geological Survey records located in Iowa City, Iowa.

over too lightly is that they occasionally coincided with the times of year an irrigator would most likely need water for supplemental irrigation. An established priority giving a user an assured right to use water could be extremely valuable under such circumstances. Such potential value to a particular user by no means justifies the creation of priorities, but it does suggest that the Commissioner may eventually have to come up with a more satisfactory explanation for the policy against priorities.

Passing for the moment other questions relating to the soundness of the Commissioner's position on priorities, it is interesting to speculate on whether either the Commissioner or the Council has the power under the act to assign priorities to uses, assuming they desired to do so. Examining the provisions of the act, it is not clear whether any power was granted to assign priorities based on the relative beneficialness of competing uses. The terms of the act are so broad and general as to admit of almost any interpretation. The several sweeping policy declarations cited earlier again deserve note. For example, section 455A.2, labeled "Declaration of policy," declares that the welfare of the people of Iowa requires that the state's water resources "be put to beneficial use to the fullest extent of which they are capable. . . ." The same section states that it is intended that the police power shall be used to "effectuate full utilization and protection" of the water resources of the state. Section 455A.17 directs the Natural Resources Council to establish a comprehensive state-wide plan for the development of water resources, providing for "the optimum control, protection, development, allocation and utilization thereof." However, very little statutory machinery is to be found to implement these declarations.

Only three sections of the act make any reference to superior or prior rights among users. None can be said to lend much clarity to the priorities questions.

Section 455A.21 is entitled "Priority of permits." The section first provides that priority in the consideration of applications will be given in the order the applications are received. This opening sentence is followed by several exceptions which, it is suggested, actually establish no priorities at all. The first of these states that "persons who have made diversion or withdrawal for a beneficial use prior to May 16, 1957 (the effective date of the act) will be accorded priority according to the actual date of said diversion or withdrawal." The Commissioner has interpreted this section to mean only that such persons are to be accorded priority in the processing of their applications, not in the use of water once the permits are granted.²¹⁴ Since this clause is immediately preceded by the opening sentence providing in general for considering appli-

214. Interview with Deputy Water Commissioner Clifford Peterson in Iowa City, Iowa, November 8, 1965.

cations on a first-come first-serve basis, the Commissioner's interpretation would seem to be reasonable. If this is the proper interpretation, the clause in question is for practical purposes no longer operative. It served only to give existing users priority in processing during the expected rush of applications when the act first took effect.

The second purported exception contained in section 455A.21 states that "the use of water for ordinary household purposes, for poultry, livestock and domestic animals shall have priority over other uses." The presence of this clause in this particular section of the act would seem to be unexplainable. This use of water is clearly and expressly a nonregulated use as defined by section 455A.1, and nonregulated uses are expressly excepted from the requirement of a permit by section 455A.25(2). Thus, if the clause means that domestic uses are to have rights superior to those of permitted uses, as its position in the section entitled "Priority of permits" seems to suggest, then the clause is mere surplusage. Obviously, all nonregulated uses can be said to have a "priority" over those for which permits are required. The clause does have another possible meaning. It could be a codification of the common-law riparian rights rule giving domestic uses a priority over other kinds of riparian uses. Thus, the clause could mean that domestic uses are to be prior to all other nonregulated uses. If this is the intended meaning, it seems rather strange that the clause was included in a section otherwise dealing exclusively with regulated uses.

The final exception in section 455A.21 states that "any person with an existing irrigation system in use prior to May 16, 1957 shall be issued a permit to continue, unless by the use thereof some other riparian user is damaged." This may have been an attempt to ensure that existing irrigators, many of which may have made substantial investments in irrigation machinery, would be permitted to continue after the act took effect. If this is so, however, the "unless" clause would seem to destroy much of the intended effect. Damage to "some other riparian user" would be likely to result if the irrigator withdraws water during a time of shortage. In any event, the Commissioner has never in fact accorded any special consideration to possible damage to other riparian users when passing on an application for a permit from an existing irrigator.²¹⁵ So long as the proposed use is "beneficial" a permit will be granted without regard to the needs of other irrigators who may have received their permits first. All may withdraw so long as the established minimum flow is maintained. If the minimum flow is reached, all must stop withdrawing, whether their use began before or after the effective date of the act.

Another section of the act which mentions priorities is section 455A.20. That section provides that the Commissioner on first hearing, or the Council

215. See O'Connell, *Iowa's New Water Statute* 607 n.369.

on appeal, shall grant a permit if after due investigation it is found that the intended use "will not be detrimental to the public interests, including drainage and levee districts, or to the interests of property owners with *prior or superior rights* who might be affected" Just who might be a property owner "with prior or superior rights" is difficult to determine. It is possible that this phrase applies only to downstream nonregulated users. For example, if it were found that a proposed use would drastically reduce the flow of the watercourse, this would be detrimental both to the public and to nonregulated users below the point of withdrawal. Since these are the interests the established minimum-flow concept was designed to protect, the permit would not be granted. It is also possible that "prior or superior rights" refers to the exceptions in section 455A.21, discussed above. If these exceptions were attempts by the legislature to establish priorities, they failed rather miserably.

The one other mention of the term "priority" is found in section 455A.29, a garbled provision concerning termination of a permit. Here it is provided that if a permittee makes application to have his permit extended, the Council may grant the extension "without loss of priority." Little argument can be made from this obscure reference.

Any attempt to discover just what the legislature had in mind concerning priorities is soon reduced to somewhat frustrating speculation. The act is extremely vague and often internally inconsistent on the subject. This is probably the natural fate of an attempt to determine the nature of an intent which was never solidly formulated by the legislature. It seems likely that the legislature did not consider consciously the establishment of a comprehensive system of priorities one way or the other. The word "priority" is used in the sections discussed, but probably not in the context of any comprehensive plan. Thus, it is suggested the sections discussed above, despite their use of the magic word, neither promote nor refute the contention that the Commissioner has the power under the statute to assign priorities. However unclear it may be whether the act would permit the Commissioner to establish priorities, it is quite clear that nothing in the act requires him to do so.

If the power to create priorities exists, it must do so as a necessary adjunct to other powers and duties of the Commissioner and the Council. It is quite clear that the legislature intended to bring certain specified water uses under state control, to the end that a beneficial use of the state's water resources might be ensured. Since the act does not in all cases define how this end is to be achieved, presumably the details were intended to be left to the Commissioner and the Council. It is also reasonable to suppose that some uses are more beneficial than others. Since the act contemplates the regulation of water, and since the Commissioner is nowhere expressly or impliedly denied the power to choose among competing users, he probably can be said to have the power to do so. Thus, if a point were reached where there was not enough

water to satisfy all uses most of the time, it seems reasonable to assert that the Commissioner necessarily has power to choose among them. That point is probably still quite a way off in Iowa.

Although no comprehensive system for establishing priorities among permittees has been developed, certain de facto priorities do exist under the act as administered. The most obvious of these is the priority of nonregulated over regulated uses. Nonregulated users are at no time prohibited from withdrawing water, even when the watercourse from which they take has fallen below the established minimum flow. To the extent that such uses are consumptive, meaning that they withdraw more water from the watercourse than they return to it, they can deplete the watercourse below the point at which permitted users must stop withdrawing. They, therefore, might be said to have rights superior to those of regulated users.

Certain priorities may also exist among permitted stream users under the present operation of the minimum flow restriction. By administrative interpretation, the minimum flow restriction applies only to uses recognized by the Commissioner as being "consumptive." While the distinction itself makes sense, its equitable operation depends heavily upon the accuracy with which a particular use can be described as consumptive or nonconsumptive. At present the irrigator is essentially the only user who is classed as consumptive, and, therefore, the only user to whom the minimum flow restriction is meaningful. A sort of negative priority has thus come into being; the irrigator is inferior to all other users, both regulated and nonregulated. This is true even though large uses of water classified as nonconsumptive may actually be partly consumptive.

It is not presently contemplated that such uses as cities or industries, which may at times be partly consumptive, will be required to modify their withdrawal to maintain the established minimum flow. Thus, at least in theory, there is an operative priority of municipal and industrial consumptive use over use for irrigation. It is not suggested that such a priority would be unwise in the event of shortage, or even that its effect is to deprive irrigators of needed water at the present time.²¹⁶ However, this theoretical priority raises questions

216. The lack of serious competition for water during the last decade is shown by the relative stability in the figures on total acreage of land for which an irrigation permit is in effect. The following table should not be interpreted as showing a stagnancy in irrigation interest. Although the total land acres subject to irrigation is about the same since 1960, it is by no means the same land constantly under the same permit. Many earlier permits have expired and not been renewed and a number of new applications are received every year. See notes 218, 259 *infra*.

TABLE 5A
Acreage Under Irrigation Permits

| | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| Acreage | 0 | 10,215 | 49,511 | 75,143 | 73,000 | 71,766 | 73,231 | 77,656 | 78,805 |

that will have to be given consideration in the future, when increasing demand for the state's water resources may be expected to exceed the available supply at certain times of the year.

Another type of de facto discrimination created by the enforcement of the protected flow restriction is the superior position of the consumptive users withdrawing from sources other than streams over similar users who must look to streams for their water supply. In times of water shortage the stream user must curtail his withdrawals to preserve the minimum flow, whereas the user whose source is a well or reservoir may continue unregulated. The strong policy expressed in the statute to safeguard stream flow would seem to make this result inevitable. However, the close analogy in such a case to the result reached under riparian principles can hardly pass unnoticed. Perhaps the common-law rules were not so irrational after all. On the other hand, in certain circumstances, reaching the identical result under both systems does not guarantee rationality. For example, suppose two irrigators are located near one another on the same watercourse. One takes his water directly from the watercourse, and the other depends on wells he has sunk which draw from the alluvial flow of the stream. In the event that the established minimum flow is reached, is the well irrigator also subject to its restrictions? If not, and this seems the likely result, a completely unreasonable priority has been established.²¹⁷

Other priorities may be inherent in the definition of "consumptive." It is possible that some beneficial qualities of water can be consumed even though the quantity of water is not affected. For example, assume that two or more industrial users are located on the same watercourse. Each of them uses water only for cooling, returning all water withdrawn to the watercourse as soon as it has served its purpose. Each time the water is used, however, it is returned to the watercourse at a significantly higher temperature than when it was withdrawn. A sufficiently large user may raise significantly the temperature of the watercourse for some distance below his point of discharge, making the water less useful for cooling the machinery of the downstream users. If the increase in temperature is not recognized as consumptive, it would seem a priority of sorts would exist favoring the upstream user.

The above discussion is not intended to be an exhaustive analysis of all priority problems which have or may arise in the administration of the Iowa

217. How the Council would resolve this type of situation is by no means clear. The statute makes the minimum protected flow applicable to stream permits only, yet both surface and ground water are regulated. The Commissioner has pointed out the fact that surface and ground water supplies are interconnected. See Bullard, *supra* note 184, at 3, where after making the above point, he says, "All decisions on applications for regulated uses of water take into account the effect of the requested use on the entire water resource." Presumably, this same policy might be applied to decisions regarding the modification or cancellation of existing permits.

act. It is intended merely to point out the kinds of considerations which will have to be made, if increasing demands for our water resources ever reach the point at which some allocation among uses will have to be made to protect the public interest.

PROCEDURE FOR PROCESSING ORIGINAL APPLICATIONS

The Application

As befalls any new regulatory agency created to perform a licensing-type function, the first few years are primarily devoted to processing the flood of original applications. During the first year and a half of operation (the agency was created in mid-1957) permit applications were received from 762 users, excluding highway applications. Almost exactly half of the applications during this initial rush involved irrigation uses. Over time the volume of irrigation applications slowed down to an average of about 16 per year between 1960 and 1965, while the numbers of applications from most other types of uses have increased gradually.²¹⁸

The most noticeable increase over time has been in applications to impound water for storage purposes. Although it might be hypothesized that these applications represent stream irrigators who are endeavoring to assure the availability of water should the flow in their stream source diminish to the protected level, a check of the permits does not bear this out. Most are small impoundments created for soil conservation and livestock watering purposes.

218. The following table shows the frequency of original applications over time. The early rush of irrigation permits is the most striking feature of the table. The general increase in storage permits is also noteworthy.

TABLE 6
Applications Received

| Use | 1957* | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965** |
|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|
| Industrial | | | | | | | | | |
| Materials Production | 22 | 125 | 74 | 39 | 32 | 16 | 18 | 26 | 6 |
| Power Production . . . | 16 | 15 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Food Processing | 3 | 4 | 5 | 4 | 1 | 3 | 2 | 5 | 1 |
| Manufacturing | 3 | 6 | 4 | 3 | 2 | 6 | 5 | 3 | 1 |
| Air Conditioning | 0 | 5 | 2 | 1 | 3 | 0 | 0 | 0 | 0 |
| Irrigation | | | | | | | | | |
| Farms | 253 | 135 | 37 | 10 | 10 | 11 | 24 | 20 | 7 |
| Golf Courses | 6 | 4 | 1 | 2 | 2 | 2 | 6 | 8 | 1 |
| Specialty Crops | 41 | 24 | 3 | 1 | 5 | 6 | 1 | 10 | 1 |
| Municipal | 13 | 26 | 13 | 10 | 8 | 16 | 11 | 7 | 4 |
| Recreation | 8 | 10 | 5 | 1 | 1 | 5 | 2 | 3 | 0 |
| Storage | 2 | 41 | 66 | 51 | 64 | 57 | 97 | 98 | 50 |
| Other | 0 | 0 | 2 | 2 | 3 | 2 | 2 | 3 | 4 |
| Total | 367 | 395 | 212 | 125 | 132 | 124 | 168 | 183 | 75 |

*1957 figures represent approximately one-half year.

**1965 figures cover only the first six months of the year.

The procedure evolved for processing original applications for diversion, storage, or withdrawal of waters of the state of Iowa are relatively complex. However, a *Procedural Guide*, published by the Natural Resources Council, which contains sample forms, detailed instructions for filling out applications, and hearing procedures, helps to relieve this situation.²¹⁹

The Council has provided five basic forms. The form to be used depends upon the intended use of the water. There are application forms for the particular uses of highway construction, irrigation, storage, and sand, gravel, or rock production. Also, a general form is provided for other users who intend to divert, store, or withdraw water.

The general application form for water use requires an identification of the intended source and the exact location of the point of withdrawal, the intended use of the water, the maximum rate and minimum quantity of water desired, and period of the year that withdrawal is desired. The application must be accompanied by the statutory filing fee of \$15.00 and by a map accurately portraying the points of diversion or withdrawal, use, and discharge of water. The specialized application forms vary from the general one only as their particular use requires.

The highway form contemplates water use in conjunction with a certain road construction project. The irrigation form requires specification of the size and description of the land to be irrigated. Also, the application should indicate not only boundaries and water sources, but also topographical features of the land to be irrigated and man-made structures thereon. The storage form requires, in addition to the normal information, the drainage area of the impoundment and, in cases where the storage area is to be located on a stream, an explanation of the provisions to be made in the impounding structure to assure a continuance of flow. If the water is to be stored for subsequent withdrawal and use, either the general form or the appropriate special form must accompany the storage permit application. The form for use of water in the production of sand, gravel, or rock materials additionally requires the applicant to state a diversion between the water lost by evaporation or hauled away in the product and that which is merely pumped from the pits. The application in each case is to be submitted by the person or persons having legal jurisdiction by ownership, lease, or easement over the area where the water is to be diverted or withdrawn and used.

When the application is received in Des Moines, it is reviewed by the Commissioner. If the application is incomplete or obviously erroneous, the Commissioner may request additional information or a new application. Likewise, if the \$15.00 fee is not enclosed, the application may be held up. Once the application is determined to be correct and complete, a time and a

219. *PROCEDURAL GUIDE, IOWA NATURAL RESOURCES COUNCIL* (1961) [Hereinafter cited as *PROCEDURAL GUIDE*].

place for a hearing is set. Notice of the hearing is then published once each week for two consecutive weeks in a newspaper of general circulation within the county in which the permit is sought. The date of the last publication must be not less than ten nor more than thirty days before the hearing. A copy of the notice is sent to interested organizations and officers of the state. Notices are also sent to any person who has requested in writing that he be mailed a copy of the notice of any hearing affecting that area.²²⁰

Pre-hearing Investigation

Prior to the actual hearing, the hearing officer may conduct an informal pre-hearing investigation.²²¹ This occasion is used to question the applicant about any unusual aspects of his application. The effect that various modifications might have on the applicant's operation are discussed. Frequently, the hearing officer will inform the applicant of relevant Council policies pertaining to the applicant's use, and he will ordinarily explain some of the guidelines used by the Commissioner.

When the hearing is held on or reasonably near the location of the proposed beneficial use, an informal inspection of the premises and equipment is usually made by the hearing officer just prior to the hearing. This gives the hearing officer first-hand knowledge of what is actually proposed and enables him to make a more informed determination.

One example of the utility of this informal pre-hearing meeting relates to an irrigator's request for an unreasonable amount of water. The policy of the Council has been to limit irrigation permittees to an annual use of not in ex-

220. IOWA CODE §455A.19 (1962). The following is an example of the notice ordinarily distributed by the Commissioner:

NOTICE OF HEARING ON AN APPLICATION
FOR A PERMIT TO STORE WATER
IN WOODBURY COUNTY, IOWA

Notice is hereby given that there is now on file in the Office of the Iowa Natural Resources Council, State House, Des Moines, Iowa, an application from Raymond Petersen for a permit to store water for erosion control and recreational use upon his land generally described as the NE ¼ Section 32, T88N, R42W, Woodbury County, Iowa.

Applicant requests a permit to store water in the maximum amount of 33.8 acre-feet at a maximum rate of natural runoff from 199 acres throughout each year.

Notice is further given that a public hearing will be held at 1:30 P.M., DST, on May 16, 1966, Room 526, State Office Building, Des Moines, Iowa, at which time and place or at any adjournment, the Water Commissioner or his Deputy will take evidence by the applicant and any other person either in support of or in opposition to the granting of a permit.

R. G. Bullard
Water Commissioner

221. The statute requires the Council to "cause to be made an investigation of the effect of such (requested) use upon the natural flow of such watercourse, the effect of any such use upon the owners of any land which might be affected by such use, and the effect of any such use upon the state comprehensive plan for water resources. . . ."

cess of eighteen acre inches of water in the western part of the state and fifteen acre inches in the eastern part.²²² This policy is grounded in scientific data showing that these amounts are the maximum that could be beneficially applied in Iowa. Often the applicant applies for an amount of water not reasonably related to his needs. In such a situation, the Commissioner takes an active role and may attempt to persuade the applicant to decrease, or where appropriate, increase his requests to conform to his needs.

The purpose of this informal investigation by the Commissioner is essentially twofold. It provides the Commissioner with an opportunity to get a good look at the applicant's needs and the possible means of satisfying those needs. At the same time, it affords the applicant an opportunity to learn what will be required of him and perhaps to obtain an assessment of the efficiency and possible improvements of his system. The whole process is very similar to a pre-trial conference where all concerned can iron out any small differences and determine the real issues to be emphasized at the hearing. The hearings on highway and storage applications are usually held in the Commissioner's office in Des Moines. Hearings on initial applications for other uses generally are held in the county in which the use will be made.²²³

Hearings

The hearing is held at the time and place designated in the notice, with the Water Commissioner or one of his deputies acting as hearing officer. Ordinarily about thirty-six days now elapses between the time application is made for a permit and the date of the hearing.²²⁴ This period varies somewhat accord-

222. These limits are not inflexible. If the applicant can demonstrate a need for a greater amount of water owing to exceptional circumstances, the standard amounts may be exceeded. Most commonly such enterprises as orchards or truck farms may receive permits for irrigation applications in excess of the normal maximums.

223. Interview with Deputy Water Commissioner Clifford Peterson in Iowa City, Iowa, November 8, 1965.

224. The table below indicates by uses the average lapse of time in days between the date an original application was received by the Commissioner and the date a hearing was held. The number of permits included in each classification is shown at note 236 *infra*. The range in time lapses is substantial. The four recreation permits granted in 1960 spent an average of 494 days in the hands of the Commissioner before a hearing was held. At the other extreme, the ten applications for food processing in 1962 and hydrostatic testing in 1961 and 1965 required an average of only twenty-three days before a hearing was held.

TABLE 7
Time Lapse Between Application and Hearing

| Use | 1957* | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965** |
|---------------------------|-------|------|------|------|------|------|------|------|--------|
| Industrial | | | | | | | | | |
| Materials Production NI+ | | 124 | 183 | 99 | 39 | 31 | 32 | 33 | 28 |
| Power Production . . NI | | 89 | 337 | NI | 89 | NI | NI | NI | NI |
| Food Processing . . . NI | | 61 | 171 | 28 | 49 | 23 | 28 | 31 | 28 |
| Manufacturing NI | | 85 | 110 | 33 | 62 | 25 | 31 | 33 | 33 |
| Air Conditioning . . . NI | | 32 | 159 | 36 | 25 | NI | NI | NI | NI |

ing to the type of use involved, but in all cases it is considerably less than what it was during the earlier years of administration. During the initial flood of applications the Council decided as a matter of policy to postpone the hearings on applications to withdraw stream water for irrigation.²²⁵ The protected minimum flows were not yet set so it would have been difficult, if not impossible to properly appraise the applications. Any serious prejudice from this policy of deferment was seemingly removed in most cases by invoking the statutory authorization to continue the existing use pending determination on the application. Possibly some applicants for new uses were harmed by the policy, but no evidence of complaints was found.

Under authority of the water statute, the Natural Resources Council has promulgated general rules of procedures for the conduct of hearings.²²⁶ The rules provide that the applicant may either represent himself or be represented by counsel at the hearing. In point of fact, today many applicants for storage and highway permits, and noncontroversial renewals do not appear at all, but elect rather to stand on their applications.

The hearing is public but other interested persons who wish to offer evidence or enter an appearance at the hearing must sign the register furnished by the hearing officer. Briefs and opening statements are allowed but are not necessary. When a person desires to give an opening statement, he must do so immediately prior to the presentation of his evidence. Stipulation of facts between the parties prior to the hearing is encouraged. However, no stipulation is binding upon the Water Commissioner.

The rules place upon the applicant the burden of proof in establishing the necessity and propriety of a permit. The necessity and propriety are established by showing the following factors:

- (1) That there is water available.
- (2) That the applicant has the present ability to put the water to the proposed beneficial use.

| | | | | | | | | | |
|--------------------------------|----|-----|-----|-----|-----|-----|----|-----|----|
| Irrigation | | | | | | | | | |
| Farms | 53 | 177 | 265 | 318 | 185 | 80 | 38 | 46 | 36 |
| Golf Courses | NI | 128 | 402 | 271 | 28 | 28 | 34 | 29 | 46 |
| Specialty Crops | NI | 144 | 246 | 266 | 49 | 28 | NI | 28 | 31 |
| Municipal | 31 | 96 | 120 | 120 | 24 | 29 | 32 | 293 | 27 |
| Recreation | NI | 79 | 226 | 494 | 32 | 244 | 60 | 48 | 25 |
| Storage | NI | 58 | 52 | 36 | 30 | 27 | 38 | 30 | 38 |
| Other | NI | NI | 34 | 28 | 23 | 25 | 28 | 29 | 23 |
| Average for all uses | 48 | 127 | 212 | 170 | 42 | 42 | 36 | 46 | 36 |

+ NI means no permits were issued in this year for this use.

* 1957 figures represent approximately one-half year.

** 1965 figures represent only the first six months of the year.

225. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, Oct. 20, 1965.

226. See PROCEDURAL GUIDE III F.

- (3) That the use to which the water is to be devoted is consistent with the policies and principles of beneficial use as set forth in Chapter 455A, Iowa Code 1958, as amended.
- (4) That the proposed diversion, storage, or withdrawal of water will not be detrimental to the public interest, including drainage and levee districts.
- (5) That the proposed diversion, storage, or withdrawal of water will not be detrimental to the interests of property owners with prior or superior rights who might be affected.²²⁷

There is no standard set for the level of proof of the evidence presented, but presumably it is that of civil trials, that is, a preponderance of the evidence.

In establishing such evidence, witnesses can either testify in narrative form or in response to questions asked. The Commissioner has discretion to allow leading questions. Hearsay is admissible, as are exhibits which are accompanied by proper foundation testimony. All persons are given the right of cross-examination of any witness. However, it appears by statute that an interested person not a party cannot cross-examine the witness himself but must do so through an attorney.²²⁸ At any time during the hearing, the hearing officer has the prerogative to call and to examine any witness himself.

Except for the provision requiring a party to give his opening statement immediately prior to the presentation of his evidence, the order of the hearing follows the basic order of a court trial in Iowa. Testimony and evidence of the applicant and persons supporting the application is first presented. This is followed by testimony and evidence of persons opposing the application. Then the closing arguments of the applicant and those in support of the application are heard, followed by the closing arguments of the opponents. The applicant is reserved the right to make a final rebuttal argument.

There is no requirement either by statute or Council rule for preserving a record of the hearings on an application. However, the policy of the Commissioner is to make a transcription of each hearing through the use of a tape recorder. The hearing tapes are kept at least until after the period of appeal to the Council expires, thirty days from the date of the filing of the final determination. In addition to serving as an invaluable tool for helping the hearing officer review the testimony when he is writing the final determination, the tapes are also valuable in case an appeal is filed with the Council.²²⁹

227. *Id.* at §7.

228. IOWA CODE §455A.19(4). "Any interested person may appear and present evidence at the hearing, and may be represented by counsel, who shall have the right to question others who present evidence." Such a rule seems a little ridiculous. The considerable discretion vested in the hearing officer would appear to allow him to permit a party without counsel to question other witnesses, and this policy has been uniformly followed.

229. The Attorney General of Iowa has ruled that in his opinion the use, preserva-

Once the hearing has been concluded, it cannot be reopened unless new evidence becomes available which could not, in the exercise of reasonable diligence, have been presented at the original hearing. The motion for reopening may be made within thirty days before the filing of the determination or within thirty days thereafter. The Commissioner must then give ten days written notice by ordinary mail of the time, date, and place of the reopened hearing to each person who filed an appearance at the original hearing and to the person requesting reopening of the hearing. Notice also is given to persons who have requested notice of all hearings in that area and interested state officers and agencies. In no case can a hearing be reopened if an appeal has been taken to the Natural Resources Council.²³⁰

Most applications for permits are not contested today; however, there was a period earlier in the history of the administration when contests were the rule and not the exception. When the system first went into effect, almost all applications were opposed by one group or another. In 1957, only four permits were granted and appearances were filed in each case opposing the granting of the permit. In 1958, two hundred and forty-eight permits were granted and eighty-three appearances were made in opposition to them. Certain cities and industries would oppose any application for a permit for consumptive withdrawal upstream from them on the grounds that such withdrawal would jeopardize their water supply. In addition, the Iowa Conservation Commission opposed applications for irrigation withdrawals on the basis that any lowering of a stream damaged fish and wildlife. Many of these objections were not based upon facts or knowledge of the law's operation and merely tended to add general confusion and undue length to the hearings.²³¹

tion and destruction of tape recordings by the hearing officers is a procedural matter wholly within the control and discretion of the Council, and thus it is proper for the Council to destroy the record of hearings of a non-controversial nature after the period of appeal has expired. A Letter Opinion from the office of Att'y Gen. of Iowa to Iowa Nat. Res. Council, dated May 14, 1959, on file in the Council's office.

230. PROCEDURAL GUIDE III F §11.

231. The following table shows the appearances entered at hearings by objectors according to the character of the objection. For this purpose, objectors were classed according to the use they represented, Municipality, Industry, Downstream Domestic Users, Well User, Recreation, and Other. The table documents the troubled times of the early years of administration when various fears were at large concerning the effect of the granting of a permit. For example, persons representing recreational interests objected 155 times in 1959, and almost all of these were at the hearings on irrigation permits.

TABLE 8

| Class | Objectors Classified | | | | | | | | |
|-----------------------|----------------------|------|------|------|------|------|------|------|--------|
| | 1957* | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965** |
| Municipality | 3 | 27 | 40 | 30 | 5 | 17 | 28 | 3 | 3 |
| Industrial | 0 | 2 | 40 | 3 | 0 | 0 | 1 | 0 | 0 |
| Downstream User | 0 | 10 | 21 | 9 | 2 | 0 | 4 | 5 | 2 |
| Well User | 0 | 4 | 11 | 9 | 5 | 9 | 3 | 4 | 0 |
| Recreational | 3 | 39 | 155 | 49 | 0 | 3 | 3 | 1 | 1 |

The fears of many of these groups gradually diminished and all eventually discontinued the practice of opposing applications as a matter of principle. Lack of success in preventing the issuance of the permit was undoubtedly one factor contributing to the cessation of objections, but according to the Commissioner, the explanation lies more in the fact that objectors appearing at the hearings usually returned home satisfied even though a permit was granted. Explanation by the hearing officer of the effect of the requested withdrawal of water upon the objector's water supply was normally sufficient to allay the unfounded worries of most objectors.²³²

Final Determination

A written determination must be made by the Water Commissioner on all applications. This determination states his findings and must be filed with the Council and a copy mailed to the applicant and anyone else who filed an appearance at the hearing and has requested a copy.²³³

In making the determination, the Commissioner is directed by the Council to "seek all available pertinent scientific and technical information not presented at the hearing, concerning the availability and present or future use of all water connected to the source for which the permit is requested."²³⁴ This information may be used by the Commissioner in making his final determination regardless of whether it was presented at the hearing. Generally, the findings for the final determination are derived from six sources:

- (1) The application;
- (2) Evidence presented at the hearing;
- (3) Policies and principles of "beneficial use";
- (4) Policies of the Council;
- (5) Results of Water Commissioner investigations;
- (6) Technical reference works and basic data studies.

The acquired expertise of the Water Commissioner is also utilized.²³⁵

If, after due consideration of all the pertinent factors and guidelines, the Water Commissioner finds that the granting of the permit applied for will not be detrimental to the public interest or the interests of property owners with prior or superior rights, and, where applicable, that the minimum flow of a

| | | | | | | | | | |
|-------------|---|----|-----|-----|----|----|----|----|---|
| Other | 0 | 1 | 1 | 3 | 2 | 2 | 1 | 6 | 2 |
| Total | 6 | 83 | 268 | 103 | 14 | 31 | 40 | 19 | 8 |

* 1957 figures represent approximately one-half year.

** 1965 figures represent only the first six months of the year.

232. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, Oct. 20, 1965.

233. IOWA CODE §455A.19 (7) (1962).

234. PROCEDURAL GUIDE III F §10.

235. *Ibid.*

stream is preserved and neither navigability nor the pollution control laws will be impaired, the permit is granted. Such a permit may be granted for any period of time not exceeding ten years.²³⁶ The amount of water use authorized may be either less than or equal to the amount applied for.

Ordinarily from the time of the hearing it now takes about thirty days to receive the permit. This is another time interval that has been substantially decreased as administrative experience has been gained.²³⁷

236. IOWA CODE §455A.20 (1962). The following table shows the permits granted by the Water Commissioner by use and by year, both original and renewal. The numbers to the left of the dividing line represent original permits granted, the number to the right renewal permits.

TABLE 9
Permits Granted

| <i>Use</i> | <i>1957*</i> | <i>1958</i> | <i>1959</i> | <i>1960</i> | <i>1961</i> |
|---------------------------|--------------|-------------|-------------|---------------|--------------|
| Industrial | | | | | |
| Material Production | 0/0 | 55/0 | 134/5 | 69/7 | 33/13 |
| Power Production | 0/0 | 14/0 | 17/0 | 0/0 | 2/6 |
| Food Processing | 0/0 | 5/0 | 7/0 | 4/0 | 1/1 |
| Manufacturing | 0/0 | 7/0 | 5/1 | 3/1 | 3/1 |
| Air Conditioning | 0/0 | 2/0 | 4/0 | 2/0 | 3/1 |
| Irrigation | | | | | |
| Farms | 3/0 | 82/0 | 262/2 | 86/3 | 7/21 |
| Golf Courses | 0/0 | 4/0 | 3/0 | 5/0 | 2/0 |
| Specialty Crops | 0/0 | 18/0 | 41/1 | 9/0 | 6/4 |
| Municipal | 1/0 | 29/0 | 20/0 | 9/0 | 9/2 |
| Recreation | 0/0 | 5/0 | 14/0 | 4/1 | 1/1 |
| Storage | 0/0 | 27/0 | 69/0 | 63/0 | 59/1 |
| Other | 0/0 | 0/0 | 2/0 | 2/0 | 3/2 |
| Total | 4/0 | 248/0 | 578/9 | 256/12 | 129/53 |
| | <i>1962</i> | <i>1963</i> | <i>1964</i> | <i>1965**</i> | <i>Total</i> |
| Industrial | | | | | |
| Material Production | 16/10 | 19/10 | 26/15 | 6/3 | 358/63 |
| Power Production | 0/0 | 0/0 | 0/1 | 0/0 | 33/7 |
| Food Processing | 3/1 | 1/0 | 6/2 | 1/0 | 28/4 |
| Manufacturing | 4/3 | 5/1 | 4/0 | 2/1 | 33/8 |
| Air Conditioning | 0/0 | 0/0 | 0/1 | 0/0 | 11/2 |
| Irrigation | | | | | |
| Farms | 15/91 | 21/120 | 22/104 | 9/19 | 507/360 |
| Golf Courses | 2/2 | 6/8 | 7/3 | 3/1 | 32/14 |
| Specialty Crops | 6/16 | 0/20 | 6/10 | 6/3 | 92/54 |
| Municipal | 11/2 | 16/3 | 9/3 | 4/1 | 108/11 |
| Recreation | 5/3 | 3/3 | 2/7 | 1/0 | 35/15 |
| Storage | 62/2 | 90/0 | 94/5 | 62/2 | 526/10 |
| Other | 2/1 | 2/0 | 3/0 | 4/0 | 18/3 |
| Total | 126/131 | 163/165 | 179/151 | 98/30 | 1781/551 |

* 1957 figures represent approximately one-half year.

** 1965 figures represent only the first six months of the year.

237. The following table shows the average time lapse between the time an applicant received a hearing on his original application and the time his permit was ultimately granted. The figures tend to document the Council's "go slow" policy on potentially

Appeal

A right of appeal is provided from the Water Commissioner's determination to the Natural Resources Council. Appeal may be taken by any party

consumptive users practiced during the early years of administration. For example, in 1960 the average farm irrigation permit granted was received nearly a year and a half after the hearing. In the later years the figures show relatively prompt action in issuing the permit.

TABLE 10
Time Lapse Between Hearing and Permit

| Use | 1957* | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965** |
|--------------------------|-------|------|------|------|------|------|------|------|--------|
| Industrial | | | | | | | | | |
| Materials Production NI+ | | 83 | 97 | 76 | 28 | 24 | 24 | 25 | 44 |
| Power Production .. NI | | 113 | 89 | NI | 71 | NI | NI | NI | NI |
| Food Processing ... NI | | 62 | 77 | 10 | NI | 7 | 19 | 80 | 23 |
| Manufacturing NI | | 33 | 137 | 46 | 15 | 37 | 92 | 28 | 8 |
| Air Conditioning .. NI | | 32 | 118 | 46 | 28 | NI | NI | NI | NI |
| Irrigation | | | | | | | | | |
| Farms | 127 | 162 | 298 | 349 | 75 | 80 | 26 | 53 | 66 |
| Golf Courses | NI | 81 | 158 | 297 | 82 | 18 | 130 | 40 | 22 |
| Specialty Crops ... NI | | 196 | 334 | 512 | 51 | 56 | NI | 75 | 162 |
| Municipal | 8 | 63 | 36 | 18 | 26 | 41 | 64 | 59 | 23 |
| Recreation | NI | 59 | 271 | 12 | 37 | 160 | 195 | 10 | 25 |
| Storage | NI | 44 | 31 | 151 | 18 | 12 | 9 | 11 | 14 |
| Other | NI | NI | 2 | 6 | 8 | 2 | NI | NI | 15 |
| Average for all uses .. | 97 | 111 | 201 | 205 | 30 | 37 | 33 | 30 | 33 |

+ NI means no permits were issued in this year for this use.

* 1957 figures represent approximately one-half year.

**1965 figures represent only the first six months of the year.

The next table shows the total average time elapsed from the date application is filed until the date a permit is issued. In essence, this table is a combination of the two previous tables dealing with time lapse.

TABLE 11
Time Lapse from Application to Permit

| Use | 1957* | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965** |
|--------------------------|-------|------|------|------|------|------|------|------|--------|
| Industrial | | | | | | | | | |
| Materials Production NI+ | | 207 | 280 | 174 | 64 | 55 | 56 | 56 | 72 |
| Power Production .. NI | | 202 | 426 | NI | 159 | NI | NI | NI | NI |
| Food Processing ... NI | | 123 | 248 | 37 | 49 | 30 | 47 | 110 | 51 |
| Manufacturing NI | | 118 | 247 | 79 | 71 | 62 | 123 | 61 | 40 |
| Air Conditioning .. NI | | 64 | 277 | 81 | 52 | NI | NI | NI | NI |
| Irrigation | | | | | | | | | |
| Farms | 180 | 339 | 562 | 666 | 260 | 150 | 64 | 97 | 102 |
| Golf Courses | NI | 209 | 560 | 568 | 110 | 46 | 164 | 69 | 68 |
| Specialty Crops ... NI | | 340 | 580 | 779 | 101 | 84 | NI | 103 | 193 |
| Municipal | 39 | 157 | 154 | 135 | 50 | 70 | 96 | 353 | 50 |
| Recreation | NI | 126 | 497 | 506 | 69 | 405 | 254 | 58 | 50 |
| Storage | NI | 101 | 80 | 151 | 41 | 34 | 44 | 38 | 50 |
| Other | NI | NI | 36 | 33 | 31 | 27 | 28 | 51 | 34 |
| Average for all uses .. | 145 | 236 | 410 | 361 | 66 | 72 | 64 | 70 | 64 |

+ NI means no permits were issued in this year for this use.

* 1957 figures represent approximately one-half year.

** 1965 figures represent only the first six months of the year.

aggrieved by the determination of the Commissioner. Such an appeal must be filed with the Council within thirty days of the determination and must state the grounds of the appeal. The director of the Council sets the time and date of the hearing and everyone who appeared at the Commissioner's hearing or any hearing is given notice by ordinary mail.²³⁸

By statute, the Council is to prescribe rules and regulations governing the appeal to this body.²³⁹ The same set of rules and regulations used for the original hearing before the Commissioner have apparently been adopted to cover the hearing on appeal. This means that the appeal is in effect a complete retrial of the original hearing before the Commissioner.

After hearing all the evidence the Council files its own determination setting forth its findings. The Council apparently applies the same standards as the Commissioner. A copy of the determination is sent to the applicant and to any person appearing who in writing requests a copy.²⁴⁰

Further appeal is permitted if a party is not satisfied with the Council's determination.²⁴¹ Within thirty days of an adverse determination by the Council, a party may file suit in the district court of the county in which the property affected is located. Upon receipt of notice of this appeal, the Council must file a certified transcript of all proceedings and orders affecting the case with the clerk of the court. On this appeal the case is again given a complete airing as the statute provides for the court to hear the matter *de novo*. In this round the Council has the burden of showing that its acts and orders were "reasonable and necessary."²⁴² If the Council can show both, its determination should be affirmed. This required showing by the Council represents a complete shift of the risk of non-persuasion between the parties. At the original hearing, the applicant must show by affirmative evidence his right to obtain a permit. On appeal to the courts, it is the Council which must take the affirmative role.

Appeal to the Iowa Supreme Court is also available to a party aggrieved by the district court's judgment. The *Iowa Rules of Civil Procedure* control the procedures in this appeal.²⁴³

On its face the appeal procedures are subject to severe criticism for their redundancy. As a result of the multiple appeals available, any aggrieved party may demand no less than three separate full hearings on the same issue. Further, the scheme provides motivation to keep appealing by requiring the Council to shoulder the burden of justifying its determination when the third

238. IOWA CODE §455A.19(8) (1962).

239. IOWA CODE §455A.19(9) (1962).

240. *Ibid.*

241. IOWA CODE §455A.37 (1962).

242. *Ibid.*

243. See IOWA R. CIV. P. 368. §455A.37 of the act provides that the district court or Supreme Court may stay the "order" of the Council, but otherwise an appeal will not stay the operation of an order. This has been interpreted as including permits.

round of appeals is reached. After losing three full hearings, a party may still try his luck with the Supreme Court. About the only good thing that can be said about the appeal procedure is that it has not been invoked frequently. In only nine instances have the Commissioner's determinations been appealed to the Council. In all cases the Commissioner's findings were sustained. One appeal was filed in the district court, but it was subsequently dismissed.²⁴⁴ Thus far good fortune has smiled on the Council in the form of relatively bountiful water supplies. When water shortages again occur, this seemingly endless appeal procedure could prove to be a substantial obstacle to administrative efficiency.²⁴⁵

TRANSFER OF PERMITS

Section 455A.20 states that a water use permit is an appurtenance to the land on which the water is used. This indicates that even though the permit is granted to an individual, it does not confer on the permittee a general personal privilege to divert, withdraw, or store water. Instead it allows the use of the specified amount of water for the specified purpose on that land. If the permittee moves his water using operation to another location, his permit for use at the old location does not move with him; a new permit will be required if water is to be used at the new location.²⁴⁶

Consistent with the theory of the permit attaching to a particular tract of land the statute provides that a permittee may transfer his interest in the permit by "conveying, leasing, or otherwise transferring the ownership of the land described in the permit."²⁴⁷ Because the permit is appurtenant to the land, pre-

244. One appeal was dismissed for want of prosecution. In the other case the City of West Des Moines filed an appeal in district court challenging the short duration of the permit it received on the ground that the time was too short to allow advantageous borrowing. Later a sufficient water supply was obtained without the construction for which the permit was sought, so the appeal was dismissed.

245. The Iowa Natural Resources Council, Report for the Biennium Ending June 30, 1964, contains the following passage:

It is again recommended that Section 455A.37 be amended to avoid the possibility of unwarranted expenditure of State funds through litigation of appeals encouraged by the statute. This section provides for appeal to the district court from Resources Council actions and orders and, contrary to normally applicable rules of law, places the burden of proof that such actions are reasonable and necessary upon the Resources Council. Imposition of the burden of proof on the regulatory agency tends to encourage appeals from Resources Council actions and orders, many of which are the result of review proceedings. Other provisions of this section requiring the Resources Council to furnish a certified transcript of all proceedings before the Council and providing for a trial de novo on appeal to the district court would seem to afford ample protection to individual rights.

The bill submitted by the Council to the 1965 session of the Iowa General Assembly contained a provision changing the burden of proof in appeal. S.F.518 §4. The bill was passed, but the section relating to appeal procedure was deleted. IOWA ACTS, 61st G.A., ch. 372 (1965).

246. See IOWA CODE §455A.20 (1962).

247. IOWA CODE §455A.30 (1962).

sumably no special procedure is required to transfer it. An ordinary deed or lease should therefore suffice to assign the rights and duties represented by the permit to the transferee of the land.

The policy of the Commissioner has been to generally discourage permit transfers, particularly between material producers. As a practical matter, this policy has taken the form of inducing applications by the party in possession of land who will use the water rather than by the land owner. Thus if a permit is required for water which will actually be used by a lessee, an effort is made to encourage the lessee to make the permit application rather than the owner. If this effort is successful and the lessee is the applicant, then the permit will usually be granted for the remaining term of his lease. This is not true for short-term leases by farmers who would be required to apply for a new permit every year, but long-term lessees (up to ten years) and lessees who are not likely to renew their lease are uniformly subjected to this treatment.²⁴⁸

If for some reason the lease is terminated before the expiration date of the water permit, the Commissioner will encourage the departing lessee to cancel his permit voluntarily. The same encouragement is given to owners who sell their property during the term of their water permit. In this manner, any new owner or lessee will be required to make his own application for a permit. This gives the Commissioner the opportunity to make direct contact with the new user and explain what will be required of him. The Commissioner feels that this policy leads to a much better understanding between himself and the user than would be possible otherwise.

The chance to talk to the user also dispels any notions that, because he succeeds to an existing permit, he is not really regulated. The statute provides that the transferred permit remains "subject to the principle of beneficial use and the orders of the Council."²⁴⁹ The new user has the same duties and obligations as his predecessor had. However, without the opportunity on the part of the Commissioner to explain what these obligations are, the new user would likely be uncertain or unaware of them. The policy of the Commissioner therefore appears sound in that it avoids problems later on for both himself and the user.

RENEWAL AND MODIFICATION

The Commissioner's policy is to notify a permittee that his permit is about to expire approximately sixty days before the permit expiration date. Once notified the water user should then complete and submit to the Commissioner an application to renew the permit. The renewal application is generally received in the form of a letter. Permits may be renewed by the Commissioner

248. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, Oct. 20, 1965.

249. IOWA CODE §455A.30 (1962).

if an application for renewal is made before the expiration of the preceding term. In his application the applicant should notify the Commissioner of any desired changes in the permit.²⁵⁰

The Commissioner sends notices of the receipt of the application for renewal by ordinary mail to all persons who filed an appearance at the next previous proceeding and to those persons who have requested notice of any hearings affecting that area. If an objection is filed within thirty days of the date of notice by any person shown to have an interest, a hearing must be held. Notice of this hearing is sent to the objector and to the same persons who received notice of the application for renewal.²⁵¹

If no objection is made within thirty days and if no change in the permit terms is requested, then the permit may be renewed without any hearing. The provision authorizing the granting of renewal applications without hearings was added by amendment in 1965.²⁵² Before that time hearings were required for all renewals. There is no fee charged for a simple renewal.

250. This table shows the volume and distribution of renewal applications by years. The figures reveal the approximate pattern that the foregoing discussion of the administration would lead one to expect. Irrigation renewals were high in 1962-64 because the bulk of the three-year permits were issued 1959-1961. Materials producers were originally given short term permits because the policy toward them was not yet settled, therefore many were regularly seeking renewals. Permits of most other industrial and municipal users have yet to expire for the first time. In this table applicants seeking renewals and those seeking renewal with modification are compared.

TABLE 12
Renewal Applications

| Use | 1957* | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965** |
|----------------------------|----------|----------|-----------|----------|-----------|------------|------------|------------|-----------|
| Industrial | | | | | | | | | |
| Materials Production | 0 | 1 | 9 | 4 | 11 | 11 | 13 | 3 | 3 |
| Power Production | 0 | 0 | 0 | 1 | 5 | 0 | 1 | 0 | 0 |
| Food Processing | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| Manufacturing | 0 | 0 | 2 | 0 | 3 | 1 | 0 | 1 | 1 |
| Air Conditioning | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Irrigation | | | | | | | | | |
| Farms | 0 | 0 | 3 | 2 | 35 | 115 | 95 | 95 | 15 |
| Golf Courses | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 3 | 1 |
| Specialty Crops | 0 | 0 | 1 | 0 | 4 | 23 | 14 | 9 | 3 |
| Municipal | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 3 | 1 |
| Recreation | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 6 | 0 |
| Storage | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 5 | 2 |
| Other | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 |
| Total | 0 | 1 | 15 | 8 | 69 | 160 | 135 | 137 | 26 |

*1957 figures represent approximately one-half year.

**1965 figures represent only the first six months of the year.

251. IOWA CODE §455A.20 (1962) as amended by IOWA ACTS, 61st G.A., ch. 372 §3 (1965).

252. IOWA ACTS, 61st G.A., ch. 372 §3 (1965). The above discussion is written on the assumption that the Council will implement the recent legislative change. To date this has not been done.

If, however, a modification of the terms of the permit is requested which involves a change in the beneficial use, a change in the place of such diversion, or an increase in the quantity, time, or rate of water usage, then the applicant must pay the \$15.00 fee as required in section 455A.19(5) and a hearing is required. Notice for this hearing includes notice by publication as prescribed in section 455A.19(3). The procedures followed at all hearings on applications for renewals and renewals with modifications are the same as those used at the hearing for the original permit.

Prior to the 1965 amendment, the average length of time required to process the applications for renewal from the date the application is received by the Commission until the date the renewal is granted has been around seventy days. When a modification was involved, the time required was slightly more. The effect of the amendment should be to cut this time period approximately in half for uncontested renewals. The thirty-day period required for notice is still required, however the amendment should cut out many unnecessary hearings, thus making it possible for the Commissioner to complete his determinations much more rapidly. Where the applicant is diligent in submitting his renewal application it should be possible frequently to issue the renewal permit immediately on the expiration of the preceding permit.²⁵³

253. The following table shows the average time lapse between the time an application to renew or modify an existing permit was received by the Commissioner and the time the renewal permit was ultimately granted. The 1965 figures cover only the first six months of the year, therefore it was too early to expect any reduction in the time delay due to the 1965 amendment providing for the possibility of renewals without hearings. The number of permits included in each classification is shown at note 236 *supra*.

TABLE 13
Time Lapse Between Renewal Application and Permit

| Use | 1959* | 1960 | 1961 | 1962 | 1963 | 1964 | 1965** |
|--------------------------------|-------|------|------|------|------|------|--------|
| Industrial | | | | | | | |
| Materials Production | 112 | 99 | 58 | 81 | 58 | 63 | 76 |
| Power Production | NI | NI | 68 | NI | NI | 35 | NI |
| Food Processing | NI | NI | 35 | 95 | NI | 43 | NI |
| Manufacturing | 59 | 77 | 48 | 236 | 30 | NI | 29 |
| Air Conditioning | NI | NI | 25 | NI | NI | 51 | NI |
| Irrigation | | | | | | | |
| Farms | 108 | 73 | 69 | 78 | 77 | 57 | 51 |
| Golf Courses | NI | NI | NI | 77 | 47 | 114 | 51 |
| Specialty Crops | 30 | NI | 60 | 63 | 71 | 67 | 78 |
| Municipal | NI | NI | 47 | 102 | 54 | 55 | 44 |
| Recreation | NI | 23 | 30 | 158 | 45 | 79 | NI |
| Storage | NI | NI | 22 | 194 | NI | 55 | 38 |
| Other | NI | NI | 25 | 31 | NI | NI | NI |
| Average for all uses | 92 | 85 | 59 | 82 | 72 | 60 | 54 |

†NI means no permits were issued in this year for this use.

*No renewal or modification permits were granted during 1957 or 1958.

**1965 figures represent only the first six months of the year.

In cases where for one reason or another the renewal permit cannot be issued by the time the preceding permit is due to expire, the Commissioner has the power to grant an extension of not more than ninety days to the expiring permit during the pendency of the application for renewal.²⁵⁴ This very useful power is generously exercised to avoid the problems of requiring another full application and hearing.

An application to modify a permit may be submitted at any time; it need not be associated with an application for renewal. If the modification sought involves only a decrease in the amount of water used, the Commissioner may grant the application without a hearing.²⁵⁵ All other modifications, whether involving changes in the amount, source, diversion method, rate of withdrawal, duration, or location of the permitted use must be applied for and processed in the same procedure as an original application.²⁵⁶ For this reason, when the original permit is issued, the Commissioner tries to anticipate any probable changes and make allowance for them in the permit.

TERMINATION AND SUSPENSION

All permits are continuously subject to modification and cancellation by the Commissioner.²⁵⁷ Nearly all permits issued for withdrawals from wells or reservoirs expressly advise the permittee that his permit is subject to modification and cancellation under the provisions of Iowa Code § 455A.28; however, absence of this statement either in the determination or on the permit does not free the permittee from the operation of this provision.

A permit may be modified or canceled by the Commissioner with the consent of the permittee, and without the permittee's consent in case of:

- (1) Any breach of the terms or conditions of the permit;
- (2) Any violation of the law pertaining to the permit by the permittee;
- (3) Nonuse;
- (4) Necessity to protect the public health or safety;
- (5) Necessity to protect the public interest in lands or waters; and
- (6) Necessity to prevent substantial injury to persons or property in any manner.²⁵⁸

254. IOWA CODE §455A.20 (1962), as amended by IOWA ACTS, 61st G.A., ch. 372 §3 (1965).

255. This is more or less a policy derived from the negative inference of §455A.20 in which a hearing is specifically required for a change in the terms of a permit effecting an "increase in quantity."

256. IOWA CODE §455A.20 (1962), as amended by IOWA ACTS, 61st G.A., ch. 372 §3 (1965).

257. IOWA CODE §§455A.20, .28 (1962).

258. IOWA CODE §455A.28 (1962). One provision associated with possible termination that deserves further comment is §455A.29. Although the purpose of this section is fairly clear, the language defies comprehension. Apparently the idea is that the Commissioner is to notify a permittee whose use has ceased for three consecutive years, that

In all cases where the modification or cancellation are without the permittee's consent, a hearing after a minimum of thirty days' notice to the permittee is required.

Other than consensual modifications and cancellations, the only ground of the statute invoked to date to cancel a permit has been that dealing with breach of the terms or conditions of the permit. Typically these situations arise when the permittee becomes delinquent in submitting required reports describing his water use.²⁵⁹

As a general rule, permit holders are diligent in preparing and submitting the necessary reports to the Water Commissioner. Failure to do so is usually attributed to either oversight or a failure on the part of the permittee to realize that reports are necessary even though no water has been used. In such cases, the Commissioner sends a letter advising the permit holder of the facts and normally the report is promptly submitted. But, if the permit holder still fails to submit the reports after receiving notice of his delinquency, the Commissioner writes a final letter informing the permittee that a hearing for cancella-

unless he applies for and receives an extension, his permit will be terminated. If such an application is then made, the Council may grant it; if no application is forthcoming, the permit is terminated. The situation sets out no time limits for applications for extensions and is otherwise generally unintelligible. The Commissioner has not found occasion to utilize this section—he is not sure what it means either.

259. In the following table all permits no longer in effect are classified by use according to the four possible explanations for their termination. It is readily observable that the great majority of non-active permits were simply allowed to expire by their holders. The number of irrigation permits that have expired is significant from the point of view of overall potential of irrigation in Iowa. As was noted earlier, the total acreage under irrigation permits in Iowa has remained fairly constant over the last five years. In this same time 107 irrigation permits were permitted to expire. It is reasonable to suppose that the onset of water shortage could easily lead to an awakening of interest in these currently dormant potential irrigators.

TABLE 14
Non-Active Permits

| <i>Use</i> | <i>Expired</i> | <i>Vol. Term.</i> | <i>Consolidated</i> | <i>Canceled</i> |
|----------------------------|----------------|-------------------|---------------------|-----------------|
| Industrial | | | | |
| Materials Production | 42 | 17 | 1 | 2 |
| Power Production | 1 | 1 | 0 | 0 |
| Food Processing | 0 | 0 | 0 | 0 |
| Manufacturing | 3 | 1 | 0 | 0 |
| Air Conditioning | 1 | 0 | 1 | 0 |
| Irrigation | | | | |
| Farms | 89 | 0 | 1 | 0 |
| Golf Courses | 0 | 0 | 0 | 0 |
| Specialty Crops | 18 | 1 | 0 | 0 |
| Municipal | 0 | 0 | 2 | 1 |
| Recreation | 8 | 0 | 0 | 0 |
| Storage | 2 | 0 | 0 | 1 |
| Other | 1 | 0 | 1 | 0 |
| Total | 176 | 20 | 5 | 4 |

tion of his permit will be held if the reports are not forthcoming. If the reports are not then filed, the hearing is held and the permit cancelled.²⁶⁰

A number of permits have been canceled in this manner, but no appeals have been taken. It is the Commissioner's opinion that these permit holders were not exercising their water use right and thus were unconcerned by the cancellation of the permit.

Under the act the Commissioner also has the power to summarily suspend a permit for a period up to thirty days if he finds it necessary in an emergency to protect the public health or safety or to protect the public interests in lands or waters against imminent danger of substantial injury, or to protect persons or property against such danger. In connection with an emergency the Commissioner may also require the permittee to take such affirmative actions as may be necessary to prevent or remedy the types of injuries described above. The Commission exercises this power through a written order to the permittee.²⁶¹

If the order is intended to remain in effect for more than thirty days, the permittee must be given ten days' written notice and an opportunity to be heard. The hearing should be of such a nature as to guarantee the permittee fair treatment, but a hearing of the type held before the permit was granted is probably not required.

One question raised by the statute is whether the Commissioner is empowered to issue more than one thirty-day suspension consecutively to the same permittee. The availability of the ten-day notice procedure argues convincingly against such a practice. The Commissioner has not yet found it necessary to use this emergency power to suspend the permit.

CONSTITUTIONAL LIMITATIONS

On its face the Iowa Water Act makes rather extensive alterations in the

260. Interview with Water Commissioner Richard Bullard in Iowa City, Iowa, March 14, 1966.

261. IOWA CODE §455A.28(3) (1962). Another interesting question associated with the Council's power to modify and cancel permits for cause relates to water impounded under a storage permit. Stated bluntly, the question is, could the Commissioner cancel or modify a storage permit in time of water shortage, and thereby require the permittee to release his stored water for the benefit of downstream users. This issue should not be confused with the requirement commonly inserted in storage permits requiring the release of stream inflow where necessary to prevent downstream damage. See note 191 *supra*. Section 455A.1 includes a definition of "Impounded or stored water" which seems to give the impounding party absolute ownership if the water is captured pursuant to the provisions of the act. Does this refer to all impounding and storage, or only to unregulated activity authorized by §455A.27? It would appear logical arguments can be made for either position. Understandably, the Commissioner is unwilling to venture an opinion, but it seems likely that the Council would be very reluctant to require the owner of an impoundment, who had planned ahead for times of water scarcity, to open his drain valves for the benefit of downstream grasshoppers.

rights to the capture and use of water which existed under the common-law riparian doctrine. Because of these changes, it is perhaps inevitable that the constitutionality of the act will at some time be called into question. Therefore, it may be helpful at this point to review the possible constitutional principles upon which the act might be challenged as deficient, substantive due process, procedural due process, and delegation of powers.

THE POLICE POWER AND SUBSTANTIVE DUE PROCESS

Each state has a positive power, termed the "police power," to make regulations in the best interests of the health, safety, and welfare of its citizens.²⁶² The police power is exceedingly broad in scope, encompassing regulations affecting traffic, health control, zoning, fire prevention, and conservation, to name only a few. Of course, the state is not unlimited in its exercise of the police power. The regulations enacted under the power must be consistent with the substantive due process provisions of the state and federal constitutions.²⁶³

The due process requirement is essentially a test of reasonableness. It requires that a statute be rationally related to some legitimate end of the state. The means selected must be reasonable both in the sense that a rational legislator could believe that they could achieve the desired end, and in the sense that they are not an unreasonable means to achieve that end.²⁶⁴ For example, a legitimate end of the state might be the elimination of typhoid fever. A rational legislator might think that that end could be achieved either by implementing a comprehensive vaccination program, or by shooting every discovered victim of typhoid. Both means would be rationally related to the end, but only one would be reasonable. Within these broad limits, the states have much discretion in their regulations. The means selected need not actually achieve the end in every situation, so long as it might reasonably be thought that the leg-

262. See, e.g., *Queenside Hills Realty Co. v. Saxl*, 328 U.S. 81 (1946); *Sinclair Ref. Co. v. City of Chicago* 178 F.2d 214 (7th Cir. 1949); *Consolidated Gas Util. Corp. v. Thompson*, 14 F. Supp. 318, 326 (W. D. Texas 1936).

263. The federal constitution guarantees in the fifth amendment that no person shall be deprived of property without due process of law and prohibits any taking of private property for public use without just compensation. U.S. CONST., amend. V. The various states are subject to the same limitation under the due process clause of the fourteenth amendment. U.S. CONST., amend. XIV, §1. Also see, e.g., *Griggs v. Allegheny County*, 369 U.S. 84 (1962); *Delaware, L. & W.R.R. v. Town of Morristown*, 276 U.S. 182, 193-95 (1928); *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

The Iowa Constitution has two relevant provisions: Article I, section 9 bars deprivation of property without due process of law and Article I, section 18 specifically provides for compensation where a public taking is exercised.

264. See, e.g., *Ray v. Blair*, 343 U.S. 214, 226 (1952); *Liggett Co. v. Baldrige*, 278 U.S. 105 (1928); *Lawton v. Steele*, 152 U.S. 133 (1893).

islation could do so.²⁶⁵ Moreover, the means selected need not be the most reasonable means available. As the Supreme Court stated in *Williamson v. Lee Optical*, "it is enough that there is an evil at hand for correction, and that it might be thought that the particular legislative measure was a rational way to correct it."²⁶⁶

The Iowa Supreme Court agrees with the United States Supreme Court axiom that state legislative acts deserve a strong presumption of constitutionality. If legislation regulating economic interests is "within the zone of doubt and fair debate" and "not clearly and plainly prohibited by some constitutional provision," it is presumed constitutional.²⁶⁷ It is not within the judicial prerogative "to pass upon the policy, wisdom, advisability, or justice of a statute."²⁶⁸

An examination of due process leaves little doubt that the state has the constitutional power to regulate the capture and use of water. That such regulation is a legitimate end of the state goes almost without saying. It is difficult if not impossible to overemphasize the importance of water to a state and its citizens. Surely the importance of water makes its regulation by the state as appropriate as other types of police power regulations, such as zoning. Although the Iowa Supreme Court has not had the occasion to hold directly on the question of the constitutionality of legislative interference with riparian rights, it has spoken in favor of such regulation in a few cases. In *Hatcher v. Board of Supervisors*, the plaintiff made constitutional objections to the county's actions assessing him for drainage work approved pursuant to a statute establishing drainage districts. In upholding the act, the court spoke extensively of the state's right to regulate property for the greater collective benefit of the public:

Recognizing in its fullness the individual right to the control of property held by private ownership, there accompanies that right, as a limitation upon it, the right of government to exercise control, at times absolute but more often abridged, but always upon the claim that such control is necessary to subserve the public good. . . . The court's so holding [a valid police power exercise in drainage projects] have not recognized as the sole question that of a purpose exclusively or essentially of public benefits in the results sought, but have pro-

265. See *Williamson v. Lee Optical*, 348 U.S. 483, 487 (1955); *Williams v. United States*, 327 U.S. 686, 710-11 (1945).

266. 348 U.S. 483 (1955). The court further stated: "The day is gone when this court uses the Due Process Clause of the Fourteenth Amendment to strike down state laws, regulatory of business and industrial conditions, because they may be unwise, improvident, or out of harmony with a particular school of thought." *Id.* at 488.

267. *Steinberg - Baum & Co. v. Countryman*, 247 Iowa 923, 929, 77 N.W.2d 15, 18 (1956). See also *Benschoter v. Hakes*, 232 Iowa 1354, 1364, 8 N.W.2d 481, 487 (1943); *City of Des Moines v. Manhattan Oil Co.*, 193 Iowa 1096, 1103, 184 N.W. 823, 826 (1921); *Stoner McCray Sys. v. City of Des Moines*, 247 Iowa 1313, 78 N.W.2d 843 (1956).

268. *Steinberg - Baum & Co. v. Countryman*, *supra* note 267, at 929, 77 N.W.2d at 18.

ceeded upon the broader grounds that it is important to the state, to its citizens, as a whole, as well as to individuals whose property may thus be directly affected by charges for benefits, that all the resources of a state shall, so far as practicable, be brought to the point of effective service.²⁶⁹

The significance of this language for the Iowa water statute is two-fold: 1) The Iowa Supreme Court recognizes that water is an important "public" resource and therefore a proper subject of police power regulation, and 2) the court realizes that the essence of a police power based regulatory scheme is not its ability to achieve a precise balance of equity among all regulated persons, but rather, it is to marshal the state's resources and to plan their use in a manner calculated to maximize the public benefit on a state level.

Although, in general, it can be said that the regulation of water is a legitimate end of the state, specific applications of the regulations might still be constitutionally challenged. Police power regulations have often been attacked on the ground that, as applied to the particular property in question, they constitute a "taking" of "vested property rights" without due process, prohibited by the federal and state constitutions.²⁷⁰ Thus, in water regulation, it might be argued that rights inherent in riparian owners under the common law have become "vested" and that the alteration or termination of these vested rights through the enactment of a water statute violates due process.²⁷¹

The vested rights argument seems misleading in several respects. In the first place riparian rights are "property" only in a very limited sense. The common-law riparian owner had no property rights in the water in a stream, but only a restricted right to use it. This right was subject to similar rights in all other riparian owners on the watercourse, as well as to a considerable number of federal and state powers.²⁷²

Perhaps an even more serious objection to the "vested rights" argument is that the term would seem to be meaningless. Whether or not a particular right is termed "vested" sheds very little light on whether the state can constitutionally take it. Even the most faultless of property rights can be taken for a public purpose through the eminent domain power, accompanied by appro-

269. 165 Iowa 197, 201-02, 145 N.W. 12, 15 (1914).

270. See, e.g., *Reconstruction Fin. Corp. v. Bankers Trust Co.*, 318 U.S. 163 (1943); *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922); *United States v. Tilley*, 124 F.2d 850, 861 (8th Cir. 1942).

271. See *McCord v. High*, 24 Iowa 336, 342 (1868) where the court says: "The right which the owner of lands has to a water-course flowing over them . . . cannot be taken from him constitutionally for public use with just compensation."

272. See generally *Willis v. City of Perry*, 92 Iowa 297, 301-02, 60 N.W. 727, 728 (1894). Lauer, *The Riparian Right as Property*, in *WATER RESOURCES AND THE LAW*, 131, 133-268 (1958); O'Connell, *Iowa's New Water Statute—The Constitutionality of Regulating Existing Uses of Water*, 47 *IOWA L. REV.* 549, 581-94 (1962).

priate compensation.²⁷³ Thus, the real question arising from water legislation is not the ability to take, but whether the owner must be compensated for the taking. The term "vested" is merely a label attached by courts to interests they deem worthy of protection under the facts of a particular case.

The cases seem to reveal a tendency of requiring compensation in those situations where government action is direct and is aimed at a specific party or a specific piece of property. Thus, compensation was awarded where the federal government condemned a dam,²⁷⁴ requisitioned all the electric power produced by a particular power company,²⁷⁵ or revoked the easements of a particular railroad.²⁷⁶ However, where a demonstrable injury results indirectly from an exercise of governmental powers, the courts are less likely to require compensation.²⁷⁷ Compensation has been denied, for example, for consequential damages arising from a readjustment of a regulatory scheme, such as a modification of regulations for optical appliance²⁷⁸ or rental regulations.²⁷⁹ In *Higgins v. Board of Supervisors*, the Iowa Supreme Court made its position quite clear in this respect:

Acts done in the proper exercise of governmental powers [in this case the police power], and not directly encroaching upon private property, though their consequences may impair its use, are universally held not to be a taking within the meaning of the constitutional provision.²⁸⁰

While in general consequential damages arising from government regulations do not require compensation, this is not always the case. Sometimes the damage to the individual is so great, even though it arises only indirectly and from a perfectly proper exercise of regulatory power, that courts will require compensation. The test used to determine whether a particular injury is compensable is essentially one of fairness. As such, the outcome of the test will depend heavily upon the peculiar facts of the case under consideration. Compensation will be awarded if, after considering all the facts, the court decides

273. See Dunham, *Griggs v. Allegheny County in Perspective: Thirty Years of Supreme Court Expropriation Law*, in *THE SUPREME COURT REVIEW* 63, 65-71 (1962) and cases cited therein.

274. *Monongahela Nav. Co. v. United States*, 148 U.S. 312, 345 (1893).

275. *International Paper Co. v. United States*, 282 U.S. 399 (1931).

276. *Noble v. Union River Logging R.R.*, 147 U.S. 165 (1893).

277. See Dunham, *supra* note 273, at 73-90 and cases cited therein.

278. *Williamson v. Lee Optical*, 348 U.S. 483 (1955).

279. In *Fleming v. Rhodes*, 331 U.S. 100 (1947), the Supreme Court, in preventing enforcement of an eviction order of the state court rendered before the enabling legislation was enacted, rejected the contention that vested rights were taken without due process when the application of certain rent regulations were sustained. The Court stated, "So long as the Constitution authorizes the subsequent enacted legislation, the fact that its provisions limit or interfere with previously acquired rights does not condemn it." *Id.* at 107.

280. 188 Iowa 448, 457, 176 N.W. 268, 271 (1920).

the public benefit achieved by the regulation is outweighed by the amount of injury to the plaintiff.²⁸¹ An example is the United States Supreme Court Case of *Griggs v. Allegheny County*.²⁸² That case involved landing routines established for commercial jet aircraft by the United States Civil Aeronautics Administration at the Greater Pittsburgh Airport. The landing routine resulted in so many low-altitude jet flights over plaintiff's property as to render that property unusable for practically any purpose. The court held that this was a taking worthy of compensation.

One can only speculate as to what result will be reached in litigation involving the Iowa Water Act. However, the uncompensated alteration of riparian rights is not without precedent. For example, in *Gibson v. United States*,²⁸³ the Supreme Court held that the consequential interference with riparian rights resulting from the improvement of a navigable river was not a taking requiring compensation. Moreover, in *United States v. Commodore Park, Inc.*,²⁸⁴ the court upheld government action changing the course of a stream to improve navigation, thereby cutting off completely the riparian's access to the watercourse. Damages have been awarded, however, when overflow from a government dam deprived the agricultural land in back of the dam of all value.²⁸⁵

State courts likewise have denied compensation in upholding state action. A recent decision by the Ohio Supreme Court held no compensation was due plaintiff, a marine terminal operator, when the state highway commission built a bridge which substantially impaired traffic to and from his terminal.²⁸⁶ The Supreme Court of Louisiana held that where oyster beds were destroyed by dredging operations of a state agency, the lessees of such beds were not entitled to compensation for an "appropriation" of private property under the Louisiana Constitution.²⁸⁷

A group of Iowa cases speak of "vested rights," which, although they concern zoning and building regulations, could influence the Iowa Supreme Court if and when the vested rights question comes up concerning the Iowa water statute. It is probably most accurate to characterize their facts as situations where individuals have relied to their financial detriment on building and zoning permits that were subsequently revoked because they were erroneously issued.

In *Des Moines v. Manhattan Oil Co.*,²⁸⁸ defendant received a permit to

281. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415-16 (1922).

282. 369 U.S. 84 (1962).

283. 166 U.S. 269 (1897).

284. 324 U.S. 386 (1945).

285. *United States v. Lynah*, 188 U.S. 445 (1903).

286. *State ex rel. Anderson v. Preston*, 2 Ohio App. 2d 244, 207 N.E.2d 664 (1963).

287. *Marie v. Police Jury of the Parish of Terrebonne*, 161 So. 2d 407 (La. App. 1964).

288. 193 Iowa 1096, 184 N.W. 823 (1921).

build a gas station on a lot zoned residential. Before the permit was rescinded, the defendant had contracted to buy the land and to build the gas station and had placed some construction materials on the lot. Nevertheless, the Iowa Supreme Court held that since title to the land had not yet passed nor had any construction commenced, defendant's reliance was insufficient to establish a vested right. Language later in the opinion, however, suggests the real rationale for the decision was that, although the defendant perhaps had some property rights, they should be regulated to this extent because of the police power policy behind the zoning scheme.

*Call Bond & Mortgage Co. v. Sioux City*²⁸⁹ involved similar facts with a commercial green house in a residential zone. The only reliance in this case was that the plaintiff met a Mr. Mahoney on the street and orally ordered five thousand bricks — no price was set, no delivery was made, nor was there performance of any kind by either party. The issue of the existence of "vested rights" here was not in constitutional terms as it was in *Manhattan Oil*, but the court did hold there were not vested property rights.

The Iowa court found a vested right in *Crow v. Board of Adjustment*,²⁹⁰ where the appellant proceeded to construct a combination apartment-animal clinic in a residential zone, relying on a building permit and an erroneous legal opinion from the Iowa City Attorney. The court emphasized that "due to the change in status quo during this period, Dr. Crow secured a vested right to proceed under the building permit as issued." *Stoner McCray System v. City of Des Moines*,²⁹¹ approached on the due process level the question whether an ordinance which interferes with rights in existing billboards amounts to an impairment of vested rights. The court held there was an unconstitutional taking in regard to the existing billboards; but they stated that the "regulation" (barring) of *future* billboards is valid exercise of the state's police power, thus expressing the dichotomy of existing versus future rights which was only implied in the above cases. The most recent of these cases, *Board of Supervisors v. Paaske*,²⁹² involved a real estate entrepreneur who purchased five houses, acquired permits to move them, dug basements, laid concrete footings, contracted

289. 219 Iowa 572, 259 N.W. 33 (1935).

290. 227 Iowa 324, 288 N.W. 145 (1939).

291. 247 Iowa 1313, 78 N.W. 2d 843 (1956). In dictum the court stated:

We do not wish to infer herein that under certain circumstances a municipality could not provide for the termination of nonconforming uses, especially if the period of amortization of the investment was just and reasonable, and the present use was a course of danger to the public health, morals, safety, or general welfare of those who have come to be occupants of the surrounding territory. *Id.* at 1319-20.

There is a question whether this would apply to any alterations of water rights under the Iowa Act since this dictum appears to apply only to nonconforming uses.

292. 250 Iowa 1293, 98 N.W.2d 827 (1959).

to have foundations laid, and placed construction materials on his 2.4 acre tract, only to be confronted with a subsequently enacted zoning ordinance requiring at least a one-acre lot per house. The court had no difficulty in finding that the plaintiff had "relied" to the point that his right should be considered vested.

Although the exact portent of these cases for the Iowa water statute is unclear, it is obvious that they represent some of the Iowa Supreme Court's thinking about the nature of vested rights in general. In the first place, a finding or not of vested property rights depends to a great extent on the particular facts of each situation. Next, the court is concerned with detrimental financial reliance — do the facts stack up to show such reliance? In the three cases that found vested rights, there was a substantial investment irrevocably committed to the claimant's project. The *Stoner* case approached this reliance aspect in terms of existing versus nonexisting billboards, and probably did so because this was the distinction expressed by the ordinance. Although unexpressed in the other cases, this existing-nonexisting analysis is implicit in their rationale, and thus all of these cases may present a cluster of authority which might be regarded as threatening the ability of the Iowa Water Act to adversely affect uses of water existing at the time the act was adopted, without providing damages to the owners of such rights.

Since the Iowa act has never operated during a period of severe water shortage, it is difficult to predict under what circumstances a constitutional challenge might arise. At the present time the most likely complainant would seem to be the irrigator. The irrigator is the primary consumptive user of water. Therefore, he is the one most likely to be adversely affected by the minimum flow restriction. The typical irrigator would probably not have a valid constitutional claim. He is required to obtain a permit and to pay a fee for it, but this would not seem to be a substantial deprivation. His permit states a limit of the amount of water he can take, but at the present time the limits are set sufficiently high that he can probably take all he can use. Indeed, so long as the water in the watercourse remains above the minimum flow the irrigator would not seem to be in any worse position than he was under the common law.

Even when the minimum flow is reached and no further water can be taken, the irrigator is adversely affected by the act only to the extent that the established minimum flow exceeds the point at which he would have been denied further access to the watercourse under the "reasonable use" theory of the riparian rights doctrine. It is very doubtful that this relatively minor imposition is sufficient to outweigh the benefit derived by the public from the protection of a certain minimum flow in Iowa streams against incursions by consumptive artificial uses.

While the typical user of water would probably have no valid complaint,

a possibility exists that the act might be held unconstitutional as applied to individuals who can show special circumstances. For example, an irrigator who, at considerable expense, built pumps capable of withdrawing from a stream enough water to raise a specialized crop needing much more water than normal Iowa crops, might claim an analogy between his position and that of the complainants in the zoning and building regulations cases discussed above. However, to do so it would be necessary to show that his substantial financial outlay was in reasonable reliance on the riparian law existing before the Iowa act was passed. Given the uncertainties interest in riparian system of water rights, reasonable reliance on any right claimed under the former law will be extremely difficult to show. Therefore, except for the possibility of a few extraordinary circumstances, it is doubtful that there can be successful constitutional attacks upon the Iowa act on the grounds that it is violative of substantive due process.

Nevertheless, because the fear of unconstitutionality is a cloud that seems always to cast its shadow on regulation of this species,²⁹³ there is considerable merit in the idea of amending the act by adding to it a statute of limitation-type curative provision. In essence, such a provision should require all persons claiming rights to use Iowa waters as the result of interests acquired prior to the effective date of the act to file their claims with the Commissioner before a certain date or the right to enforce their claims will become barred. If the period allowed for filing is adequately long, such a provision should effectively erase the possibility of the act as administered being held to have unconstitutional destroyed valid rights.²⁹⁴ Of course any claims filed within the period

293. See Fisher, *Due Process and the Effect of Eastern Appropriation Proposals on Existing Rights, with Special Emphasis on the Michigan Proposal*, in *THE LAW OF WATER ALLOCATION IN THE EASTERN UNITED STATES* 441 (1958); Lauer, *supra* note 272, at 133-36; O'Connell, *supra* note 272, at 581.

294. See Lauer, *supra* note 272, at 264-68. An example of statutory limitation on existing uses can be found in § 303 and § 304 of the MODEL WATER USE ACT. The drafter's comments to these sections suggest that they should satisfy constitutional requirements.

"Section 303 [*Preservation of Existing Uses*].

Alternate 1

[(a) The withdrawal of water directly from any contained or ground water source, an application of water for the production of power, or an impounding by any dam, waterway obstruction, or reservoir of any contained water, which is a lawful and beneficial use, other than a domestic use, (1) being made at the effective date of this Act, (2) to be made in conjunction with facilities under construction at the effective date of this Act, or (3) made within the [three] years prior thereto, may be continued if the user complies with the provisions of section 304.]

Section 304 [*Certification of Existing Uses*].

(a) Within [three] years after the effective date of this Act, the Commission shall require by rule any person making a use preserved under section 303(a) to file a declaration of his use with the Commission within [three] months after the effective date of the rule. In its rules requiring the filing of declarations of existing uses, the Commission

would have to be closely examined, and if a meritorious claim turned up it would have to be recognized, but it is likely that not many such rights would be claimed, and that fewer could be substantiated.

ADEQUACY OF PROCEDURAL SAFEGUARDS

As a matter of fundamental fairness a person whose rights may be adversely affected by the action of an administrative agency should be afforded the opportunity to appear before the agency and present his case.²⁹⁵ This principle is most honored where the agency is adjudicating a case in which the person's rights are directly involved. The Iowa permit statute is an example of the general practice as it spells out in detail the hearing procedures afforded to an applicant for a permit, and requires hearing in connection with the cancellation or modification of a permit. It is generally recognized that certain procedural guarantees may be forgone in times of emergency. Also, where the agency is engaged in rule making (legislative) activity it is generally held that members of the general class of parties to be affected need not be provided a

may divide the State into areas and prescribe different dates for filings from the various areas.

(b) Any person making a use preserved under section 303(a) may file a declaration of his use with the Commission at any time.

(c) (1) When the Commission requires filings of declarations of uses by rule, it shall cause notice of the rule to be given by publication [once each week for the three weeks prior to the effective date of the rule] in a newspaper of general distribution in the affected areas.

(2) The Commission shall also cause notice of the rule to be given by registered or certified mail to any person required to file of whom the Commission has or could readily obtain knowledge or who has requested mailed notice to be given when the Commission adopted a rule requiring the filing of declarations.

(d) The declaration shall be in such form and contain such information as the Commission by rule prescribes including the quantity of water used, the purpose or manner of the use, the time of taking the water, and the point of diversion of the water.

Alternate 1

[(e) If no declaration is filed as required by rule of the Commission, the Commission shall conclusively determine the extent of the uses preserved under section 303(a).]

(f) If the Commission has not acted upon a declaration within [90] days after its filing, the Commission shall certify those uses described in the declaration.

(g) When uses preserved have been ascertained in accordance with the provisions of this section, the Commission shall issue a certificate describing those uses.

(h) The Commission shall hold a hearing upon the request of any person adversely affected by the certification or the refusal to certify any water use.

295. Mr. Justice Douglas once stated the proposition in these terms. "It is not without significance that most of the Bill of Rights are procedural. It is procedure that spells much of the difference between rule by law and rule by whim or caprice. Steadfast adherence to strict procedural safeguards is our main assurance that there will be equal justice under law." *Joint Anti-Facist Refugee Committee v. McGrath*, 341 U.S. 123 (1951). For a comprehensive discussion of the necessity of hearings in the administration process see 1 DAVIS, *ADMINISTRATION LAW* § 7 (1958).

hearing, although in many instances these parties are invited to present their views.²⁹⁶

The difficult procedural problem presented by the Iowa statute in this area concerns the participation of third parties in the hearing concerning issuance, modification or cancellation of a permit. Without question, any person interested in the outcome of the hearing may appear and support or oppose the issuance modification or cancellation of a permit offering both evidence and arguments. In the early days of administering the Iowa statute such appearances were commonplace. Whether such persons are entitled to any personal notice of the hearings admits of great uncertainties, however.

Under modern constitutional notions of procedural due process, a person whose rights may be adversely affected by any proceeding to which finality is to be accorded is entitled to a notice of such proceeding in a manner reasonably calculated, under all the circumstances, to apprise the interested person of the pendency of action and to afford him an opportunity to present his objections. In evaluating the adequacy of the Iowa notice provisions *vis-a-vis* third parties, three elements must be considered: (1) The nature of the interests of "affected" third parties, (2) the "finality" of the determination awarding the permit, and (3) the reasonableness of the notice provisions.

Third Party Rights

As an initial proposition, it would seem that the granting of a permit to use Iowa waters may affect rights of others than the particular permittee involved. Under the statute the grant of a permit is conditioned on the Water Commissioner's finding that the proposed withdrawal is not detrimental "to the interests of property owners with prior or superior rights who might be affected."²⁹⁷ As administered this limitation is rendered somewhat nugatory, yet it suggests that the legislature contemplated that the property interests of third persons might be affected by the issuance of a permit to any particular applicant.

More to the point might be the interest of an irrigator holding a permit in the granting of a permit to another irrigation use in the same reach of the stream. Under the summation flow doctrine utilized by the Water Commissioner each irrigation use permitted on a stream reach raises proportionally the level of stream flow that must exist before any irrigator may draw water from the stream without an approved sharing agreement.²⁹⁸ The granting of a new permit, therefore, could be said to reduce in some measure the quantum

296. See 1 COOPER, STATE ADMINISTRATION LAW 173-208 (1965); 1 DAVIS, *id.* at § 7.08

297. IOWA CODE §455A.20 (1962).

298. See discussion *supra* accompanying footnotes 185-207.

of water rights held by existing permittees. Although it is impossible to predict with certainty whether the courts would regard such third party rights as of a substantial enough nature to require that they be adequately notified of the hearing, in a proper case the likelihood of such a result must be recognized.

Finality of the Hearing

Before it can be said that third parties must be notified of hearings that might affect their water rights, it must be determined that such hearings can have a substantial adverse affect on such rights.²⁹⁹ Under the Iowa scheme, it might be suggested that third parties rights are not adversely affected because the proceeding through which a permit is issued lacks finality. This argument is premised on section 455A.28 which provides: "Subject to appeal in the manner provided by section 455A.19, subsection 8, a permit may . . . in case the water commissioner finds such modification or cancellation necessary to protect the public health or safety, or to protect the public interests in lands or waters, or to prevent substantial injury to persons or property in any manner" Under this provision it would seem that the question of the grounds for issuance of a permit is always open and that at any time subsequent to the granting of the permit, these matters may be re-opened and re-examined.

On the other hand, the statute provides no procedure for an interested third party to initiate a review of the grounds for continuation of a particular permit except the regular appeal provisions, which are usefully only to the extent that the third party is made aware of the hearing result in time to file an appeal. Therefore, it would seem that in many cases the third party who did not know about the permit application considered at the hearing would have no direct procedure to call in question the "substantial injury" to his rights, but would have to depend on the Water Commissioner to exercise his discretion and call for a hearing on the issue of cancellation or modification. Such a restricted method for later raising his rights seems to be considerably less protection for third parties than what could be provided by notifying them of the hearing in the first instance. Further, it could be argued that any damage that might occur between the granting of the permit and a later cancellation or modification is not remedied by the provision authorizing such cancellation or modification. On the whole, it would seem that the proceeding through which a water permit is granted partakes of sufficient finality as to third parties as to raise a procedural due process question if the notice of the hearing is not adequate.

299. See 1 COOPER, *op. cit. supra* note 296, 135-59; Oberst, *Parties to Administrative Proceedings*, 40 MICH. L. REV. 378 (1941).

Reasonableness of the Notice

Thus, we come down to the crucial question — the adequacy, as to third parties, of the notice provisions in the water statute. The test for adequate notice has been stated thusly: "The reasonableness and hence the constitutional validity of any chosen method may be defended on the ground that it is in itself reasonably certain to inform those affected . . . or, where conditions do not reasonably permit such notice, that the form chosen is not substantially less likely to bring home notice than other of the feasible and customary substitutes."³⁰⁰

Under the Iowa act the notice requirements are specified in detail. Upon application for a permit to use water under the Iowa act, the Water Commissioner shall cause due notice of a hearing thereon to be published once a week for two consecutive weeks in a newspaper of general circulation in each county in which the property affected is located.³⁰¹ This publication must be within thirty days, but not less than ten days, of the hearing date.³⁰² The statement "shall specify the date, time and place of hearing and shall include a concise statement of the designated beneficial purposes for which diversion is sought, the specific limits as to quantity, time, place, and rate of diversion, storage or withdrawal of waters, the name of the applicant and the description of the land upon which waters are to be diverted, stored or withdrawn." In addition, provision is made that such notice must be sent to interested state agencies,"— and to any other person who has filed a written request for a notification of any hearings affecting a designated area"³⁰³

Considering that a water user may be affected by a permitted use miles upstream and perhaps in a different county, can it be said with assurance that the notice provided for in the Iowa act is reasonably calculated to actually apprise all interested parties of the pendency of a permit application hearing.³⁰⁴ Four related issues are raised by this question: (1) The necessity for some type of personalized notice to interested third parties; (2) the sufficiency of the Iowa publication requirements if it is determined that general notice may be adequate; (3) the effect of permitting interested parties to file requests

300. *Mullane v. Central Hanover Bank & Trust Co.*, 339 U.S. 306, 315 (1950). This case is universally recognized as the touchstone for almost all due process notice questions.

301. IOWA CODE §455A.1 (1962) as amended by IOWA ACTS, 61st G.A., ch. 372 §1 (1965).

302. *Ibid.*

303. IOWA CODE §455A.19(3) (1962).

304. From the statutory syntax it seems clear that "property affected" in §455A.1 refers to the property on which the permitted use is to be made and not other property that may be affected by granting of the permitted use. One way around the notice problem discussed subsequently might be to strain the statutory language to obtain the latter interpretation.

for hearing; and (4) the possible curative effect of giving better notice than the statute requires.

(1) The constitutional requirements for due process notice laid down in the *Mullane* case have been further developed in recent years. An examination of several of the important cases should shed some light on the question of the sufficiency of the Iowa act's notice provisions.

Walker v. City of Hutchinson,³⁰⁵ involved a condemnation proceeding brought by an administrative agency regulating private property for the public benefit. Under the statutes of Kansas notice could be given by publication "in the official city paper," and it was so done even though the plaintiff's name and address could have been ascertained from the official city records. The Court held that because his name could have been easily ascertained, conditions reasonably required direct written notice, and the failure to so provide was a violation of fourteenth amendment due process of law. In discussing the *Mullane* principles, the Court emphasized the significance of the particular factual situation:

We there called attention to the impossibility of setting up a rigid formula as to the kind of notice that must be given; notice required will vary with the circumstances and conditions. . . . In the present case there seems to be no compelling or even persuasive reasons why such direct notice cannot be given. Appellant's name was known to the city and was on the official records. Even a letter would have apprised him that his property was about to be taken and that he must appear if he wanted to be heard as to its value.³⁰⁶

Recently the Court passed on the constitutionality of a statute dealing with condemnation of riparian rights which provided for notice by newspaper publication and the posting of handbills.³⁰⁷ The plaintiff failed to make a timely application for compensation for the taking of her riparian rights. The provision in issue required notice by publication in two specified New York City papers and two papers in the county where the property was located, once a week for six consecutive weeks. Also handbills were to be posted simultaneously along affected watercourses at appropriate intervals. The Court found actual compliance with these requirements. The plaintiff asserted that the requirements of *Mullane* and *Walker* were not met by this statute because she used the property only in the summer and thus the provisions were not likely to give her notice. The Supreme Court reversed the New York Court of Appeals holding that in the circumstances, the newspaper publications and posted notices did not measure up to the quality of due process required by *Mullane*

305. 352 U.S. 112 (1956).

306. *Id.* at 116.

307. *Schroeder v. City of New York*, 371 U.S. 208 (1962). The plaintiff's complaint alleged damages based on impairment of her riparian rights relating to bathing, swimming, fishing, and boating due to the diminution in the velocity of flow in the river.

and *Walker*. The crucial factor seemed to be that her name and address could have been easily discovered from the public records and that she did not actually see the newspaper notice, nor was any handbill posted on her property.

Closer to the issue under study is the decision of the Federal District Court in *Baumann v. Smrha*,³⁰⁸ holding that the Kansas Water Act was not constitutionally defective for its failure to provide for notice to affected parties for a permit hearing. However, the rationale for this decision seemed to rest on the ground that the Kansas permits are necessarily granted subject to valid existing vested rights and to prior appropriations, and provision for the protection of those rights, either by actions for damages or injunction, is carefully made by the act. The court seemed to be saying in effect that no notice issue was presented because no third party's rights can be affected by the hearing. As discussed earlier, this conclusion is not so easily reached under the Iowa statute.

The adequacy of the Iowa notice procedures is very difficult to evaluate under the emerging due process standards. The cases seem to say that if the party raising the issue has an interest in the nature of a property right, he must be given some sort of personalized notice if his identity is known or can be discovered in the exercise of reasonable diligence. Thus, it would seem to follow that where the identity of other permittees and existing nonregulated water users likely to be affected by an action in regard to a particular permit are known to the Water Commissioner, due process requires better service than a two-time publication. On the other hand, the cases developing this doctrine involve parties whose rights were clearly and directly affected by the action taken, not third parties, the nature of whose rights border on the speculative. It should be noted in this regard that the Iowa court has in the past attempted to distinguish between substantial and speculative interests in applying the *Mullane* standards.³⁰⁹

A modification of the approach adopted by the court in the *Baumann* case considering the Kansas provision might provide something of a compromise answer. It is very difficult to take the position that third parties are entitled to no notice because their rights can in no way be affected by the hearing. But because the Iowa permits are always subject to review and the rights of third parties, are therefore, never completely cut off, perhaps it is reasonable for Iowa to take the position that, although notice of hearings concerning

308. 145 F. Supp. 617 (D. Kan. 1956).

309. See *In re Estate of Pierce*, 245 Iowa 22, 27, 60 N.W.2d 894, 898 (1953) where the court said in connection to the right of a will contestant to receive personal notice of the admission of the will, "These objectors . . . only interest in the estate was contingent upon a successful contest of the will . . ." and then quoted from the *Mullane* decision the passage, "Nor do we consider it unreasonable for the State to dispense with more certain notice to those beneficiaries whose interests are either conjectural or future."

permits should be provided for interested third parties, a general notice reasonably likely to apprise such parties of the action will suffice, even in cases where better notice might readily have been given. Whether this rationale will weather the test of litigation, only time will tell; however, it does have a certain practical appeal to commend it.³¹⁰

(2) Assuming for the moment the validity of the foregoing rationale, can it be said that the Iowa provisions provide adequate general notice? The statute provides for publication of the notice for two weeks in the county in which the property affected is located. Is this reasonably calculated to apprise of the hearing a water user on the same reach of the stream, but in a different county? Ought not notice be published in every county in which an affected user might be located? The answers to these questions are not readily apparent from the case authorities. A certain common sense efficiency and expediency suggest that it might be nigh to impossible to determine the full range of effect of any particular water use. Still, to the extent it can readily be determined that effects are likely to cross county lines it would seem reasonable to require notice in the other counties.

Although by no means conclusive on the question, the rules and practices of other administrative agencies with regard to published general notice are suggestive of the result a court might reach on this question. A federal agency somewhat analogous in activity to the Water Commissioner is the Federal Communications Commission. The F.C.C., in allocating licenses for radio and television stations, regulates a resource — the air waves — not unlike water in many of its characteristics. The F.C.C. issues and modifies communication licenses after a hearing on the matter at which competitors of the applicant may appear and present objections. The F.C.C. rules provide for only a publication type notice of such hearings, and only in the city in which the facility in issue is located. Although the licenses at issue are prized considerably higher than water permits, no question has ever been raised concerning the sufficiency of such notice.³¹¹

Insofar as they purport to provide general notice, the Iowa provisions

310. It is likely that the notice provisions will stand a fair chance of being sustained by the Iowa Supreme Court under the doctrine of the *Pierce* case cited in note 309 *supra*. In federal court the outlook may not be so good, see 1 COOPER, *op. cit. supra* note 296, at 277.

311. See 47 C.F.R. §1.580(c) (1966). Admittedly, this is a weak argument for supporting the validity of the Iowa notice provision, but the weakness lies less in the analogy than in the circumstance that the F.C.C. rules have never been questioned. Signals from radio or T.V. transmitters in a particular city can affect stations in nearby cities in much the same way that withdrawal of water at one location can affect uses some distance downstream. The absence of challenge in a competitive business like communications might indicate the acceptability of the notion that requiring anything more than general published notice at the site of the proposed facility would be highly impractical.

are at best minimally adequate. As a matter of sound policy, notice should be published where it is likely to reach persons whose interests may be affected, even if outside the county of the proposed use.

(3) If the notice provisions are found inadequate in a particular case on either of the grounds discussed above, it is extremely unlikely that the opportunity to request notice³¹² provided in the act will cure the deficiencies. The very persons for whose benefit the notice requirements are created are those unlikely to know of the proceeding other than by receiving adequate notice at the time it is held. It makes little sense to suggest that because they had a right to file a request to receive notice if a proceeding of a certain kind were ever held, by not filing such a request they rendered themselves undeserving of adequate notice when the event occurred.³¹³

(4) One final possibility for sustaining the adequacy of the notice provisions deserves mention. Suppose the Water Commissioner affords better notice to interested parties than the statute requires, i.e., he mails notice of hearings to all parties known to be interested. Is the sufficiency of the notice to be judged by the notice in fact received by interested parties or by the notice provided for by the statute?

A formidable body of older authority substantiates the proposition that to be effective notice must be "legal", that is, it must comply with the terms of the statute under which it is given.³¹⁴ Under this theory, notice beyond the requirements of the relevant statutory provisions is extralegal and of no effect. Therefore, the argument runs, such notice would be ineffective to cure the constitutional deficiencies of the statute.

Arrayed against this ancient learning is the modern constitutional law concept of standing. The standing doctrine is concerned with the ability of a particular party to challenge the constitutionality of a procedure and is premised on the notion that constitutional questions should not be determined unless the claimant raising the issue can show some injury as a result of the alleged invalidity.³¹⁵

Applying this thinking, a party who in fact received constitutionally adequate notice, or had actual knowledge of a proceeding, could not complain that the statutory notice requirements were deficient. As yet, Iowa courts have not been faced with the necessity to choose between the "legal notice" and "standing" approaches to the due process notice problem. When the issue is faced the "standing" theory will probably hold sway. Hopefully, the water permit procedures will not furnish the occasion for this test.

312. IOWA CODE §455A.19(3) (1962).

313. See generally on waiver of notice, 1 COOPER, *op. cit. supra* note 296 at 278.

314. See *Wuchter v. Pizzutti*, 276 U.S. 13 (1928); *Boivin v. Talcott*, 102 F. Supp. 979 (N.D. Ohio 1951).

315. See generally 3 DAVIS, ADMINISTRATIVE LAW §22.01 *et seq.* (1958).

IMPROPER DELEGATION OF POWERS

Perhaps the stiffest challenge the water permit law faces in the constitutional area relates to the possible improper delegation of legislative powers to the Council. State courts, generally, and the Iowa court in particular, have been extremely vigilant in protecting the balance of powers between the several branches of government.³¹⁶ This concern that the various departments of government not overreach one another is expressed in Article III, Section 1 of the Iowa Constitution: ". . . no person charged with the exercise of powers properly belonging to one of these departments shall exercise any function appertaining to either of the others. . . ."

Receiving the closest scrutiny in Iowa are attempts by the legislature to confer on an administrative agency decision making powers requiring legislative-type judgment. Although the Iowa court has addressed itself frequently to the improper delegation issue, no clear pattern of approach has yet emerged. Iowa's handling of the delegation of powers issue depends heavily on the type of situation before the court. In almost all cases a balancing process is utilized, weighing the public interest against the danger to rights intended to be protected through the separation of powers concept. Where the public interest is highest, as in matters of health and safety, a proper delegation is usually found. Where the public interest is less and the threat to important rights is substantial, the likelihood is greater for finding an excess delegation. Where the scale is more or less in equilibrium, the presence or absence of several factors may cause the balance to be struck one way or the other. In passing, it should be noted that the state of the Iowa law on the issue of legislative delegation is very similar to that of most other jurisdictions.³¹⁷ The federal cases are much more liberal, though not much better reasoned.³¹⁸

The delegation of a power to an administrative agency will not be struck down solely because the power delegated is legislative in its nature. Powers of a type ordinarily exercised by the legislature may be delegated under circumstances where the necessity for such delegation may be readily perceived.³¹⁹

316. See 1 COOPER, *op. cit. supra* note 296, at 31-94; *Lewis Consol. School Dist. v. Johnson*, 256 Iowa 236, 127 N.W.2d 118 (1964).

317. See 1 COOPER, *id.*; 1 DAVIS, *op. cit. supra* note 295, at §§2.07-16.

318. See 1 DAVIS, *op. cit. supra* note 295, at §§2.01-06. The traditionally liberal Federal approach to undue delegation problems has been extended to new heights in the recent interstate water apportionment case, *Arizona v. California*, 373 U.S. 546 (1963), decree entered 376 U.S. 340 (1964). The majority rejected guidance from the traditionally applied equitable apportionment doctrine, and upheld the language of the statute as providing an adequate standard for the allocation of Colorado River waters to the contending states. The majority apparently was untroubled by the literal absence of any standard as they explained "while the Secretary must follow the standards [broad limits] set out in the Act, he nevertheless is free to choose among the recognized methods of apportionment or to devise reasonable methods of his own."

319. See DAVIS, *op. cit. supra* note 295, at §§2.07-10. In *McLeland v. Marshall*

This statement is most likely to hold true where the function to be performed lies in the area of public health, safety or morals.³²⁰ For example, the Iowa court has approved the delegation of authority to local health boards to discover and remedy any "nuisance, source of filth or cause of sickness" found on private premises in the community, including the power to prescribe necessary health rules.³²¹ The court pointed out that in absence of such a delegation of power the enforcement of acts involving public health would be ineffective.

Similarly, in the recent case of *Danner v. Hass*,³²² the Iowa court sustained the validity of a statute authorizing the State Department of Public Safety to suspend, without preliminary hearing, the license of an operator who has committed a "serious" violation of the motor vehicle laws. The plaintiff challenged the suspension of his license on the ground that the term "serious-violation" was so vague a standard as to constitute an unconstitutional delegation of legislative power to the public safety department. The court noted that the question was not free from difficulty, but went on to state that the "trend of authority is to uphold a considerable vesting of discretion in the department for the purpose of promoting public safety."

Where the public interest in the regulatory activity carried on by the administrative agency is not large, but the possible prejudice to private rights involved is substantial, the delegation of power must be spelled out in sufficient detail that the administrative officer has relatively clear guidelines in which he must operate. For example, where the city of Des Moines by ordinance delegated to its board of zoning adjustments the power to authorize a permit to occupy a stockyard after receiving certain fire and health reports, the court found such ordinance completely devoid of guides or standards, conferring on the board "virtually unlimited power . . . to authorize or not authorize a permit. . . ."³²³

Even where the public interest is substantial, a strong possibility for deprivation of individual rights may cause the courts to require clear legislative standards. For example, where the state highway commission was authorized

County, 199 Iowa 1232, 1238, 201 N.W. 401, 406 (1925) the court said:

The exact line of demarcation between legislative power and administrative duties, in some cases, is not easily determinable. It may be stated in a general way that it is for the legislature to determine what the law shall be, to create rights and duties and provide a rule of conduct. This does not necessarily mean that the legislature must lay down a strict rule that must be followed by an administrative officer; but that an executive or commission may be vested by the legislative branch of the government with discretion within certain limits, in carrying out the provisions of a statute.

320. See 1 COOPER, *op. cit. supra* note 296, at 85-87 and cases cited therein.

321. *State v. Strayer*, 230 Iowa 1027, 299 N.W. 912 (1941).

322. 134 N.W.2d 534 (Iowa 1965). See also *Broadlay v. Sioux City*, 229 Iowa 1291, 291 N.W. 171 (1940).

323. *Chicago, R. I. & Pac. R.R. v. Liddle*, 253 Iowa 402, 408, 112 N.W.2d 852, 855 (1962).

to establish regulations governing the use of highways, the violation of which would constitute misdemeanors, the court found an unlawful delegation of power owing to the absence of any real standards to guide the agency in formulating its rules.³²⁴

In circumstances in which the public interest in the activity regulated is substantial but less critical than matters touching on safety and health and no great threat to private rights is apparent, it is very difficult to predict how the court will resolve the adequacy of the standards provided to guide administrative decisions. One factor recognized in Iowa in such cases is the need for relatively broad standards where a particularly complicated activity is being regulated to permit the administrative agency's expertise to be utilized. In *Miller v. Schuster*,³²⁵ the court approved a grant of power to the State Banking Board authorizing it to fix maximum interest rates for small loans in an amount "as will induce efficiently managed commercial capital to enter such business in sufficient amount to make available adequate credit facilities to individuals without the security or financial responsibility usually required by commercial banks." The court explained its holding on the basis of a long standing "common sense" policy through which due regard is given to the difficulty of adapting legislation to complex conditions.

However, the difficulty of legislating effective standards does not excuse the failure to specify any standards whatsoever where it is clear some standards could be formulated. In an important recent case the court struck down the grant of power to the state superintendent of public instruction to "formulate standards, regulations and rules . . . for the approval of the schools and public junior colleges under his supervision," and to enforce such rules by removing from his approved list schools which he finds do not comply with them.³²⁶ The statute in question contained no provisions expressly bridling the superintendent's exercise of this discretion in these matters. As the court put it, the statute seems "to give the superintendent, with the approval of the department, unlimited authority to do whatever he deems best in furthering the educational interests of the state." The court continued by recognizing that the modern trend is to require less exactness in the setting of legislative standards, but held "where standards or guidelines are readily possible, we think the legislature may not abandon them altogether. . . ."

Other factors that may play a role in the outcome of cases of this type are the extent to which the regulatory action is penal in nature, the degree to which the separation of powers principle is compromised, the extent to which

324. *Goodlove v. Logan*, 217 Iowa 98, 251 N.W. 39 (1933).

325. 227 Iowa 1005, 289 N.W. 709 (1940), 25 IOWA L. REV. 812 (1940).

326. *Lewis Consol. School Dist. v. Johnson*, 256 Iowa 236, 127 N.W.2d 118 (1964).

regulation of the type at issue is established as a matter of tradition, and the measure of procedural protections built into the regulatory scheme.³²⁷

What does all of this discussion forebode for the Iowa water permit statute? Several sections of the Iowa act would seem to be susceptible to attack on delegation of powers grounds. Under section 455A.20 the Water Commissioner is directed to issue a permit if he determines that the use in question "will not be detrimental to the public interests . . . , or to the interests of property owners with prior or superior rights who might be affected. . . ." Later in the same section in relation to renewal of permits, it is provided ". . . permits *may* be renewed by the Water Commissioner for any period of time not to exceed ten years." Section 455A.21 attempts to assist the administrator in his deliberations by directing him that "the declared policies and principles of beneficial use, as set forth in this chapter, shall be the standard for determination. . . ." Section 455A.28 authorizes the Water Commissioner to modify or cancel a permit . . . " in case of any breach of the terms or conditions thereof or in case of any violation of the law pertaining thereto by the permittee . . . or in case the Water Commissioner finds such modification or cancellation necessary to protect the public health or safety or to protect the public interests in lands or waters, or to prevent substantial injury to persons or property in any manner."

In relation to the issuance of a permit, it could be argued that the standards are illusory and in fact the Water Commissioner is given complete discretion in the issuance of a permit. After all, whether a use is detrimental to the public interest or to other private rights is not a matter of fact; these are matters requiring the exercise of the Commissioner's judgment. If the judgment goes against the applicant, the permit is not issued. How many definitions might be imagined to such vague terms as "detrimental," "public interest," and "superior rights." Are these meaningful guidelines for the exercise of administrative discretion? Does reference to the "policies and principles of beneficial use" serve to chart the administrator's path of decision?

Similarly, where are the standards governing the exercise of the Commissioner's discretion in renewing a permit? Presumably, if the Commissioner may renew a permit, he also may not. What criteria are to be employed in determining whether or not to renew? The same sort of objections can be raised concerning the modification and cancellation powers. What standards control the terms and conditions on which a permit is issued, the breach of which may lead to cancellation? What Solomon knows when "any manner" of injury to persons or property is substantial? Of what law pertaining to permits may

327. See 1 COOPER, *op. cit. supra* note 296, at 74-91; 1 DAVIS, *op. cit. supra* note 295 at §2.10.

the violation lead to cancellation or modification of the permit; is it the rules and regulations promulgated by the Council?

Anyone familiar with state delegation of powers cases will realize that these questions are by no means spurious or facetious. These are the kinds of inquiries courts make when issues of legislative standards are presented to them. The rhetorical nature of many of these questions indicates the potential vulnerability of the Iowa statute. But how vulnerable is it really?

Projecting the water statute against the backdrop of Iowa authority, no completely analogous situation emerges. Although the public has a great interest in water, regulation of the resource may not quite reach the level of police power exercise found in the health and safety regulation cases, although a sound argument could be made that it should.³²⁸ On the other hand, the private rights being regulated are of questionable substance. Consider the tenuous nature of both the existing interests being regulated and the new rights created by the statute. Hardly the weighty variety of rights that cause the judicial balancing arm to tilt abruptly downward.

The situation posed by the water regulation statute is more similar to the *Miller and Lewis School District* cases where the test employed by the court seemed to be whether the explicitness of the legislative standards were reasonably appropriate to the flexibility and discretion necessarily required of the administrative agency by reason of the complexity of the task with which it is charged. If the water act is measured against this criterion, the chances for a finding of constitutional delegation seem bright.

It cannot be said in connection to the water statute, as was said in *Lewis School District*, that no standards were provided by the legislature. The act purports to provide standards, although in some instances it may be necessary to imply them. The principle difficulty is the vagueness of the standards. However, water use regulation is an incredibly complex matter. Such regulation necessarily involves utilization of the talents of an expert administrative agency. Assuming the legislature has determined to regulate water (and note that a paramount state interest in water resources was declared), how much more definite standards than those contained in the act could be formulated? Is beneficial use not a standard that can be intelligently interpreted?³²⁹ The difficulty of creating more specific guidelines was compounded by the fact that nowhere had experience at the type of regulation envisioned by the Iowa statute been acquired. Judged on a common sense basis, the standards provided by the water statute should be found sufficient considering the uncertainties inherent

328. *Cf.* *State v. Van Trump*, 224 Iowa 504, 275 N.W. 569 (1937) where a rule making grant to the Conservation Commission was held an unconstitutional delegation.

329. For an excellent collection of cases discussing the constitutional adequacy of a standard couched in terms of "beneficial uses" see Ziegler, *Statutory Regulation and Water Resources*, in *WATER RESOURCES AND THE LAW* 87, 97-101 (1958).

in the regulatory venture at issue and the high current public interest in safeguarding the continued availability of adequate water supplies.³³⁰

Reinforcing this view of the act's validity are such factors as the adequate procedural guarantees provided in the statute, the availability of judicial review to correct abuses, the non-penal nature of the statute, and the circumstance that under the statute the agency is performing something of a proprietary function — managing a resource owned by the state. Also of possible relevance is the fact that the Water Commissioner has over the last ten years succeeded in interpreting and applying these vague standards to develop a rational and workable administrative system that has so far operated in such a fashion as to minimize the likelihood of the kinds of dissatisfaction that give rise to constitutional litigation.

One other rather far-fetched constitutional issue should be noted in passing. The Iowa act provided that “[a]ny person aggrieved” may appeal to the district court from a determination by the Natural Resources Council, and that the court is to try the matter *de novo* with the burden on the Council to prove its acts “reasonable and necessary.” The court has power to “make such order to take the place of the order appealed from as it is justified by the record before it.”³³¹ This provision might possibly be thought to present a constitutional question under the Iowa separation of powers provision as it purports to allow the court to review and alter all aspects of the Council's orders.

Courts often indulge in *de novo* review of certain acts deemed to concern an administrative agency's “judicial function.” Other acts considered to concern the discretion of the agency in its area of expertise, are termed “nonjudicial” functions, and it is review of these matters that is occasionally declared unconstitutional as an invasion of the executive power.³³² Although the Iowa act seems to authorize the courts to substitute their judgment for the Natural Resources Council's discretion in its area of expertise, it is unlikely the review

330. An excellent statement of the permissive doctrine relating to legislative delegation is contained in *American Power & Light Co. v. SEC*, 329 U.S. 90, 105 (1946).

The legislative process would frequently bog down if Congress were constitutionally required to appraise beforehand the myriad situations to which it wishes a particular policy to be applied and to formulate specific rules for each situation. Necessity therefore fixes a point beyond which it is unreasonable and impracticable to compel Congress to prescribe detailed rules; it then becomes constitutionally sufficient if Congress clearly delineates the general policy, the public agency which is to apply it, and the boundaries of this delegated authority. Private rights are protected by access to the courts to test the application of the policy in the light of these legislative declarations.

331. IOWA CODE §455A.37 (1962).

332. See *Sellin v. City of Duluth*, 248 Minn. 333, 80 N.W.2d 67 (1956) (discharge of employees); *Jones v. Marsh*, 148 Tex. 362, 224 S.W.2d 198 (1949) (denial of license); *Household Fin. Corp. v. State*, 40 Wash. 2d 451, 244 P.2d 260 (1952) (denial of license); *Jaffe v. State Dept. of Health*, 135 Conn. 339, 64 A.2d 330 (1949) (revocation of license).

provision could be successfully challenged as an unconstitutional delegation of executive power to the judiciary. Such an arrangement is probably unwise, but it should not be unconstitutional.

CONCLUSIONS AND RECOMMENDATIONS

This work might have appropriately be entitled "A *humid* decade of experience, etc." One factor that must constantly be kept in mind in evaluating this discussion of the Iowa experience is the circumstance that this water allocation scheme, born in the drought years of the mid 1950's, has had its infancy blessed with nearly a decade of relatively abundant water supplies. This general plentitude of water has been something of a mixed blessing. It has enabled the administrative agency delegated to carry out the legislative plan to evolve its regulatory techniques with a minimum of resistance. On the other hand, the relative lack of competition for Iowa's water has postponed the kind of conflicts that constitute the sternest test for such a regulatory scheme. The permit system seems to work very well in Iowa, but there is always that haunting uncertainty of how it will work under the stress of drought.

Adoption of the Iowa water permit system signaled the beginning of a new era in Iowa water use law, but the Iowa act was by no means a radical solution to water allocation problems in terms of either the changes actually wrought in Iowa water rights or the contemporary thinking about water use as reflected by the water law of other states. Although the Iowa system has several unique characteristics that render it readily distinguishable from other states' water use laws, the Iowa statute is essentially eclectic, attempting to draw the best and most appropriate features from a number of different sources. As written and administered, the system is characterized by an extremely broad coverage of water uses and a relatively low degree of regulation thereof.

Because the Iowa legislation seemingly was generated in great measure by concern about increased demand for draught-diminished stream supplies anticipated from a rapidly growing interest in irrigation within the area, the principal regulating function of the Iowa system has been to settle the heretofore uncertain position of irrigation in the hierarchy of water uses. Under the riparian system, it was unclear whether any priority existed between various uses such as municipal, industrial, and irrigation; all are artificial uses, but only irrigation is completely consumptive. Under the permit system as administered, an irrigation use in excess of five thousand gallons a day is a regulated use, while municipal and industrial uses are initially unregulated. Further, among regulated uses, the totally source-depleting nature of irrigation is recognized through the specification of protected minimum flows in the permits of all irrigators withdrawing from streams. The effect of the protected minimum

flow requirement is to prevent consumptive users from withdrawing water during periods of low-flow that would otherwise be available to nonconsumptive users. To date, only all irrigation permits are written to contain protected flow limitations, although many other uses may be partially source depleting. Thus, to the extent the irrigator had rights equal to other artificial users under Iowa's riparian rules, the water permit statute has altered those rights through recognition of the essential difference between irrigation and other less consumptive uses. However, in all likelihood no persuasive constitutional objections can be raised concerning this alteration of an indefinite right into a regulated use.

Aside from the changes relating to irrigation, Iowa water users have approximately the same rights under the statute as they did under common law. True, if their use exceeds the statutory minimum, they must apply for a permit, but if the use is beneficial (and it is difficult to conceive of a user making a non-beneficial use, as the term is defined in the statute) the permit may be obtained with a minimum of expense and delay. Presumably, any one may receive a permit to use water if he can show his use beneficial. The statute makes no requirement that the user own land contiguous to the water supply. This represents a departure from riparian principles, but because no power to obtain access rights is granted in the statute, it is unlikely that many nonriparians will seek permits. Another change of little practical consequence is the possibility of losing a water use right through nonuse created by the act.

Because the law, as administered, attempts to create no priorities among users, permittees under the act occupy the same general position as did riparian owners under the common law. Rights of water users not regulated by the statute are still apparently fully governed by riparian principles. No real advantage is enjoyed by regulated or nonregulated users over one another, save in the case of irrigators.

Other than regulating irrigation, the principle achievement of the Iowa act has been the creation of a base upon which further regulation can be built when it becomes necessary to do so. The permit system serves several very important purposes. In the first place it establishes conclusively the principle that water use is an appropriate subject for regulation in Iowa and it allows for the development of an administrative framework through which future problems can be handled. Secondly, it takes the formulation of water rules away from the courts, and places it in the hands of a public agency which will presumably develop considerable expertise in handling the problems of water use. Moreover, it serves the very important function of gathering information. Many of the problems encountered in the common-law rules concerning riparian owners and ground water were due to a lack of factual knowledge about water. No efficient regulatory system can exist until it is known how much water is available, how it is used, and what effect such use has on the supply. This information is now being systematically gathered and recorded.

Finally, the Iowa act provides for the public enforcement of the newly promulgated water rules. Violations of the common-law water rules could be ended only by those private citizens who had standing to complain of the violations. This was, at best, an inefficient system of enforcement. The Iowa act provides an agency which is attuned to the public interest, and which is given the power to enforce the rules by which the public interest is served. The permit system does not contain the answers to all the questions concerning the use of Iowa's water resources; it does, however, provide many of the tools through which those answers may ultimately be found.

The temptation at this juncture is to include a long and detailed list assembling, in one place, all of the relatively minor suggestions and recommendations scattered throughout this work. Such a list would undoubtedly include some fairly important items such as the suggested amendment to cure the shadowy vested rights problem and the recommendation relating to providing better notice of hearings to affected third parties. This temptation is resisted in favor of placing concentration on one issue that strikes to the very heart of the permit system under development in Iowa.

Perhaps the most unusual characteristic of the Iowa system, at least as presently administrated, is that it does not purport to do that which one would normally suppose to be the purpose of water regulation—the establishment of priorities of use for times of scarcity.

The supply of water is relatively inelastic, but the demand for it is not. Population and technological advances in the next century may put a severe strain on our water resources. There is a limit to the number of users, consumptive or otherwise, that can coexist in using any water source without rendering that source permanently near or below the level required for it to be fully used beneficially by anyone. If and when water demands reach that stage in Iowa, necessity will compel the water administrators to discriminate between beneficial uses, and to grant priorities to those which are most beneficial in the light of the public interest.

At present, and for the immediate future, our resources are probably great enough to justify the practice of granting a permit for any beneficial use. Increased regulation may not be necessary as long as water scarcity is caused only by occasional temporary shortages or droughts. At some point in the future, however, this policy is likely to require re-examination.

If current projections of future water demands are to be believed, the time of true competition for water may not be as far away as many Iowans believe. If the Iowa permit system is to be an enduring institution in the water allocation field, those responsible for its development must face up to the need to begin thinking about the priorities problems of the future now while time still remains to fully investigate and reflect on the matter. Establishing priorities

is such a difficult undertaking because no recognized standards exist for evaluating the relative beneficialness of a use. It seems very likely that the greatest contribution the present water administration could make to assuring the orderly future development of Iowa's resources would be to commence now the protean process of research and deliberation that must underlie the creation of standards for distinguishing among beneficial uses. The hour may already be late.

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