
WISCONSIN'S WATER RESOURCES ACT OF 1965*

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The indiscriminate erection of structures on floodlands¹ with an increase in flood losses, and the despoilation of shorelands² with an increase in the deterioration of water quality have recently received increasing attention at state and national levels. This attention has resulted in the issuance of a presidential executive order on the prevention of flood damage and in the enactment of federal and state flood damage prevention and water resource protection legislation.

The President of the United States, as a result of a report on federal flood control policies, issued Executive Order No. 11296³ directing the heads of all federal executive agencies to provide leadership in preventing uneconomical use and development of the Nation's floodlands; requiring all federal agencies to evaluate flood hazards associated with federal development proposals; and requiring all federal grant, loan, and mortgage insurance agencies to evaluate flood hazards so far as practical to preclude the uneconomical, hazardous, and unnecessary use of floodlands.

The Congress of the United States amended the Federal Water Pollution Control Act⁴ by passage of the Water Quality Act of 1965⁵ so as to provide that if the states did not establish and adopt water qual-

*Laws of Wis. ch. 614 (1965); selected excerpts appended to this Comment.

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1. Floodlands may be defined as those parts of a stream valley which are periodically subject to inundation and should be determined on the basis of careful hydrologic and hydraulic engineering studies.

2. Shorelands have been recently defined by the Wisconsin Legislature as those lands within a specified distance from lakes, streams, ponds, sloughs, and flowages.

3. 3 CFR 599, 33 U.S.C. 701.

4. Act of Jul. 9, 1956, ch. 518, §§ 1-6, 70 Stat. 498.

5. Pub. L. No. 89-234, §§ 7(c)-(e) & 8 (Oct. 2, 1965).

ity standards applicable to interstate waters, the Secretary of the U.S. Department of Health, Education and Welfare would promulgate such standards. These standards are to protect the public health and welfare and enhance the quality of water, taking into consideration the needs for public water supplies, wildlife propagation, and recreational, agricultural, industrial and other legitimate water uses.

In addition to establishing and adopting such interstate water quality standards, the Wisconsin Legislature adopted the Water Resources Act of 1965, granting to counties, cities, and villages, shoreland regulatory powers and to the state, floodland regulatory powers. This Act further provides that if counties do not adopt shoreland regulations and if counties, cities, and villages do not adopt floodland regulations which meet state standards by January 1, 1968, the State Department of Natural Resources is required to adopt such regulations.

I. FLOODLANDS

A. Floodland Problems

Streams have from time immemorial periodically overflowed their banks and taken possession of their natural floodlands. Before the advent of intensive urban development, such flooding was usually accepted as a natural course of events, since it was recognized that the streams would in time revert to their normal channels leaving the adjacent floodlands dry and suitable for certain agricultural or other compatible uses. However, as urbanization has proceeded, man has begun to increasingly encroach upon the floodlands with urban land use developments which are incompatible with periodic flooding.

In addition to the inconvenience, hardship, danger, and economic loss caused to occupants and owners of floodlands, flood waters also disrupt utility and transportation services, create health and safety hazards, and damage industries, businesses, residences and agricultural operations. Flooding has a semi-direct impact on neighboring properties and on the community tax base, for in areas subject to flooding, structures may not be fully repaired or restored after flood waters recede. A cycle of deterioration thus begins which may lead to neighborhood blight, reduced property valuation, and a lower tax return to the municipality. In addition, certain local public flood losses may be incurred by public property damage, road and bridge repairs, cleanup operations, and emergency measures such as basement pumping, relief services, ice jam blasting, road and rail traffic rerouting, sandbagging, floodfighting, temporary floodproofing, and evacuation.

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B. Flood Damage Prevention Program

Once a comprehensive land use plan and a related water use plan have been prepared and adopted, numerous methods and devices for preventing flood damage are available. These include the protection, removal, discouragement, or regulation of certain types of development in floodland areas. For both economic and humane reasons local, state, and federal units of government may find it necessary to protect existing floodland development. Protection may be accomplished by such methods and devices as flood control works, flood warning, temporary evacuation, and floodproofing.

Persistent and frequent damage or danger to human life from flooding can sometimes be best avoided by permanent evacuation of the floodlands, by complete removal of structures or by the conversion of the structures to some less flood-vulnerable use. Methods for such evacuation, removal, or conversion include: public acquisition of floodlands, urban renewal and redevelopment, razing of substandard structures, nonconforming use provisions in zoning ordinances, public nuisance actions, and conversion of use. Several devices may be used to discourage development of floodlands. These include educational programs, flood warning signs, recordation of floodland boundaries on subdivision plats, tax assessment practices, financing policies, public development policies, and flood insurance.

However, it is costly to undertake public works programs, difficult to remove or convert existing development, and unrealistic to assume that all future flood-vulnerable development will be discouraged on floodlands. The prohibition and regulation of flood-vulnerable uses under local and state police powers has proved to be one of the most efficient, economical, and logical methods of preventing flood damage.

The Wisconsin Legislature has granted to counties, cities, villages, and towns, several police powers which implicitly or explicitly authorize floodland regulations. These police powers include the adoption and enforcement of zoning,⁶ land division,⁷ and sanitary and building ordinances.⁸ The Wisconsin Legislature has granted several powers to various state agencies that can affect development on floodlands. The State Department of Natural Resources is empowered to regulate the erection of structures and the depositing of materials in navi-

6. WIS. STAT. §§ 59.97(1)(c), 60.74(1)(a) 3, 61.35, 62.23(7) (1965).

7. WIS. STAT. § 236.45(1) (1965).

8. WIS. STAT. §§ 59.07(51), 60.18(3),(12), 60.29(13), 61.34(1), 62.11(5) (1965).

gable waters.⁹ The State Department of Industry, Labor, and Human Relations has been given certain building and safety code powers and the State Division of Health has been given certain subdivision approval powers.¹⁰ These powers could be reasonably extended to include rules pertaining to the safety, accessibility, and health of floodland development.

C. New State Floodland Powers

By passage of the State Water Resources Act of 1965, the Wisconsin Legislature granted a new floodland regulatory power to the state. This Act provided that where a county, city, or village had not adopted reasonable and effective floodplain regulations by January 1, 1968, the State Department of Natural Resources would be directed to adopt such regulations after a public hearing.¹¹ In addition, the costs of the state action shall be assessed and collected as taxes from the county, city, or village. The State Department of Natural Resources has prepared and promulgated a "Flood Plain Management Program" which includes general criteria which must be met by counties, cities, and villages.

This Act further provided that every structure, building, fill, or development placed or maintained within any floodplain in violation of a zoning ordinance is a public nuisance; and its creation may be enjoined and its maintenance abated by the suit of any municipality, the state, or any citizen thereof. Any person who places or maintains any structure, building, fill or development within any floodplain in violation of a zoning ordinance may also be fined not more than \$50 for each offense.¹²

II. SHORELAND AND WATER QUALITY

A. Shoreland and Water Pollution Problems

A delicate, complex, biotic relationship exists between the natural condition of shorelands, adjacent stream and lake waters, and the wildlife supported by such lands and waters. This relationship is greatly affected by the use made of the shorelands, the type of shore-

9. WIS. STAT. §§ 30.11-30.16 (Supp. 1965).

10. LAWS OF WISCONSIN, State Reorganization Act, ch. 75, (1967), renamed the State Department of Resource Development, State Industrial Commission, and State Board of Health.

11. WIS. STAT. § 87.30(1) (Supp. 1965).

12. WIS. STAT. § 87.30(2) (Supp. 1965).

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land cover, and man-made influences upon the amount and quality of surface and subsurface drainage in the shoreland areas. The quality of the total environment around streams and lakes depends to a considerable extent upon maintaining this biotic relationship in a healthy state.

Indiscriminate dredging of streams and wetlands and the placement of dredged material on the shorelands disturb stream bottoms, destroy natural banks, create sedimentation and turbid water, destroy the natural setting, and impair the wildlife habitat. Uncontrolled cutting or clearing of shoreland woods causes serious soil erosion and sedimentation problems, reduces wildlife cover and food sources, permits additional nutrients and other pollutants to run off into surface waters, and usually destroys the natural scenic quality of shoreland areas.

Poor farming practices such as uncontrolled cattle watering, overgrazing, spreading of manure on frozen ground, and tillage of steep slopes contribute to stream bank destruction, silting of drainage ditches, presence of animal fecal wastes in waters, fertilization of waters, soil erosion, and stream sedimentation with a reduction in water quality. The conversion of existing seasonal cottages to year-round residences and the erection of additional dwellings on shoreland lots of inadequate widths and areas, located on steep slopes or distinctly visible from the water, have or will effectively obliterate the remaining shoreline growth. Heavy grading during subdivision development and uncontrolled cutting and filling during road construction subject shorelands to heavy erosion and subject surface waters to unnecessary siltation.

Malfunctioning soil absorption and sewage disposal systems produce an untreated effluent containing coliform bacteria and permit this effluent to seep, drain, wash, or percolate into ground or surface water supplies. Such conditions cause fertilization of surface water with excessive algae growth, turbid water, impairment of the water quality for various types of recreational uses and may result in health hazards including danger of cholera, typhoid, paratyphoid, dysentery, and hepatitis.

Sewage treatment plants, located on floodlands, which are under-designed, overused, inefficiently operated, poorly maintained, or connected to sewage systems with high infiltration rates may result in untreated or undertreated sewage entering the surface waters.

B. Shoreland and Water Quality Protection

The use of lands within a watershed and, more particularly, within shoreland areas of a watershed, is directly and intimately related to the quality of the surface and ground waters within the watershed. Shoreland uses affect, and are affected by, water quality levels in the adjoining streams and lakes. Any consideration of shoreland protection, therefore, should include consideration of related surface water quality.

Once a comprehensive water use plan and related land use plan has been prepared, applicable water quality objectives selected, and water quality standards adopted, numerous methods and devices for protecting water quality are available. These include the correction, abatement, and prevention of water pollution and the regulation of shoreland uses.

Certain existing land and water uses may have such an adverse effect upon water quality, because of their nature or magnitude, that it becomes necessary to inaugurate costly remedial or rehabilitation measures. Such measures may include exportation of liquid wastes, public acquisition of shoreland areas, redevelopment of existing urban land uses, and rehabilitation of streams and lakes, including removal of undesirable plants and animals, restocking with fish and game, and replanting of shorelands.

Many of the causes of water pollution can be alleviated, reduced, or abated by certain methods or practices which include improved waste treatment, alternative methods of treatment, low streamflow augmentation, replacement of private waste disposal systems and good soil and water conservation practices.

However, it is costly to undertake those measures necessary to correct shoreland problems or reduce water pollution. The prohibition and regulation of certain uses under local and state police powers has been found to be one of the most efficient, economical, and logical methods of preventing shoreland problems and protecting water quality. Generally, shorelands should be restricted to certain open uses such as wildlife preserves, parklands, agricultural uses, woodlands, wetlands, and very low-density residential uses so that the natural terrain, cover, wildlife, and aesthetic setting is the least disturbed. It has been recommended, for example, that the shorelines of streams having a width less than two hundred feet should not be divided into building sites nor built upon nor settled, and that at least twenty-five

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percent of the shore frontage of lakes be preserved in a natural state.¹³

Cities, villages, and towns in Wisconsin have been granted, as part of their broad statutory grant of authority, sufficient police power to regulate for the public health, safety, and general welfare.¹⁴ Some shoreland and water quality protection measures could probably be construed to be authorized under these broad police powers.

C. New Local Shoreland Powers

By passage of the State Water Resources Act of 1965, the Wisconsin Legislature specifically authorized municipal zoning regulations for shorelands and defined "municipality" as "a county, village or city."¹⁵ In addition, counties were specifically authorized to enact shoreland zoning ordinances separately from comprehensive zoning ordinances in unincorporated areas without town board approval.¹⁶ The shoreland regulations authorized by this Act have been defined so as to include land division regulatory powers delegated by law to counties, cities, and villages thereby making the State Platting Statutes¹⁷ applicable to shorelands.¹⁸ In addition, counties were specifically granted power to exercise all of their land division regulatory powers in shoreland areas.¹⁹ The purposes of such zoning and land division regulations in shoreland areas were specified as follows:

1. Maintain safe and healthful conditions,
2. Prevent and control water pollution,
3. Protect spawning grounds, fish and aquatic life,
4. Control building sites, placement of structures and land uses, and
5. Reserve shore cover and natural beauty.²⁰

The State Department of Natural Resources was required to prepare a comprehensive plan as a guide for the application of municipal ordinances regulating shorelands. Such plan is to be governed by standards which prefer the following shoreland uses:

1. Domestic uses,
2. Uses not inherently a source of pollution,

13. WIS. CONSERVATION DEP'T, LAKE AND STREAM CLASSIFICATION RECOMMENDATIONS Nos. 7 & 8, (1963, 1965).

14. WIS. STAT. §§ 60.18(3), 61.34(1), 62.11(5) (1965).

15. WIS. STAT. § 144.26(2)(c) (Supp. 1965).

16. WIS. STAT. § 59.971 (Supp. 1965).

17. WIS. STAT. ch. 236 (1965).

18. WIS. STAT. § 144.26(2)(e) (Supp. 1965).

19. WIS. STAT. § 59.971(3) (Supp. 1965).

20. WIS. STAT. § 144.26(1) (Supp. 1965).

3. Location of uses tending to minimize the possibility of pollution, and
4. Dispersion of uses.²¹

The State Department of Natural Resources was also required to prepare and provide to counties, cities, and villages, recommended standards for navigable water protection regulations which meet the objectives of the State Water Resources Act with particular attention to be given to the following:

1. Safe and healthful conditions for the enjoyment of aquatic recreation,
2. Demands of water traffic, boating and water sports,
3. Capability of the water resource,
4. Proper operation of septic tank disposal fields,
5. Building setbacks from the water,
6. Preservation of shore growth and cover,
7. Conservancy uses for low-lying lands, and
8. Layouts for residential and commercial development.²²

The objectives of maintaining healthful conditions and preventing water pollution would seem to infer the necessity of sanitation regulations in shoreland areas. This is confirmed by Items 1 and 4, above, relating to healthful recreation and operation of septic tank disposal fields. The objectives of maintaining safe conditions and protecting spawning grounds would suggest the need for aquatic recreation regulations. This is confirmed by Items 1, 2 and 3, above, relating to safe recreation, water recreation demands, and water resource capabilities.

The Wisconsin Legislature has authorized its cities, villages, and towns to adopt certain aquatic recreation regulations provided that all municipalities having jurisdiction on a given lake enact identical regulations; it has further provided that if any county operates a marina development adjacent to any waters or lake, this authority shall exclusively vest in the county insofar as the local regulations relate to the development, operation, and use of the marina and its adjoining waters.²³

D. New State Shoreland Powers

The Wisconsin Legislature by enactment of the State Water Resources Act of 1965 transferred various water pollution control and

21. WIS. STAT. § 144.26(5) (a) (Supp. 1965).

22. WIS. STAT. § 144.26(6) (Supp. 1965).

23. WIS. STAT. § 30.77(3) (1965).

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other regulatory functions of the Public Service Commission, the former State Board of Health, and the former State Committee on Water Pollution, to the State Department of Resource Development, since renamed State Department of Natural Resources.

As a result, the State Department of Natural Resources now regulates the following: the diversion of surplus waters; the use of water for irrigation or other agricultural purposes; the construction or enlargement of certain waterways; the grading or removal of top soil where exposed areas exceed 10,000 sq. feet; the changing of stream courses; the removal of stream and lake bed materials; and the construction, operation, maintenance and abandonment of dams on navigable waters.²⁴

In addition to the above powers, the State Water Resources Act of 1965 assigned the following new shoreland and water quality protection powers and duties to the State Department of Natural Resources:²⁵

1. Adopt rules setting standards of water quality to be applicable to the waters of the State²⁶ and issue orders and adopt rules for the construction, installation, use, and operation of systems, methods, and means of preventing and abating pollution of the waters of the State.
2. Consult and advise on the best method of disposing of sewage or refuse and supervise chemical treatment of waters and furnish equipment for the purpose of suppressing algae, aquatic weeds and other nuisance-producing plants and organisms.
3. Order or cause the abatement of any nuisance such as the discharge of untreated domestic sewage or pumpage from septic tanks, dry wells, or cesspools into any surface water or drainage ditch or any source of filth or cause of sickness caused by improper sewage disposal facilities.²⁷
4. Prohibit the installation or use of septic tanks in any area where their use would impair water quality.

24. WIS. STAT. chs. 30, 31 (Supp. 1965).

25. WIS. STAT. § 144.025(2) (Supp. 1965).

26. The Department of Natural Resources has prepared and promulgated water use and quality standards for interstate waters and is in the process of preparing such uses and standards for intra-state waters.

27. The Wisconsin Legislature recently acted to prohibit solid waste disposal sites and facilities in floodland and shoreland areas except by a permit issued by the State Department of Natural Resources.

5. Order sewage treatment systems secured, altered, extended, replaced, or constructed within a specified time if a nuisance or menace to health or comfort tends to be created.

This state agency has also been given the power to adopt shoreland ordinances if counties have not adopted such ordinances by January 1, 1968 or if, after notice and hearing, the agency determines that the county ordinance fails to adequately protect shorelands and water quality.²⁸ The cost of the promulgation and enforcement of such shoreland ordinances by the State shall be assessed and collected as taxes from the county.

The State Department of Natural Resources has prepared and promulgated a "Shoreland Management Program" which includes general criteria for meeting the requirements of the State Water Resources Act of 1965. These state criteria require that counties enact land division and sanitary ordinances as well as zoning ordinances in the shoreland areas.

III. DEFINITIONS

The definitions of the terms "floodlands" and "shorelands" becomes very important not only to the legality of floodland and shoreland regulations but to the determination of which lands are to be the subject of such regulations. Because the Wisconsin Statutes relate the definition of the term "shorelands" to floodlands and navigable bodies of water, proper discussion of the definition of the term "shorelands" also requires discussion of the definitions of first, floodlands and then, navigable waters.

A. Floodlands

The State Water Resources Act of 1965 does not precisely define floodlands but speaks only of those areas within a stream valley within which "serious [flood] damage may occur" or "appreciable damage from floods is likely to occur."²⁹ In urbanizing areas, this statutory description of floodlands is not adequate for floodland determination and precise delineation necessary for effective and legal administration of floodland regulations. As a watershed or drainage basin becomes urbanized and the hydraulic characteristics of the stream and watershed are altered, additional areas of the stream valley become subject to flooding and it becomes necessary to regulate all of the potential, as well as existing, floodland areas.

28. WIS. STAT. § 59.971(6) (Supp. 1965).

29. WIS. STAT. § 87.30(1) (Supp. 1965).

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Floodlands may be defined as those parts of a stream valley which are periodically subject to inundation. It is apparent that this definition raises an important question concerning the frequency of inundation which must be resolved before the floodlands can actually be delineated and police power regulations applied to their use. Therefore, floodlands may be conceptually divided into three areas based upon differing degrees of flood hazard:

1. That area of the stream valley, normally occupied by the stream under average annual flow conditions, having the primary function of drainage and navigation.
2. That area of the stream valley, including the channel, wherein periodic inundation occurs and wherein flood depths and velocities are highest and most damaging; this area has the primary function of effectively carrying and discharging flood waters.
3. That relatively level area of the stream valley, beyond the area required to carry and discharge flood waters, wherein periodic inundation occurs, but wherein the flood depth and velocities are generally low, having the primary function of storing flood waters.

In order to relate the floodland regulations in a reasonable manner to the different flood characteristics and hazards associated with each of these three stream valley areas, the floodland area of a stream valley should be identified and divided into three regulatory areas as follows:

1. The channel—that portion of the floodlands normally occupied by a stream of water under average annual high-water flow conditions.
2. The floodway—that portion of the floodlands, including the channel required to carry and discharge the 100-year recurrence interval flood. If development and fill are to be prohibited in the floodplain, the floodway may be delineated as that area subject to inundation by the 10-year recurrence interval flood.
3. The floodplain—that portion of the floodlands excluding the floodway subject to inundation by the 100-year recurrence interval flood, or, where such data is not available, by the maximum flood of record.³⁰

30. S.E. WIS. REGIONAL PLANNING COMM'N [hereinafter cited as SEWRPC] TECHNICAL REPORT NO. 2, WATER LAW IN SOUTHEASTERN WISCONSIN (1966).

B. Shorelands

Unlike floodlands, which must be determined on the basis of careful hydrologic and hydraulic engineering studies, shorelands have been given a statutory definition. The State Water Resources Act of 1965 defines shorelands as all that area lying within the following distances from the normal high-water elevation of lakes, streams, ponds, sloughs, flowages, and other waters which are navigable under the laws of the State of Wisconsin: 1,000 feet from the shoreline of a lake, pond, or flowage; and 300 feet from the shoreline of a river or stream, or to the landward side of the floodplain, whichever is greater.³¹ (See Figure) The Wisconsin Legislature has not defined the term "normal high-water elevation"; however, the Wisconsin Supreme Court has held that the ordinary "high water mark" of a navigable stream means

. . . the point up to which the presence of the water is so continuous as to leave a distinct mark by erosion, destruction of vegetation, or other easily recognized characteristics; and where the bank at a particular place is of such character that the high-water mark cannot be easily determined; other places on the bank may be resorted to for the determination of the high-water mark.³²

It should be noted that the floodland and shoreland areas as defined by the Wisconsin Statutes are not mutually exclusive areas. The shoreland area along navigable waters always includes the floodlands, as shorelands have been defined as including floodlands.

C. Navigable Waters

The Wisconsin Navigable Waters Protection Law authorizes municipal shoreland regulations relating to lands under, abutting, or lying close to navigable waters and defines navigable waters as:

1. Lakes Michigan and Superior,
2. All natural inland lakes within Wisconsin, and
3. All streams, ponds, sloughs, flowages and other waters within Wisconsin which are navigable under the laws of the state.³³

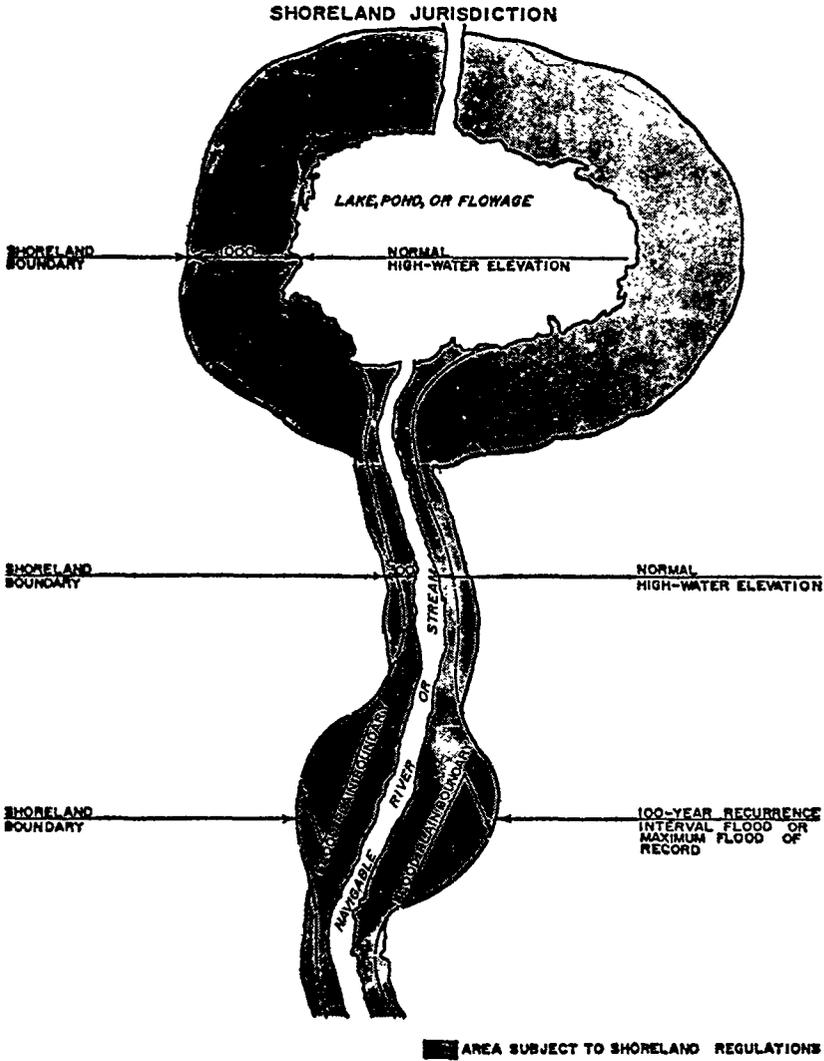
The definition of the clause, "navigable under the laws of the state," becomes very important to both the legality of shoreland regulations and the determination of those shorelands which are to be the subject of state and local regulations. The Wisconsin Legislature has

31. Wis. STAT. § 59.971(1) (Supp. 1965).

32. *Diana Shooting Club v. Husting*, 156 Wis. 261, 272, 145 N.W. 816, 820 (1914).

33. Wis. STAT. § 144.26(2)(d) (Supp. 1965).

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declared navigable waters to include all streams, lakes, sloughs, bayous, and marsh outlets which are "navigable-in-fact."³⁴

The Wisconsin Supreme Court has held that ". . . any stream is navigable-in-fact which is capable of floating any boat, skiff, or canoe of the shallowest draft used for recreation purposes."³⁵ By use of this generous recreational boating test of "navigability," virtually all natural lakes and ponds in the state became "navigable-in-fact." Man-made lakes or reservoirs caused by damming a stream or otherwise impounding a natural flow of water are also considered navigable. The late Professor Jacob H. Beuscher has noted that the stream, lake, or pond does not have to be capable of floating a boat, skiff or canoe every day of the year or over every rod of its length or surface area in order to be considered navigable.³⁶

IV. THE PROGRAM IN THE SOUTHEASTERN WISCONSIN REGION³⁷

The Southeastern Wisconsin Regional Planning Commission³⁸ is undertaking comprehensive watershed studies in the Root, Fox, and Milwaukee River Watersheds. These studies will document historic and projected flood damages and water pollution sources and will delineate those flood hazard areas subject to inundation by the 100-year recurrence interval flood. These watershed programs will result in comprehensive land and water use plans including recommendations for public works programs, bridge, road, and waterway opening design standards, pollution control measures, floodland structure removals, floodproofing methods, and parkland reservation, acquisition and development. The appropriate use of effective local or state floodland and shoreland regulations recently authorized by the State Water Resources Act of 1965 would serve to realize these plans and implement these recommendations.

The Southeastern Wisconsin Regional Planning Commission has

34. WIS. STAT. § 30.10 (1965).

35. *Muench v. Public Service Comm'n*, 261 Wis. 492, 506, 53 N.W.2d 514, 519 (1952).

36. SEWRPG TECHNICAL REPORT No. 2, *supra* note 30.

37. The Southeastern Wisconsin Region is a 2,688 square mile area in the southeast part of Wisconsin abutting Lake Michigan and the State of Illinois and containing the Counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington and Waukesha.

38. An areawide planning agency created by proclamation of the Governor on August 8, 1960 pursuant to WIS. STAT. § 66.945 (1965) upon petition of seven county governing bodies.

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conducted extensive land and water resource inventories including soil types, wildlife habitats, streams, lakes, wetlands, aesthetic and commercial forests, existing and potential park sites, scenic, historic and scientific areas, and existing land use. The majority of the prime resources inventoried, as well as many of those soils unsuited for urban development, were found to occur in a lineal pattern, designated "environmental corridors." These studies have resulted in a comprehensive regional land use plan designated to preserve such environmental corridors in a relatively natural state, and the Commission concluded,

. . . it is imperative that all of the primary corridors be preserved and protected. If man is to sustain himself within the Region, at a reasonable level of amenity, there is a 'point of no return' with respect to the deterioration and destruction of the underlying resource base, beyond which that base can no longer meet the demands upon it without a reduction in the standard of human life.³⁹

The appropriate use of carefully designed and effectively administered local or state floodland and shoreland regulations would serve to implement the regional land use plan and preserve and protect the resources lying within these environmental corridors including the water quality of those streams and lakes lying therein.

In order to assist the local communities in the Southeastern Wisconsin Region in meeting the requirements of the State Water Resources Act of 1965, the Community Assistance Division of the Southeastern Wisconsin Regional Planning Commission has prepared a *Floodland and Shoreland Development Guide*⁴⁰ which contains a discussion of floodland and shoreland problems, a comprehensive enumeration of flood damage prevention and shoreland protection methods, and suggested floodland and shoreland delineation procedures. This planning guide also contains suggested zoning districts, model sanitary and aquatic recreation ordinances, and special floodland and shoreland regulations which may be incorporated into existing zoning, land division, and building ordinances.

CONCLUSION

The prohibition and regulation of flood-vulnerable uses and certain shoreland and water abuses under local police powers is one of

39. SEWRPC PLANNING REPORT NO. 7, INVENTORY FINDINGS, 1963, Volume 1 (1964).

40. SEWRPC PLANNING GUIDE NO. 5 (1968).

the most logical and economical ways of preventing flood damage and protecting shoreland and water quality. Local units of government in Wisconsin have had floodland regulatory powers and now the Wisconsin Legislature has clearly and unequivocally granted counties, cities, and villages, shoreland regulatory powers by enactment of the State Water Resources Act of 1965. This Act further provides that if the counties do not adopt shoreland regulations or if the counties, cities, and villages do not adopt floodland regulations which meet state standards by January 1, 1968, the State Department of Natural Resources is required to adopt such regulations. In addition, the costs of the necessary floodland determination and ordinance promulgation and enforcement by the State shall be assessed and collected as taxes from the local unit of government by the State. Proper application of such floodland and shoreland regulations should prevent or reduce future flood damages, prevent additional water pollution, protect aquatic life and preserve shore cover and natural beauty along the streams and around the lakes in Wisconsin not only for the people of today but for countless generations.

APPENDIX

SELECTED EXCERPTS FROM THE STATE WATER RESOURCES ACT OF 1965

SECTION 1. STATEMENT OF POLICY AND PURPOSES. Continued pollution of the waters of the state has aroused widespread public concern. It endangers public health and threatens the general welfare. A comprehensive action program directed at all present and potential sources of water pollution whether home, farm, recreational, municipal, industrial or commercial is needed to protect human life and health, fish and aquatic life, scenic and ecological values and domestic, municipal, recreational, industrial, agricultural and other uses of water. The purpose of this act is to grant necessary powers and to organize a comprehensive program under a single state agency for the enhancement of the quality management and protection of all waters of the state, ground and surface, public and private. To the end that these vital purposes may be accomplished, this act and all rules and orders promulgated pursuant thereto shall be liberally construed in favor of the policy objectives set forth in this act. In order to achieve the policy objectives of this act, it is the express policy of the state to mobilize governmental effort and resources at all levels, state, federal and local, allocating such effort and resources to accomplish

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the greatest result for the people of the state as a whole. Because of the importance of Lakes Superior and Michigan and Green Bay as vast water resource reservoirs, water quality standards for those rivers emptying into Lakes Superior and Michigan and Green Bay shall be as high as is practicable.

SECTION 2. PREAMBLE. It is the intention of the legislature to create a department of natural resources to conserve our land, water, air, wildlife and other natural resources. The temporary reorganization commission created under chapter 265, laws of 1965, is hereby directed to include in its report to the 1967 legislature specific recommendations for the organization of a department of natural resources. The 1965 legislature recognizes the serious need in our state relating to water quality and the necessity of enabling the state to proceed with a bold program immediately. It is the intention of the legislature that the department of resource development, as reconstituted by this act, shall become a part of the department of natural resources upon creation of that new department. The provisions relating to the reconstituting of the department of resource development shall be in effect only until the effective date of an act creating the department of natural resources.

59.971 ZONING OF SHORELANDS ON NAVIGABLE WATERS.

(1) To effect the purposes of s. 144.26 and to promote the public health, safety and general welfare, counties may, by ordinance enacted separately from ordinances pursuant to s. 59.97, zone all lands (referred to herein as shorelands) in their unincorporated areas within the following distances from the normal high-water elevation of navigable waters as defined in s. 144.26 (2) (d): 1,000 feet from a lake, pond or flowage; 300 feet from a river or stream or to the landward side of the flood plain, whichever distance is greater. If the navigable water is a glacial pothole lake, the distance shall be measured from the high watermark thereof.

(2) (a) Except as otherwise specified, all provisions of s. 59.97 apply to ordinances and their amendments enacted under this section, but they shall not require approval or be subject to disapproval by any town or town board.

(b) If an existing town ordinance relating to shorelands is more restrictive than an ordinance later enacted under this section affecting the same shorelands, it continues as a town ordinance in all respects to the extent of the greater restrictions, but not otherwise.

(c) Ordinances enacted under this section shall accord and be con-

sistent with any comprehensive zoning plan or general zoning ordinance applicable to the enacting counties, so far as practicable.

(3) All powers granted to a county under s. 236.45 may be exercised by it with respect to shorelands, but it must have or provide a planning agency as defined in s. 236.02 (1).

(4) (a) Section 66.30 applies to this section, except that for the purposes of this section any agreement under s. 66.30 shall be affected by ordinance. If the municipalities as defined in s. 144.26 are served by a regional planning commission under s. 66.945, the commission may, with its consent, be empowered by the ordinance of agreement to administer each ordinance enacted hereunder throughout its enacting municipality, whether or not the area otherwise served by the commission includes all of that municipality.

(b) Variances and appeals regarding shorelands within a county are for the board of adjustment for that county under s. 59.99, and the procedures of that section apply.

(5) An ordinance enacted under this section supersedes all provisions of an ordinance enacted under s. 59.97 that relate to shorelands.

(6) If any county does not adopt an ordinance by January 1, 1968, or if the department, after notice and hearing, determines that a county has adopted an ordinance which fails to meet reasonable minimum standards in accomplishing the shoreland protection objectives of s. 144.26 (1), the department shall adopt such an ordinance. As far as possible, s. 87.30 shall apply to this subsection.

87.30 FLOOD PLAIN ZONING. (1) **STATE POWERS.** If any county, city or village does not adopt a reasonable and effective flood plain zoning ordinance by January 1, 1968, the department shall, upon petition of an interested state agency, a municipality, 12 or more freeholders, or upon its own motion as soon as practicable and after public hearing, determine and fix by order the limits of any or all flood plains within such county, city or village within which serious damage may occur. Thereafter the department shall as soon as practicable after public hearing adopt a flood plain zoning ordinance applicable to such county, city or village. Thirty days' notice of all hearings on flood plain determination or zoning before the department shall be given to the county, city or village clerk, the clerks of all towns where lands may be affected, to the highway commission and to the conservation commission. Each state agency mentioned shall keep an official record of all proceedings. Exhibits and testimony shall be a part of the official record. Failure of a county, city or village to adopt a flood plain zoning ordinance for an area where appreciable damage from

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floods is likely to occur or to adopt an ordinance which will result in a practical minimum of flood damage in an area shall be prima facie proof of the necessity for action specified herein by the department. The department shall make a decision in writing of insufficiency of any county, city or village flood plain zoning ordinance before adopting an ordinance superseding such county, village or city ordinance. All final orders, determinations or decisions made under this subsection shall be subject to review under ch. 227 and be effective 20 days after the same have been served unless such order, determination and decision specifies a different date upon which the same shall be effective. Such flood plain determination and zoning ordinance shall be of the same effect as if adopted by the county, city or village. Thereafter it is the duty of the county, city, village and town officials to administer and enforce the ordinance in the same manner as if the county, city or village had adopted it. Flood plain determinations and zoning ordinances so adopted may be modified by the county, city or village concerned only with the written consent of the department except that nothing in this subsection shall be construed to prohibit a county, city, village or town from adopting a flood plain ordinance more restrictive than that adopted by the state. The cost of such flood plain determination and ordinance promulgation and enforcement by the state shall be assessed against the county, city or village concerned and collected in substantially the same manner as other taxes levied by the state.

(2) **ENFORCEMENT AND PENALTIES.** Every structure, building, fill, or development placed or maintained within any flood plain in violation of a zoning ordinance adopted under this section, or s. 59.97, 61.35 or 62.23 is a public nuisance and the creation thereof may be enjoined and maintenance thereof may be abated by action at suit of any municipality, the state or any citizen thereof. Any person who places or maintains any structure, building, fill or development within any flood plain in violation of a zoning ordinance adopted under this section, or s. 59.97, 61.35 or 62.23 may be fined not more than \$50 for each offense. Each day during which such violation exists is a separate offense.

144.26 NAVIGABLE WATERS PROTECTION LAW. (1) To aid in the fulfillment of the state's role as trustee of its navigable waters and to promote public health, safety, convenience and general welfare, it is declared to be in the public interest to make studies, establish policies, make plans and authorize municipal shoreland zoning regulations for the efficient use, conservation, development and

protection of this state's water resources. The regulations shall relate to lands under, abutting or lying close to navigable waters. The purposes of the regulations shall be to further the maintenance of safe and healthful conditions; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structure and land uses and reserve shore cover and natural beauty.

(2) In this section, unless the context clearly requires otherwise:

(a) "Subcommittee" means the water subcommittee of the natural resources committee of state agencies.

(b) "Department" means the department of resource development.

(c) "Municipality" or "municipal" means a county, village or city.

(d) "Navigable water" or "navigable waters" means Lake Superior, Lake Michigan, all natural inland lakes within Wisconsin and all streams, ponds, sloughs, flowages and other waters within the territorial limits of this state, including the Wisconsin portion of boundary waters, which are navigable under the laws of this state.

(e) "Regulation" refers to ordinances enacted under ss. 59.971 and 62.23 (7) and means shoreland subdivision and zoning regulations which include control of uses of lands under, abutting or lying close to navigable waters for the purposes specified in sub. (1), pursuant to any of the zoning and subdivision control powers delegated by law to cities, villages and counties.

(f) "Water resources," where the term is used in reference to studies, plans, collection of publications on water and inquiries about water, means all water whether in the air, on the earth's surface or under the earth's surface. "Water resources" as used in connection with the regulatory functions under this section means navigable waters.

(g) "Shorelands" means the lands specified under par. (e) and s. 59.971 (1).

(5) (a) The department shall prepare a comprehensive plan as a guide for the application of municipal ordinances regulating navigable waters and their shorelands as defined in this section for the preventive control of pollution. The plan shall be based on a use classification of navigable waters and their shorelands throughout the state or within counties and shall be governed by the following general standards:

1. Domestic uses shall be generally preferred.

2. Uses not inherently a source of pollution within an area shall be preferred over uses that are or may be a pollution source.

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3. Areas in which the existing or potential economic value of public, recreational or similar uses exceeds the existing or potential economic value of any other use shall be classified primarily on the basis of the higher economic use value.

4. Use locations within an area tending to minimize the possibility of pollution shall be preferred over use locations tending to increase that possibility.

5. Use dispersions within an area shall be preferred over concentrations of uses or their undue proximity to each other.

(b) The department shall apply to the plan the standards and criteria set forth in sub. (6).

(6) Within the purposes of sub. (1) the department shall prepare and provide to municipalities general recommended standards and criteria for navigable water protection studies and planning and for navigable water protection regulations and their administration. Such standards and criteria shall give particular attention to safe and healthful conditions for the enjoyment of aquatic recreation; the demands of water traffic, boating and water sports; the capability of the water resource; requirements necessary to assure proper operation of septic tank disposal fields near navigable waters; building setbacks from the water; preservation of shore growth and cover; conservancy uses for low lying lands; shoreland layout for residential and commercial development; suggested regulations and suggestions for the effective administration and enforcement of such regulations.