Wisconsin Water Law

A Guide to Water Rights and Regulations

SECOND EDITION

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Foreword to Second Edition:

When this volume was originally conceived by Professor Donald Last, the hope was that this volume would serve both as a readable primer for the general public as well as a reference for public officials, lawyers and others with water law questions. As this volume approached its five year point, it became clear that there were enough changes in the law that the usefulness of this volume was beginning to fade. Don then spearheaded an effort to update the original volume, resulting in this collaborative effort between the original author, Attorney Paul Kent, and Tamara Dudiak, an attorney and lake management specialist at UW–Extension and the University of Wisconsin–Stevens Point.

This volume attempts to capture some of the significant change in water law for the past five years, including shoreland zoning, nonpoint pollution control and wetland regulation. It also provides expanded treatment of some areas which have become more controversial in recent years, including the scope of water law jurisdiction by Indian tribes, DNR’s policy with respect to piers and similar lake structures, and municipal sewer service issues. However, some of the most important changes are only found in the footnotes and references. Significant statutory renumbering has taken place since the first edition and all statutory references have been updated. In addition, new case law and other new resources including general web sites are now included as part of this reference.

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Disclaimer

Water law, like other areas of environmental law, is a complex and rapidly changing field. This book is not intended to be a substitute for legal advice with respect to the application of any of the rules, regulations or cases discussed in this volume. The authors, editors and publisher make no representation or warranty, express or implied, as to the completeness or correctness of the information in this publication and assume no liability of any kind whatsoever resulting from the use of or reliance upon the contents of this book.

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Foreword to First Edition:

The definite work on water law in Wisconsin, *Water-Use Law and Administration in Wisconsin* by Herald Ellis, Jacob Beuscher, Cletis Howard and Jay Peter DeBraal, was published by the University of Wisconsin–Extension in 1970. More abbreviated water law publications have been produced by the Southeast Wisconsin Regional Planning Commission, including *Water Law in Southeastern Wisconsin* in 1965 (revised in 1977), and by the Wisconsin DNR, including the 1971 publication, *A Basic Guide to Water Rights in Wisconsin*. Although these books remain useful references, water law in Wisconsin has been substantially modified and expanded since they were published. Thus, a new compendium of water laws was greatly needed. This volume is not a comprehensive treatise on water law, but it is intended to provide an updated overview of state statutes, administrative rules, and case law on water rights and water regulations.

This book aims to help the user understand the intent and content of water laws in Wisconsin, and procedures and requirements related to their application and administration. As such, it covers common law doctrines, state statutes and rules. For those interested in a more in-depth analysis, extensive footnotes to cases, statutes and other materials are provided with each chapter. The final section of the book provides tables and other reference material.

This book is intended for use by UW–Extension staff, zoning and planning officials, land conservation department and Natural Resource Conservation Service staff, Department of Natural Resources and other state agency water specialists, regional planning staff, municipal officials and advisory staff, as well as lake property owners, business owners, and environmental consultants. Other potential users include legislators, attorneys and staff of statewide non-profit organizations.
An advisory group was formed in 1992 to provide advice on this book’s content, format, production, pricing and distribution. Donald Last, a UW–Extension specialist and professor at UW–Stevens Point served as coordinator of the project. Selected advisory committee members also reviewed draft chapters of the book. Members of the advisory group include:

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CHAPTER 1

Water Rights: Definitions

The rules governing water rights vary depending upon the type of water resource. This chapter will answer basic questions about water classification, navigability and water boundaries.

Classifying Water Resources

There are a variety of ways to classify water resources. From a legal perspective, the most common classification scheme involves four basic categories:

- Natural streams and lakes;
- Artificial streams and lakes;
- Diffused surface water;
- Groundwater.

Each of these categories and the place of wetlands in this scheme will be described in the following sections.

However, other water classifications exist for specific purposes. The Department of Natural Resources (DNR) has classified surface waters based on use for purposes of establishing water quality standards. Use categories include:

- Fish and aquatic life use;
- Recreational use;
- Public health and welfare uses (including drinking water);
- Wildlife use.

DNR has also established several sub-categories of fish and aquatic life uses.

A different classification is used for purposes of regulating new or increased discharges of pollutants. For purposes of these anti-degradation regulations, waters are classified as:

- Outstanding resource waters;
- Exceptional resource waters;
- Great Lakes waters;
- Fish and aquatic life waters; and
- Variance waters (not meeting fish and aquatic life standards).
These classifications and associated regulations are discussed in Chapter 8.

Certain other classifications are used for purposes of managing fishery resources. For example, the DNR separately designates various classes of trout streams, waters available for recreational or commercial fishing and fish refuges.

### Natural Streams and Lakes

A natural stream is a watercourse which has a direction of flow or current. The key characteristics of a watercourse are a defined bed and bank and a regular flow of water.

A watercourse is distinct from diffused surface water which has no bed or bank and is present only on an intermittent basis. A natural watercourse is also distinct from an artificial watercourse such as a ditch or canal. While there are legal distinctions between streams and lakes, there are none between streams, creeks and rivers.

Natural lakes are less well defined under Wisconsin law. Generally, lakes are reasonably permanent bodies of water which, unlike streams, are substantially at rest. Lakes with an inlet and outlet are also considered watercourses, but there is no legal significance between a watercourse lake and a non-watercourse lake. Moreover, the size of the waterbody does not determine its status as a lake, and at this time, there is no legal distinction between lakes and ponds.

The most significant legal distinction between streams and lakes is that the state owns the title to all natural lake beds, while landowners adjacent to streams own the streambeds. (See Chapter 2.) Natural lakes and streams are also classified into navigable and non-navigable waters, which are discussed below.

### Artificial Streams and Lakes

Artificial streams include drainage ditches and canals. Artificial lakes include flowages and dug ponds. However, a natural stream does not become an artificial body of water by dredging or enlarging the original streambed or by damming the stream to create a flowage.

The law recognizes a distinction between natural and artificial streams and lakes. The most significant distinction is that public rights in artificial streams and lakes may be limited unless the artificial waterbody is connected to a natural stream or lake. (See Chapter 2.)
**Diffused Surface Water**

Diffused surface waters are waters from natural sources such as precipitation, melting snow or floods which are spread over the ground instead of being confined to a watercourse. Typically, these are waters temporarily contained in depressions or valleys before they evaporate or infiltrate.

If areas which receive diffused surface water do not drain, the area may become a wetland. Diffused surface water and drainage is discussed in Chapter 7; wetlands in Chapter 10.

**Groundwater**

Groundwater is the water contained in the ground below the water table. Historically, the law distinguished between underground streams and percolating groundwater. These historical distinctions are not relevant today.

While groundwater is integrally connected to surface water through the hydrogeological system, there are significant legal distinctions between the rights associated with groundwater use and surface water use. (See Chapter 9.)

**Wetlands**

Wetlands present a special case. Wetlands are areas where water is at or near the surface with sufficient frequency to support vegetation adapted to saturated soils. Federal and state definitions of wetlands are discussed in Chapter 10.

There are a variety of types of wetlands. Some wetland areas are located near streams or lakes. A wetland area might even be classified as a lake. Other wetland areas are isolated from streams or lakes and arise as a result of diffused surface water or local soil conditions.

Floating bogs are distinct from wetlands. Floating bogs are masses of vegetation which float on surface waters. They are not land and do not prevent the waters on which they float from being considered navigable. When they disintegrate, they may deposit material on the bed that can accumulate over time to form additional shoreland.
Navigability

Whether a natural stream or lake is considered navigable has a significant impact on public and private rights.\textsuperscript{19} As noted in Chapter 2, the public has greater rights in navigable waters.

Historically, the test of navigability required commercial navigation or the use of waterways to float logs to sawmills.\textsuperscript{20} In 1911, the Legislature enacted a statutory definition which considered streams and lakes navigable if they are “navigable in fact for any purpose.”\textsuperscript{21} The current version of this law is found in Wis. Stat. § 30.10 and provides in relevant part:

\textbf{30.10. Declarations of navigability}

\textbf{(1) Lakes.} All lakes wholly or partly within this state which are navigable in fact are declared to be navigable and public waters, and all persons have the same rights therein and thereto as they have in and to any other navigable or public waters.

\textbf{(2) Streams.} Except as provided under sub. (4)(c), all streams, sloughs, bayous and marsh outlets, which are navigable in fact for any purpose whatsoever, are declared navigable to the extent that no dam, bridge or other obstruction shall be made in or over the same without the permission of the state.

Based on this definition, courts have held that streams are “navigable in fact” if it is possible to float a canoe or small recreational craft at sometime during the year.\textsuperscript{22} All that is necessary for a stream to be considered navigable is that it have regularly recurring periods when it is navigable, or that it have navigable periods lasting long enough to be conducive to recreational use.\textsuperscript{23} However, a finding of non-navigability during an earlier proceeding does not necessarily preclude the DNR from making a finding of navigability at a later point.\textsuperscript{24}

It should be noted that the state definition of navigability is considerably broader than the federal definition. Federal law relies more heavily on historic use of the waterbody for commercial navigation.\textsuperscript{25}

Finally, a determination of navigability does not by itself create or enhance public rights in other types of water such as artificial streams and lakes, diffused surface water and wetlands. For example, occasional ponding of diffused surface water does not create public rights in such waters.\textsuperscript{26} Similarly, if a person can demonstrate that a lake is artificially created, public rights may be limited regardless of navigability.\textsuperscript{27} In general, DNR jurisdiction requires that the water be navigable and public. An artificial water is public if it is directly and inseparably connected with natural navigable waters.\textsuperscript{28}
Water Boundaries

A number of terms are used to define the limits of streams and lakes. These are significant because they determine the extent of public and private rights with respect to those waterbodies.

Ordinary High Water Mark

The ordinary high water mark ("OHWM") delineates the boundary or lateral extent of a natural stream or lake. Areas below the OHWM are considered a part of the streambed or lake bed. Areas above the OHWM are considered land.

The OHWM is the point on the bank or shore where the water, by its presence, wave action or flow, leaves a distinct mark on the shore or bank. This mark may be indicated by erosion, destruction of vegetation, changes from aquatic to terrestrial vegetation, or other characteristics. The OHWM is not the same as the average water level or the water’s edge.

Where it is difficult to ascertain the OHWM at one site, it can be determined at other places on the shore and transferred by survey to the area in question. For example, in *State v. Trudeau* the DNR determined the OHWM based on a point one-half mile from the subject site where there was a protected point with a clear erosion line free from excessive wave action.

The OHWM is not affected by the erection of an artificial barrier such as a road with culverts. If the water in its natural condition would flow into an area, the OHWM extends to the elevation consistent with the OHWM determination for that stream or lake.

Determinations of the OHWM are typically made by the DNR. However there are statutory exceptions for town sanitary districts and certain designated waters.

Some other terms are less commonly used to delineate the extent of a body of water. Some cases and legal descriptions use the term “ordinary low water mark.” That point is defined as the level at which the water usually stands when free from disturbing causes. The term “high water mark” is used to delineate shoreland zoning jurisdiction for glacial pothole lakes.
Meander Lines

A meander line is a survey line. Meander lines were established not as legal boundaries, but to approximate the amount of land included in the original government survey. Thus, when a property deed includes land which borders a stream or lake, the stream or lake usually serves as the actual property boundary – not the meander line. This rule applies unless there is a gross error in the original survey which results in substantial additional acreage between the meander line and the stream or lake. In such a case the meander line can be considered the boundary.

Bulkhead Lines

A bulkhead line is a water boundary established by a municipal ordinance in accordance with Wis. Stat. § 30.11 which approximates the OHWM. In essence, a bulkhead line is a legislatively established OHWM. While a bulkhead line must conform as nearly as practicable to the actual OHWM, it may vary somewhat.

To establish a bulkhead line a municipality must indicate the current OHWM and proposed bulkhead line on a map submitted to DNR for approval. Once approved, owners of land abutting the water, known as riparians, may fill or place structures up to the bulkhead line without DNR permits. However, other activities such as dredging between the bulkhead line and original OHWM may require separate permits.
Chapter 1 Notes


2 The specific subcategories of fish and aquatic life uses and the criteria for designating waterbodies based on those subcategories is being revised during 2000-01. Wis. Admin. Code § NR 102.04(3) (Register 2/98) provides the following subcategories:
   - Cold water communities;
   - Warm water sport fish communities;
   - Warm water forage fish communities;
   - Limited forage fish communities; and
   - Limited aquatic life.

3 Wis. Admin. Code § NR 1.02(7).


6 In Hoyt v. City of Hudson, 27 Wis. 656 (1871), the Court defined the term “watercourse” as follows:
   The term “watercourse” is well defined. There must be a stream usually flowing in a particular direction, though it need not flow continually. It may sometimes be dry. It must flow in a definite channel, having a bed, sides or banks, and usually discharge itself into some other stream or body of water.

7 See, Lessard v. Stram, 62 Wis. 112, 22 N.W. 284 (1885) in which the court concluded intermittent flows did not constitute a watercourse. This case must, however, be read in the context of the more recent cases on navigability discussed below.

8 Ne-pee-nauk Club v. Wilson, 96 Wis. 290, 291, 71 N.W. 661 (1897); see also, Restatement of Torts 2d, § 842.

9 Historically, lakes were only considered watercourses if a stream originated or flowed through them. See, Ne-pee-nauk Club v. Wilson, supra., describing distinctions between lakes and watercourses.


11 Mayer v. Grueller, 29 Wis. 2d 168, 138 N.W.2d 197 (1965); Klingeisen v. DNR, 163 Wis. 2d 921, 472 N.W.2d 603 (Ct. App. 1991).
In *Thomson v. Public Service Commission*, 241 Wis. 243, 247-48, 5 N.W.2d 769 (1942), the court cited with approval the following definition of diffused surface waters:

> The term "surface waters" is defined in Restatement, Torts, p. 333, § 846, as follows:
> "The term 'surface waters,'... comprehends waters from rains, springs or melting snow which lie or flow on the surface of the earth but which do not form part of a watercourse or lake."

*See also, Village of Menomonee Falls v. DNR*, 140 Wis. 2d 579, 412 N.W.2d 505 (Ct. App. 1987), where the court held that flooded backyards and street gutters cannot be declared navigable waters, and *Getka v. Lader*, 71 Wis. 2d 237, 246, 238 N.W.2d 87 (1976), where the court held that the laws of diffused surface water apply unless there is a standing or permanent body of water.

*See, Huber v. Merkel*, 117 Wis. 355, 94 N.W. 354 (1903).


Wis. Stat. § 23.32(1).

In *Houslet v. Natural Resources Department*, 110 Wis. 2d 280, 286, 329 N.W.2d 219 (Ct. App. 1982), the court held that the definition of a lake and wetland was not mutually exclusive and that wetlands could exist below the ordinary high water mark of a lake.


See discussion of accretion in Chapter 2.

*Village of Menomonee Falls v. DNR*, 140 Wis. 2d at 593.

*Olsen v. Merrill*, 42 Wis. 203, 212 (1877).

1911 Wis. Laws ch. 652. This definition has been applied to both streams and lakes. *DeGayner & Co., Inc. v. DNR*, 70 Wis. 2d 936, 236 N.W.2d 217 (1975); *State v. Bleck*, 114 Wis. 2d 454, 459, 338 N.W.2d 492 (1983).

*DeGayner, supra.; Village of Menomonee Falls v. DNR*, 140 Wis. 2d at 585-86.

Id.

*Turkow v. DNR*, 216 Wis. 2d 272, 576 N.W. 2d 288 (Ct. App. 1998).

See 33 C.F.R. § 329.4.

*Village of Menomonee Falls v. DNR*, 140 Wis. 2d at 593.

*State v. Bleck*, supra. The burden of proof is on the person claiming that the waterbody is artificial.

*Klingrison v. DNR*, 163 Wis. 2d 921, 972 N.W.2d 605 (Ct. App. 1991).

*State v. Trudeau*, 139 Wis. 2d 91, 408 N.W.2d 337 (1987); *State v. McFarren*, 62 Wis. 2d 492, 498, 215 N.W.2d 459 (1974); *Diana Shooting Club v. Husting*, 156 Wis. 261, 145 N.W. 816 (1914); see also Wis. Admin. Code § NR 115.03(6).

31 State v. Trudeau, supra; Zinn v. State, supra.

32 A town sanitary district is authorized to identify the OHWM of a lake that is entirely within an unincorporated area and within the boundaries of the town sanitary district. Wis. Stat. § 30.103. The Legislature also established the OHWM of Big Silver Lake in Wis. Stat. § 30.2037. This action was upheld in Silver Lake Sanitary District v. Wisconsin Department of Natural Resources, 232 Wis.2d. 217, 607 N.W.2d 627 (Ct. App. 1999) where the court held that the DNR did not have standing to challenge the constitutionality of the statute.

33 State v. McFarren, 62 Wis. 2d at 498 citing Slauson v. Goodrich Transportation Co., 94 Wis. 642, 645, 69 N.W. 990 (1897).

34 Wis. Stat. § 59.692(1)(b).

35 Perpignani v. Vonasek, 139 Wis. 2d 695, 702, 408 N.W.2d 1 (1987); Weaver v. Knudson, 23 Wis. 2d 426, 127 N.W.2d 217 (1964).

36 Brothertown Realty Corp. v. Reedal, 200 Wis. 465, 227 N.W. 390 (1929). But see, Comm'n of Board of Public Land v. Thiel, 82 Wis. 2d 276, 262 N.W.2d 522 (1978), where the court did not apply this exception even though the meander line grossly overstated the size of the lot.

37 State v. McFarren, 62 Wis. 2d at 497-98, Wis. Stat. § 30.11(3).

38 Originally, Wis. Stat. § 30.11 used the term “shoreline” rather than bulkhead line. For a further discussion of the history and use of those terms, see 49 OAG 126 (1960); 63 OAG 446 (1974); Town of Ashwaubenon v. Public Service Commission, 22 Wis. 2d 38, 126 NW2d 567 (1964) and State v. McFarren, supra.

39 Wis. Stat. § 30.11(4); State v. McFarren, 62 Wis. 2d at 504; 63 OAG, 446, 450-51 (1974).

40 63 OAG 446, 450 (1974).
CHAPTER 2
Public and Private Rights in Surface Waters

Common law and constitutional principles establish basic public and private rights in surface waters, including rights of ownership, access and use. This chapter reviews these basic principles. These rights have evolved over time and reflect the many public and private uses of water in Wisconsin.1

Public Rights in Surface Waters – the Public Trust Doctrine

Public rights generally stem from constitutional grants of authority. The Wisconsin Constitution provides the state with direct authority over navigable waters through the public trust doctrine. The public trust doctrine provides that the state holds all natural navigable waters in trust for the public. This doctrine is discussed below.

Treaties and federal and state constitutions also provide governments with the general authority to enact laws and regulations, including laws governing water rights. Chapter 3 reviews the general authority of federal, state, local and tribal governments and their agencies to enact water laws and regulations. Specific surface water regulations are discussed in Chapters 4-8.

Development of the Trust Doctrine

The trust doctrine has its origins in Roman law, English common law, the Northwest Ordinance of 1787 and the Wisconsin Constitution.2 Historically, the public trust doctrine was used to protect the right of commercial navigation on waters in the state. Over the years, the use of the public trust doctrine has expanded from its historical roots to protect other public rights. These now include:

- Commercial and recreational navigation;
- Water quality;
- Fishing and hunting;
- Swimming;
- Enjoyment of natural scenic beauty;
- Other recreational enjoyment on water or ice.

Today the public trust is important in at least three respects.3 First, it is a specific constitutional grant of authority to the state to regulate
navigable waters. The trust requires action “not only to preserve the trust but to promote it.” Second, it establishes public rights of use which the state cannot unreasonably compromise. Third, it defines state property rights in navigable waters.

**Scope of the Public Trust**

The scope of the public trust doctrine extends to the ordinary high water mark (OHWM) of all natural navigable waterbodies. It does not apply to diffused surface water, groundwater or wetlands located above the OHWM. Similarly, the public trust does not apply to artificial navigable waters unless they are “directly and inseparably connected with natural navigable waters.” Nevertheless, because of the importance of public trust, the courts have used the public trust doctrine as a justification for regulation of shoreland and wetland areas adjacent to natural navigable waters on the theory that such regulation is necessary to protect public trust waters and to ensure the right of the public to access those waters.

The trust doctrine not only extends to all natural navigable waters, but to “the beds underlying navigable waters.” However, this aspect of the trust is qualified because riparian owners hold title to streambeds to the center of the stream. Thus, the state has unqualified title only to lake beds. For streams, the public trust primarily relates to the water, not the streambed.

**Public Access Limitations**

As noted above, the public trust is designed to provide broad public access to and use of navigable waters for fishing, swimming, boating and other recreational uses. However, it does not guarantee access to all navigable waters nor does it afford the public a right to use the banks of navigable waters. Contrary to popular belief, there is no general right of public access along navigable stream banks and lakeshores.

In *Doemel v. Jantz*, the Wisconsin Supreme Court held that persons who own the land adjacent to a stream or lake, known as riparians, have “the exclusive privileges of the shore for purposes of access to his land and water.” The court concluded that public rights extend only to the water’s edge and that walking on the shoreland between the ordinary high and low water marks constitutes a trespass. One common characterization of this test is: “If your feet are wet you are not trespassing.”

In 1999, legislation was passed which carved out an exception to this long standing common law rule. Under Wis. Stat. § 30.134 a member
of the public has a right to use the exposed shore area along navigable streams and rivers without the permission of the riparian when the individual is engaged in a water-related recreational activity. Under the law a “water-related recreational activity” is an activity that requires water such as fishing, swimming and boating. This exception does not apply to lakes, ditches, channels and other bodies of water that are not characterized by flowing water.15

Public rights expand during periods of high water to the full extent of the waterbody and contract during periods of low waters.16 There is a corresponding obligation on the riparian not to restrict public access by erecting fences or placing obstructions to navigation below the OHWM without a permit.17

To help facilitate access to streams or lakes which otherwise would not have a public access point, the Department of Natural Resources and many municipalities using state funds have acquired public access areas on many streams and lakes.18 The state also promotes public access by requiring that public access be provided when land abutting navigable streams or lakes is subdivided19 and by reserving the right to stock fish in lakes without adequate public access.20

Just as there are limitations on public access to navigable waters, there are also limitations on the use of stream and lake beds. Because a riparian owns the bed of navigable streams, the Court in Munninghoff v. Wisconsin Conservation Comm’n, held that a member of the public who placed float traps anchored to the bottom of a navigable stream could be prosecuted for trespass.21 Similarly, because lake beds are owned by the state, use of the lake bed requires a permit.22

**Private Rights in Surface Waters – Riparian Rights**

The doctrine of riparian rights governs the private use of natural surface watercourses by riparian owners. The riparian rights doctrine provides that owners of lands abutting a natural stream or lake have an equal right with other such riparian owners to the reasonable use of the water.

Riparian rights stem from the ownership of land adjacent to the water.25 This doctrine was summarized by the Wisconsin Supreme Court.24

The established rule of the common law was that every riparian owner of stream or lakeshore property had an equal right to the use of it for all reasonable and beneficial purposes, and it was this rule that early became the law in Wisconsin.
Riparian rights encompass a bundle of rights which include the following:

- The right to direct or consume water for domestic, agricultural or industrial purposes.\(^{25}\)
- The right of access to water for boating, swimming and recreation, including exclusive use of shoreland to the water’s edge.\(^{26}\)
- The right of trapping and “fruits” of the streambeds.\(^{27}\)
- The right to construct piers and similar structures.\(^{28}\)
- The right to additions of shoreland from natural processes – also known as accretions.\(^{29}\)

Riparian rights are subject to two major restrictions. The first is a common law restriction of reasonable use. In general, whether a particular use is reasonable is a question of fact which must be resolved on a case-by-case basis. Whether a use is reasonable will depend largely on the impacts it has on other riparians and the public.\(^{30}\)

Second, riparian rights are subject to the paramount rights of the public under the public trust doctrine and federal, state or local regulations. These regulations may condition the use of riparian rights upon obtaining a permit, or they may restrict or prohibit certain activities. These regulations are discussed in Chapters 4-8.

In addition to these restrictions on riparian rights, the Legislature has restricted the conveyance of riparian rights by an easement. An easement is a limited interest in land to use the land for a specified purpose which is distinct from ownership.\(^ {31}\) Riparian easements were used by developers and others to provide access to the water to specified non-riparians, often for the purpose of using a pier or beach area.\(^ {32}\) Wis. Stat. § 30.133\(^ {33}\) provides that subsequent to April 9, 1994, (the effective date of Wis. Stat. § 30.133) no owner of riparian land may give any riparian right to another by way of an easement except for the following cases:

- Easements which grant the right to cross the land to gain access to navigable waters. (This does not include the right to place structures or material in the navigable waters.)
- Riparian land located within the boundary of a hydroelectric project licensed or exempted by the federal government.
- Wharfs or piers placed in navigable waters by non-riparians under Wis. Stat. § 30.131 pursuant to an easement recorded before December 31, 1986 or conveyance of such easement with the riparian land.\(^ {34}\)

Issues associated with the placement of piers on riparian easements are discussed further in Chapter 4.
Ownership and Use Rules for Natural and Artificial Surface Waters

The rules of ownership for surface waters and their beds depends on the type of body of water under consideration. All of these ownership rights are subject to reasonable state or local regulations. Ownership rights include the following:

- **Natural streams** – A riparian owner owns the bed to the thread or geographic center of the stream unless limited by deed.\(^{35}\) This is true regardless of navigability. However, the public trust over the water extends to the waters in navigable streams.\(^{36}\) Thus, the riparian owner has exclusive rights to water only in non-navigable streams.

- **Modified natural streams** – Natural streams that are dredged, enlarged or dammed retain the same rules of streambed ownership as other natural streams. Thus, creating a flowage from a natural stream does not convert the bed from a streambed to a lake bed.\(^{37}\) Private ownership is retained. If a navigable stream has been expanded, the public right to use the water is automatically increased to the edge of the water.\(^{38}\) If a non-navigable stream has been converted into a navigable stream or flowage, exclusive use by the riparian may be lost if public use has continued over an extended time or if it is directly and inseparably connected with a natural navigable water.\(^{39}\) However, by statute, farm drainage ditches are not considered navigable unless the ditches were navigable streams before ditching.\(^{40}\)

- **Artificial streams** – The bed of an artificial stream such as a canal or ditch is owned by the riparian. The riparian also has exclusive rights to the water unless the stream is navigable and is directly and inseparably connected with a natural navigable water.\(^{41}\) In such a case the public trust extends over the artificial stream, even though bed ownership is retained by the riparian.

- **Natural lakes** – A riparian owner on a natural lake owns only to the OHWM\(^{42}\) and land below the OHWM is lake bed owned by the state.\(^{43}\) The public trust also extends over all of the water of natural lakes.

- **Modified or “raised” lakes** – A natural lake which has been artificially raised presents a hybrid situation. The state retains ownership of the original lake bed and the riparians retain ownership of the land under the expanded portion of the lake.\(^{44}\) The public, however, has immediate rights to the expanded area of water.\(^{45}\)
• **Artificial lakes** – The bed of an artificial lake or pond created by means other than modifying a natural stream or natural lake is owned by the riparian subject only to any deed restrictions.\(^{46}\) The public trust does not apply to such lakes and thus a riparian has exclusive rights of use of the water.\(^{57}\) An exception applies if the lake or pond is within 500 feet of or connected to a navigable water. In such a case, a Wis. Stat. § 30.19 permit may be required which would designate the lake or pond a public water.

### Delineating Riparian Lands

To qualify as riparian land, the land must adjoin a stream or a lake.\(^{48}\) The boundary of riparian land at the waterbody depends not only on the type of water discussed above, but also on the deed granting title. In some cases, the title may extend only to the OHWM of a stream, in which case riparian rights would still exist, but the owner would not have ownership of the streambed.\(^{49}\) However, if title does not extend to OHWM, riparian rights may belong to the adjoining parcel.\(^{50}\) Thus, whether riparian rights exist for a particular parcel requires a review of the property’s title.

The extent to which land can be considered riparian as one moves away from the waterbody has not been definitively ruled on by the Wisconsin courts. Generally, the test used by DNR is the “chain of title” test. This test confines riparian land to that which has been under an uninterrupted line of ownership from the government patent.\(^{51}\) Under this test if a riparian property is divided into smaller parcels, only the parcels which continue to abut water are considered riparian property. Thus, riparian rights can be lost for those parcels which no longer abut the water.\(^{52}\)

### Changes in Water Boundaries

Over time, the boundaries of waterbodies may change. While changes are most common with streams, lake bed areas may also change over extended periods of time. The land created or lost with the change of boundaries is subject to a special set of common law doctrines known as “accretion and reliction.”

Accretion is the process whereby land is created in a waterbody by soil that is gradually deposited through natural causes. Reliction is the process whereby land is created when water permanently recedes or withdraws from a lake or river.\(^{53}\) Under the common law rule, a riparian is entitled to the land created by accretion or reliction.
Creating land in a waterbody by artificial means such as fill is highly regulated. (See Chapter 5.) Historically, however, fewer restrictions existed. Where such fill has already occurred, the courts have applied the rule of accretion to artificial fill provided that the fill was not made by the claiming owner who benefited by it.54

A different rule applies where land was created by a sudden change such as a flash flood. Sudden changes are referred to as avulsions. The rule in such cases is that the avulsion does not change the original ownership lines.55

**Conveyance of Lake Bed**

As noted above, the State of Wisconsin is the owner of the title to natural lake beds below the OHWM.56 If the land is lower than the OHWM, the area is part of the adjacent lake bed. Because ownership of lake beds is part of the state’s public trust over navigable waters, the state cannot grant or convey lake bed lands in a manner inconsistent with the public trust.57

Nevertheless, lake bed areas can pass from state ownership in two unique circumstances. The Legislature can authorize a lake bed grant through special legislation. Historically, lake bed grants were authorized if the lake bed area was used for a public purpose.58

The process for obtaining a lake bed grant was modified in 1989, when the Legislature required that a DNR report be prepared prior to legislative approval of the grants.59 Based upon its findings, the DNR must conclude whether the proposed lake bed grant legislation is consistent with the state’s mission to protect and enhance the public trust.60

In addition to a lake bed grant, the state’s title to lake beds can also be lost through the common law doctrines of accretion and reliction described above. For example, in *W.H. Pugh Coal Co. v. State*, the Wisconsin Court of Appeals held that Pugh Coal was entitled to land which had been created by filling portions of Lake Michigan by persons other than the benefited and claiming owner.61 The court concluded that the fact that the state holds the lake bed in public trust was not sufficient to prevent granting accretions of land to a riparian owner.62 However, because this rule applies only to natural or artificial accretions created by persons other than the benefited and claiming owner, this rule would not allow the current riparian owner to gain title by filling in a lake bed. Of course, any placement of fill or structures on a lake bed requires permits. (See Chapter 5.)
Subsequent courts have clarified that the doctrine of accretion applies only where accreted land is above the OHWM. Accretions which remain at an elevation below the OHWM would be considered part of the state lake bed area.\textsuperscript{63}
Chapter 2 Notes


2 See H. Ellis, et al., Water-Use Law and Administration in Wisconsin, Department of Law, University Wisconsin-Extension (1970), § 9.03 for a detailed analysis of the historical development of the trust doctrine. The trust doctrine language in the Wisconsin Constitution provides in part:

[T]he river Mississippi and the navigable waters leading into the Mississippi and St. Lawrence, and the carrying places between the same, shall be common highways and forever free, as well to the inhabitants of the state as to the citizens of the United States without any tax, impost or duty therefore.

Wis. Const. Art. IX § 1.


4 City of Milwaukee v. State, 193 Wis. 423, 449, 214 N.W. 820 (1927); State v. Town of Linn, 205 Wis. 2d 421, 556 N.W. 2d 394 (Ct. App. 1996). This not only provides a basis for regulation, but also for appropriation of funds for water projects.

5 Muench v. PSC, 261 Wis. 492, 507-08, 53 N.W.2d 514 (1952); In Gillen v. City of Neenah, 219 Wis.2d 807, 580 N.W.2d 628 (1998), the Supreme Court of Wisconsin held that citizens could bring an action to challenge the filling and private lease of a lake bed grant on the theory that the actions taken were prohibited by the public trust doctrine.

6 State v. Trudeau, 139 Wis. 2d 91, 408 N.W.2d 337 (1987).

7 Klingeisen v. DNR, 163 Wis. 2d 921, 472, 442 N.W.2d 603 (Ct. of App. 1991).

8 Just v. Marinette County, 56 Wis. 2d 7, 201 N.W.2d 761 (1972); State v Town of Linn, supra.

9 Muench v. PSC, 261 Wis. at 515-16; Gillen v. City of Neenah, supra.

10 As discussed later in this chapter, a riparian’s title to land can be limited by deed to the OHWM. Absent such a restriction, however, title extends to the center or “thread” of the streambed.

11 Of course, the state can and does regulate activities on streambeds such as the placement of structures or the removal of materials under the state’s police power. (See Chapters 3–5.)

12 Muench v. PSC, 261 Wis. at 508; Willow River Club v. Wade, 100 Wis. 86, 76 N.W. 273 (1898); Diana Shooting Club v. Husting, 156 Wis. 261, 145 N.W. 816 (1914).

13 Doemel v. Jantz, 180 Wis. 225, 234, 193 N.W.393 (1923).
In Gianoli v. Pfleiderer, 209 Wis.2d 509, 563 N.W.2d 562 (Ct. App. 1997), the Court of Appeals held that a riparian could properly exclude the public from the area between the ordinary high and low water marks, particularly when doing so would not interfere with the public’s right of navigation.

Wis. Stat. § 30.134 as created by 1999 Wis. Act 9. The public cannot use a motorized vehicle on the exposed shore, cut trees or vegetation, camp, or damage any object placed on the shore by the riparian. Wis. Stat. § 30.134(3).

Doemel v. Jantz, 180 Wis. at 234.

See Wis. Stat. § 30.15; Turkow v. WDNR, 216 Wis. 2d. 272, 576 N.W. 2d 288 (Ct. App. 1998).

See Wis. Stat. § 23.09(10).

Wis. Stat. § 236.16(3).


Munninghoff v. Wisconsin Conservation Comm’n, 255 Wis. 252, 259-60, 38 N.W.2d 712 (1949). This case was cited with approval by the Court in Lac Courte Oreilles Band of Indians v. Wisconsin, 740 F. Supp. 1400 (W.D. Wis. 1990) in the context of defining the rights of Native American tribes to trap on privately owned stream beds.

State v. Bleck, 114 Wis. 2d 454, 388 N.W.2d 492 (1983). Conveyance of lake bed land is discussed later in this chapter.

Hermansen v. City of Lake Geneva, 272 Wis. 293, 75 N.W.2d 439 (1956).

State ex rel. Chain O’Lakes Protective Ass’n v. Moses. 53 Wis. 2d 579, 582, 193 N.W.2d 708 (1972).

Munninghoff v. Wisconsin Conservation Commission, 255 Wis. at 259; State v. Bleck, 114 Wis. 2d at 406; Coldwell v. Sanderson, 69 Wis. 52, 28 N.W. 232 (1886).

See, Doemel v. Jantz and discussion in Section 2.1.

Munninghoff v. Wisconsin Conservation Comm’n, supra.

Doemel v. Jantz, supra; State v. Bleck, supra; City of Milwaukee v. State, 193 Wis. 423, 214 N.W. 820 (1927); Northern Pine Land Co. v. Bigelow, 84 Wis. 157, 54 N.W. 496 (1893); Priewe v. Wisconsin State Land & Improvement Co., 93 Wis. 534, 67 N.W. 918 (1896).

See discussion of accretions later in this chapter.

Sterlingworth Condominium Ass’n v. DNR, 205 Wis.2d 710, 556 N.W.2d 791 (Ct. App. 1996). State ex rel. Chain O’Lakes Protective Ass’n v. Moses, 53 Wis. 2d at 582. The reasonable use doctrine has essentially replaced the older “natural flow” doctrine which gave to each riparian the right to the natural flow of the watercourse without diminution or alteration.

Hunter v. McDonald, 78 Wis. 2d 338, 344, 254 N.W.2d 282 (1977); Colson v. Salzman, 272 Wis. 397, 401, 75 N.W.2d 421 (1956). Common uses of easements include utility easements to allow the placement and maintenance of a utility lines and access easements to allow a landlocked property owner to have access to a road. An easement usually “runs with the land” which means it stays in effect even if the owner of the land sells the land to a third party.
In *Stoesser v. Shore Drive Partnership*, 172 Wis. 2d 660, 494 N.W.2d 204 (1993), the Wisconsin Supreme Court held that riparian rights could be conveyed by an easement to a non-riparian.

1993 Wis. Act 167, creating Wis. Stats. 30.133. Act 167 overruled *Stoesser v. Shore Drive Partnership*, supra. However, even under *Stoesser*, a conveyance of a riparian easement was not sufficient to classify the easement holder as a riparian owner for purposes of obtaining permits for piers and other permits under Wis. Stat. ch. 30.

However, since easements “run with the land,” any riparian easement recorded before the effective date of Wis. Stat. § 30.133 should be binding on subsequent conveyances of riparian land encumbered by an easement.


*Muench v. PSC*, supra.


*Klingeisen v. DNR*, 163 Wis. 2d at 927.

*Klingeisen v. DNR*, 163 Wis. 2d at 928; citing *Haase v. Kingston Coop. Creamery Ass’n*.

Wis. State Sec. 30.10(4)(c). Thus, a non-navigable farm drainage ditch which is enlarged and would otherwise be considered navigable, is exempt from DNR jurisdiction under this exception. The determination of a farm drainage ditch is set forth in Wis. Adm. Code ch. NR 303.

*Klingeisen v. DNR*, 163 Wis. 2d at 929.

*Mayer v. Gruere*, 29 Wis. 2d at 173.

*State v. Trudeau*, supra; *Cassidy v. Dep’t of Natural Resources*, 132 Wis. 2d at 158.

H. Ellis, et al., §§ 3.10c and 10.03; but see, *Mendota Club v. Anderson*, 101 Wis. 479, 78 N.W. 185 (1899) which suggests that depending on the language of the deed, title may be limited to the OHWM of the raised lake level.

*Haase v. Kingston Coop Creamery Ass’n*, 212 Wis. at 587.


*Id.*

*Stoesser v. Shore Drive Partnership*, 172 Wis. 2d at 665. Historically, only land which adjoined a stream was considered riparian. Land which adjoined a lake was considered littoral. Today, Wisconsin cases do not distinguish between riparian rights and littoral rights. Both are referred to as riparian rights. See, *Mayer v. Gruere*, 29 Wis. 2d at 174.

*See, Priewe v. Wisconsin State Land & Improvement Co.*, 93 Wis. 534, 67 N.W. 918 (1896).

For example, a description in the deed which described land “to the west bank of the mill pond” was held not to include riparian rights. *Allen v. Weber*, 80 Wis. 551, 50 N.W. 514 (1891).

Some commentators have also referred to a “watershed test.” The “watershed” test would restrict riparian land to the lands abutting waters which lie within a single watershed. Under this test, a property would only be considered riparian to the extent it drains into the body of water that creates the riparian right. See R. Sherrar; H. Ellis, *et al.* This test is not currently used by the DNR.


*DeSimone v. Kramer,* 77 Wis. 2d 188, 252 N.W.2d 653 (1977).

*Baldwin v. Anderson,* 40 Wis. 2d 33, 161 N.W.2d 553 (1968).


For example, the court approved the filling of part of Lake Wingra by the City of Madison to improve the Vilas Park beach area and access to the park. *State v. PSC,* 275 Wis. 112, 81 N.W.2d 71 (1957). In *Gillen v. City of Neenah,* supra, a lake bed grant was challenged on the grounds that a private lease did not constitute a public use.


The DNR must base its conclusion on:

- Whether opportunities for public trust purpose uses upon completion of the project outweigh any loss of current public trust uses.
- Whether public access will be afforded to all residents of the state on completion of the project.
- Whether the public trust purposes of the proposed conveyance are sufficiently narrow to permit only the specified purpose.
- Whether the management by the grantee conforms with a public trust purpose.
- Whether the lake bed area and proposed public trust user will be controlled or supervised by a governmental unit.
- Whether any commercial uses are minor and incidental to free public trust purpose use.

*W.H. Pugh Coal Co. v. State,* 105 Wis. 2d 123, 312 N.W.2d 856 (Ct. App. 1981); see also, *DeSimone v. Kramer,* supra.

*W.H. Pugh Coal Co. v. State,* 105 Wis. 2d at 129.

*State v. Trudeau,* supra.
CHAPTER 3

Regulatory Jurisdiction Over Waters

Private and public rights to waters were described in Chapter 2. In addition to these basic rights, however, various governmental units have authority to impose regulations which restrict private rights and implement public interests in the waters. In many cases, more than one governmental body has jurisdiction.

This chapter outlines the constitutional or statutory authority for regulations from different units of government and the administrative agencies which implement the regulations. Subsequent chapters focus on specific regulations.

State Regulations

Regulatory Authority

The trust doctrine is not the sole basis for state regulatory authority. The state has general police powers to establish regulations which promote public health, safety and welfare.¹

The police power has been defined as the inherent power of the government to regulate the use of property and the conduct of business.² In general, to be a valid exercise of police power, the regulation must have a reasonable and rational relationship to a proper legislative purpose.³

The exercise of police power is also subject to constitutional restraints such as due process and equal protection. One of the most significant constitutional restraints found in both the United States and Wisconsin constitutions protects against the taking of property without compensation.⁴ Where the exercise of the police power deprives the owner of “all or substantially all practical uses of a property,” the regulation can be a taking, although this is extremely rare.⁵

Laws and regulations designed to prevent pollution and to protect state waters from degradation have been held to be valid police power regulations.⁶ The state’s police power enables it to regulate any state water regardless of whether it is subject to the public trust doctrine, including non-navigable surface water and groundwater.⁷

In addition to the police power, the state also has the right of eminent domain which allows it to acquire private property as long as fair compensation is provided.⁸
State Agencies

In exercising its constitutional authority, the Wisconsin Legislature has enacted a number of statutes regulating activities in and near state waters including surface water, diffused surface water, groundwater and wetlands. The Wisconsin Legislature has charged the Wisconsin Department of Natural Resources (DNR) to be the principal agency for protecting water quality in the State of Wisconsin. Wis. Stat. § 281.11 provides in relevant part as follows:

(1) Statement of policy and purpose. The department of natural resources shall serve as the central unit of state government to protect, maintain and improve the quality and management of the waters of the state, ground and surface, public and private.

The DNR is also the agency delegated by the United States Environmental Protection Agency (EPA) to administer the provisions of the federal Clean Water Act.

Recently, an initiative to manage Wisconsin’s natural resources on a watershed basis has resulted in the division of the state’s 32 river basins into 23 geographic management units (GMU). The reorganization is designed to promote more effective management of the resource as well as foster closer working relationships with area stakeholders. Towards this end, each GMU consists of teams of water and land-based DNR staff as well as “partnership” teams comprised of local officials, business interests and representatives of various citizen groups.

While the DNR is the primary state agency for regulating state waters, it is not the only one with jurisdiction over waters. The Department of Agriculture, Trade & Consumer Protection has been given authority over control of surface water drainage in rural areas, drainage districts and pollutants from agricultural runoff. The Department of Commerce has jurisdiction over certain construction site erosion control measures designed to protect water quality and sets standards for private sewage disposal systems which can affect surface and groundwater. The Department of Health and Family Services helps set groundwater standards.

Local Government Regulation

Types of Local Government

There are four types of local governments with general jurisdiction – counties, villages, cities and towns. Villages and cities are incorporated municipalities which possess general police and zoning powers. Town government exists in unincorporated areas of the state. While
town authority is limited, towns can exercise zoning authority in accordance with various statutory provisions. Similarly, counties also have certain limited zoning authority.

In addition to these general purpose local governments, the Legislature has also created a number of special purpose districts that have authority over specific water-related issues in a local area. They include the following:

- Inland lake protection and rehabilitation districts organized pursuant to Wis. Stat. ch. 33 which are designed to receive funds and implement programs to improve local lake watershed areas.
- Sewage districts under ch. 66 and town sanitary districts under ch. 60 which can provide sewer and related services.
- Municipal water utilities created under ch. 66 which can provide local public water supplies.
- Farm drainage districts organized under Wis. Stat. ch. 88 which allow for the construction, operation and maintenance of drainage ditches and associated structures.

These and other special purpose districts will be discussed at greater length in the context of particular water management issues.

Regulatory Authority

The authority of local units of government to regulate activities in and near waters comes from two sources. The first source of authority comes directly from the Wisconsin Constitution and is known as the Home Rule Amendment. The Home Rule Amendment, contained in Wis. Const. art. XI, § 5(1) grants to cities and villages the power to regulate matters of local concern. However, the courts have confined the application of the Home Rule Amendment to matters of local affairs. Generally, public rights in the navigable waters of the state are considered matters of statewide rather than local concern. Thus, at least regarding navigable waters, the Home Rule Amendment does not give cities and villages the right to enact regulations without specific statutory authorization.

The second source of authority for local governments is statutory authority from the Legislature. Local governments are created by the Legislature and have powers defined by it.

When local government authority is derived from the Legislature, it is limited in several respects. Local governments can exercise only those authorities that have been granted to them. Statutory grants of
authority to local governments may be general or specific. General powers are included in the statutes creating the local unit of government. General powers include police powers and planning and zoning authority. These general powers can significantly affect activities in and near waterways.

Specific powers are often granted to local governments in the context of a specific state regulation. For example, the role of local governments in regulating boating is specified in Wis. Stat. ch. 30. Similarly, local governments are given authority to enact regulations with respect to surface waters as part of their shoreland zoning authority. Local governments are also given specific statutory authority to manage stormwater. This is not an exhaustive list, but is illustrative of the types of specific delegations that currently exist. Any question of local authority should be individually researched.

Local government authority is also limited by the principle that state law is supreme over local law. This means that local government must comply with state laws. For example, when the Legislature requires a permit to undertake activities in a stream, local governments must apply for the permit. Similarly, a local ordinance cannot conflict with state legislation. For example, the Wisconsin Supreme Court held that the City of Madison did not have the authority to prohibit a chemical treatment of Madison area lakes when the DNR had specifically authorized such treatment. The supremacy of state law also means that the Legislature may completely withdraw or “preempt” the power of a local government to act in a certain area.

Federal Regulations

Regulatory Authority

Federal regulatory authority over water stems from several provisions of the United States Constitution. Clearly, the most important constitutional provision is the commerce clause which provides that, “the Congress shall have the power… to regulate commerce with foreign nations, and among the several states, and with Indian tribes.” Early Supreme Court rulings held that the word “commerce” included navigation. Currently, federal jurisdiction over waters under the commerce clause extends to any waters which could have an impact on interstate commerce regardless of navigability.

The federal government also has jurisdiction over waters under the general welfare clause. Beginning in the 1930s, this clause was used as the basis for federal involvement in major water projects such as the Tennessee Valley Authority, Norris and Wilson dam projects and
the Central Valley Project in California. Moreover, like the states, the federal government has the authority of eminent domain, subject to the fifth amendment protection that property cannot be taken without just compensation.

Some federal treaties also give the federal government authority over surface waters. The bilateral Great Lakes Water Quality Agreement between the United States and Canada was signed in 1978 and amended by the Protocol of 1987. Under this agreement, the federal government requires lakewide management plans and remedial action plans to clean up contaminated Great Lakes sites. The federal government also requires preservation of waterbodies used by migratory birds such as waterfowl in accordance with treaties with other nations.

**Federal Agencies**

Congress has exercised its constitutional authority to create a number of regulatory programs which are administered by federal agencies. The U.S. Environmental Protection Agency is the lead agency in charge of protecting water quality. EPA regulates water discharges to surface water as well as drinking water standards for public water supplies. The U.S. Army Corps of Engineers, however, retains jurisdiction over the placement of fill and structures in certain waters subject to review by EPA.

Other federal agencies also regulate certain aspects of water resources. Those activities include the Federal Emergency Management Agency with respect to floodplain management, the Bureau of Land Management with respect to waters on federal lands, the Natural Resources Conservation Service and the U.S. Fish and Wildlife Service play roles with respect to maintaining surface water quality in conjunction with the efforts of EPA and the Corps of Engineers.

**Interstate Compacts and Agreements**

The United States Constitution also provides that states can enter into agreements or compacts with other states. Wisconsin has done so with respect to certain waters that border the state.

One of the oldest compacts is the Great Lakes Basin Compact which has been approved by the Legislatures of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin. The Great Lakes Basin Compact set up the Great Lakes Commission which has the authority to undertake research and make recommendations on water use and development in the Great Lakes.
A separate organization, the Great Lakes Protection Fund, was established by the Council of Great Lakes Governors in 1989 to finance projects to protect and clean up Great Lakes waters. Participating states include Illinois, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin.

The Council of Great Lakes Governors, together with the Canadian provinces of Ontario and Quebec also signed the Great Lakes Charter in 1985. This Charter regulates all transfers in excess of 100,000 gallons per day of water out of the Great Lakes Drainage basin.

Three other multi-state organizations address common issues associated with the Mississippi and St. Croix Rivers. The Minnesota-Wisconsin Boundary Area Compact created a Boundary Area Commission and advisory committees to study and make recommendations concerning the protection of water quality for waters that border the two states.

The Upper Mississippi River Basin Association is a non-profit organization comprised of the states of Illinois, Iowa, Minnesota, Missouri and Wisconsin. It sponsors studies and planning initiatives for the basin water and related land resources.

The Lower St. Croix Management Commission was created by a cooperative agreement between Wisconsin, Minnesota and the National Park Service in 1973. The Commission coordinates planning, land acquisition, development and management of locally administered land use regulations for the Lower St. Croix National Scenic Riverway.

### Tribal Regulations

#### Tribal Jurisdiction

Regulatory jurisdiction over waters becomes particularly complex where tribal jurisdiction is added to the mix of state and federal jurisdiction. While it is beyond the scope of this book to provide an in depth analysis of the interplay between federal Indian law and Wisconsin water law, it is nevertheless important to touch on at least a number of the key concepts given the fact that there are eleven federally recognized tribal governments in Wisconsin.

At the outset, it is important to understand that under federal law, Indian nations are distinct, political communities that have significant aspects of sovereignty. Tribes are given wide latitude to govern their land and their members. Some have argued that federal common law also guarantees tribes sufficient water as part of any reservation area.
At the same time, the federal Constitution grants Congress the power to regulate commerce with the Indian tribes and this language has generally been held to provide Congress with plenary power to legislate in the field of Indian affairs. Thus, while the parameters of tribal jurisdiction are often defined by inherent tribal authority and individual treaties, the extent of tribal jurisdiction is also defined by federal statutes and regulations.

States like Wisconsin also retain certain jurisdiction over navigable waters under the Equal Footing Doctrine. The Equal Footing Doctrine provides that states enter the Union on equal footing with the original 13 colonies. That is significant for water law purposes because the rights to navigable waters were transferred to the states at the time of the American Revolution. This doctrine was summarized by the United States Supreme Court in *Shively v. Bowlby* as follows:

> By the American Revolution, the people of each state, in their sovereign character, acquired the absolute right to all their navigable waters and soil under them. The shores of the navigable waters and the soil under them were not granted by the Constitution of the United States, but were reserved to the states respectively.

Until states were admitted to the Union, the federal government held the navigable waters and the lands under them in trust for the future states. Courts have held that there is a strong presumption against the conveyance of navigable waters to tribes in the absence of express treaty language or exceptional circumstances. In at least one case, the courts have held that Wisconsin retains jurisdiction over navigable waters under the Equal Footing Doctrine.

In this complex jurisdictional environment, the question of who has regulatory authority over waters and activities affecting waters turns on several factors. This section will look at that question for tribal reservation land and off reservation land.

**Tribal Jurisdiction on Reservation Land**

Tribal jurisdiction is strongest with respect to the regulation of the activities of tribal members on reservation land owned by the tribe or tribal members, or held in trust for the tribe or tribal members. This would include the regulation of activities of its members in or near navigable waters. The federal government can also regulate the activity of tribal members if it chooses to do so. For example, the U.S. Environmental Protection Agency has taken the position that under the federal Clean Water Act, tribal members must obtain federal water permits for activities within Indian lands.
The assertion of tribal jurisdiction over non-members has been the source of almost endless litigation. These conflicts have chiefly arisen where there is substantial non-member landholdings within reservations. These non-member landholdings resulted from a federal policy in the late 1800s and early 1900s, in which the federal government allotted tribally held Indian land to individual tribal members. The tribal members were able to, and often did, sell the land to non-members which has been passed down to non-members today. In some tribal reservations non-members own the majority of reservation land.

The general rule is that tribal governments do not have jurisdiction to regulate the affairs of non-members within tribal reservation areas. Nevertheless, the courts have provided two exceptions to this rule. The first exception allows tribes to regulate the activities of non-members who enter consensual relationships with the tribe or its members. The second exception provides that the tribe may also exercise civil authority over the conduct of non-Indians on non-member lands within its reservation when, “that conduct threatens or has some direct effect on the political integrity, economic security or the health or welfare of the tribe.” Whether the regulation of non-member activities with respect to water rights falls within that second exception has been debated in a number of cases and contexts. There is also the underlying question as to whether the tribe has jurisdiction over non-members’ activities with respect to waters given the Equal Footing Doctrine. Where tribal authority is not exclusive, the states can and have regulated non-member activities.

Of course, the federal government can also regulate the activities of non-members within reservation lands. EPA has taken the position that within tribal reservation areas non-members seeking permits or approvals under the federal Clean Water Act must obtain permits from EPA rather than the DNR. EPA can also delegate authority to tribes to administer provisions of the federal Clean Water Act within tribal reservations under the “treatment as state” provision of the Clean Water Act.

**Tribal Jurisdiction on Off-Reservation Land**

The treaties with the several bands of the Chippewa Indians established Indian reservations but also allowed the tribes to exercise certain off-reservation treaty rights. For example, Article V of the Treaty of 1837 provided in part:

> The privilege of hunting, fishing and gathering the wild rice, upon the lands, the rivers and the lakes included in the territory ceded, is guaranteed to the Indians, during the pleasure of the President of the United States.
These off-reservation rights, often referred to as “usufructuary rights,” remained dormant for many years. Beginning with the case of United States v. Bouchard, 464 F. Supp. 1316 (W.D. Wis. 1978) the federal courts began to recognize these rights. In subsequent cases, the courts have held that the Chippewa could exercise off reservation hunting and fishing rights throughout the ceded territories with respect to public lands.

These rights do not extend to private lands, nor have they been extended to other tribes in Wisconsin. In addition, to date, the courts in Wisconsin have not found that tribal rights in ceded territories create an “environmental servitude,” i.e. that the right to hunt and fish implies a right to impose environmental restrictions to protect wildlife and fish.

While the Chippewa cases have primarily involved the scope of such rights on public lands, in one case, the federal court has applied the same rule to waters. The Court concluded that because riparians owned the streambeds, those lands are private lands. Thus, at least for purposes of hunting and trapping on streambeds, usufructuary rights did not apply to streams in private ownership. The tribes would, however, have rights where there was public ownership of the lake bed or streambed and of the water itself.

Where off reservation rights applied, the harvestable natural resources in such areas are to be apportioned equally between the Indian and non-Indian populations. In addition, management of the resources in the ceded territories on public lands must accommodate appropriate regulation by the DNR as well as regulation by the tribe.
Chapter 3 Notes


2 Id.

3 Noranda Exploration, Inc. v. Ostrom, 113 Wis. 2d 612, 626-27, 335 N.W.2d 596 (1983); State v. Interstate Blood Bank, supra; Kahn v. McCormack, supra.


6 In Wisconsin’s Environmental Decade, Inc. v. DNR, 85 Wis. 2d 518, 533, 271 N.W.2d 69 (1978) the court noted that “Preventing pollution and protecting the quality of the waters of the state are valid police-power concerns, as well as being a part of the state’s affirmative duty under the ‘public trust’ doctrine.” Accord: Just v. Marinette County, 56 Wis. 2d at 18, citing State ex rel. Martin v. City of Juneau, 298 Wis. 564, 300 N.W. 187 (1941); State ex rel. LaFollette v. Reuter, 33 Wis. 2d 384, 147 N.W.2d 304 (1967).

7 For example, Wis. Stat. ch. 283 regulates discharges to any waters of the state including groundwater.

8 Article I, § 13 of the Wisconsin Constitution provides that “the property of no person shall be taken for public use without just compensation thereof.”

9 See, Wis. Stat. chs. 30, 31 and 281 which regulate activities in and near surface waters, ch. 88 which regulates drainage districts, Wis. Stat. ch. 283 which regulates discharges to surface waters, and ch. 160 which regulates groundwater.

10 See Chapter 7 on Water Drainage, and Chapter 8 on Discharges of Pollutants.

11 See Chapter 8 on Discharges of Pollutants and Chapter 9 on Groundwater.

12 See Chapter 9 on Groundwater.


14 Wis. Stat. ch. 60 governs towns. Towns have the authority to adopt village powers under Wis. Stat. § 60.10(2)(c) and 60.22(3). These powers include village zoning authority of Wis. Stat. § 61.35. Even so, there may be the need for approval of such zoning ordinances by the county under Wis. Stat. § 60.62 if the county has a zoning ordinance.

15 Wis. Stat. § 59.69 et. seq.
The Home Rule Amendment, Wis. Const. art. XI, § 3(1) provides:

“Cities and villages organized pursuant to state law may determine their local affairs in government, subject only to this constitution and to such enactments of the legislature of state-wide concern as with uniformity shall affect every city or village. The method of such determination shall be prescribed by the legislature.”

Muench v. PSC, 261 Wis. 492, 515g-515h, 53 N.W.2d 514 (1952); Wisconsin’s Environmental Decade, Inc. v. DNR, supra.

As a result, local governments are frequently referred to as creatures of the state. This is true for counties, Dane County v. HSS Department, 79 Wis. 2d 323, 329, 255 N.W.2d 539 (1977); cities and villages, Schroeder v. City of Clintonville, 90 Wis. 2d 457, 280 N.W.2d 166 (1979), City of Mequon v. Lake Estates Co., 52 Wis. 2d 765, 190 N.W.2d 912 (1971) and towns, Haug v. Wallace Lake Sanitary District, 130 Wis. 2d 347, 387 N.W.2d 133 (Ct. App. 1986).

In City of Madison v. Tolzmann, 7 Wis. 2d 570, 97 N.W.2d 513 (1959), the Supreme Court held that Wis. Stat. § 62.11(5) which granted cities the general power of management and control over navigable water did not authorize the City of Madison to license the boats using a lake within its boundaries. On the other hand, in Menzer v. Village of Elkhart Lake, 51 Wis. 2d 70, 186 N.W.2d 290 (1971), the court held that a municipal ordinance prohibiting the use of power boats on certain days was a proper exercise of the City’s specific authority granted under Wis. Stat. § 30.77.

For example, under the Smart Growth legislation, every community must adopt a comprehensive plan by 2010 that includes 9 elements; natural resources being one of the required elements. See Wis. Stat. § 66.1001.

Wis. Stat. § 281.31(1) provides as follows:

(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.

This authority includes Wis. Stat. § 62.234 for cities, § 61.354 for villages, § 60.627 for towns and § 59.695 for counties.

In Village of Menomonee Falls v. DNR, 140 Wis. 2d 579, 412 N.W.2d 505 (Ct. App. 1987), the court held that the Village of Menomonee Falls did not have the ability to undertake the channelization of a navigable stream without the requisite permits from the DNR under Wis. Stat. ch. 30. In City of New Lisbon v. Harebo, 224 Wis. 66, 271 N.W. 659 (1937), the court held that the city must obtain a permit to construct a dam before condemning land to acquire the dam site.

Wisconsin’s Environmental Decade, Inc. v. DNR, supra. On the other hand, in other cases the courts have found that the state and local regulations for the same resource could coexist. In State v. Village of Lake Delton, 93 Wis. 2d 78, 286 N.W.2d 622 (Ct. App. 1979), the court held that an ordinance zoning a small area of the lake for the exclusive use of a water ski exhibition was not inconsistent with the statutes regulating boating.
For example, the Wisconsin Legislature has withdrawn the authority of local governments to enact independent pesticide regulations, *See* Wis. Stat. § 94.701; and to enact independent regulation of livestock operations. *See* Wis. Stat. § 92.15.


U. S. Const. art. I, Section 8.

28 *See*, U. S. v. *Riverside Bayview Homes, Inc.*, 447 U.S. 121 (1985), in which the Court held that wetlands adjacent to navigable waters are regulated. *See also*, U. S. v. *Edison*, 108 F.3d 1336 (11th Cir. 1997) in which the court held that a human-made tributary that was not navigable in fact was subject to federal jurisdiction. However, the migratory bird rule by which COE regulated isolated waters and wetlands (51 Fed. Reg. 41217, Nov. 13, 1986) was overturned in *Solid Waste Agency of Northern Cook County v. U. S. Army Corps of Engineers*, Case No. 99-1178 (January 9, 2001). This case effectively overturned prior cases including *Hoffman Homes, Inc. v. Administrator, USEPA*, 999 F.2d 256 (7th Cir. 1998) and *State of Utah By and Through Div. Of Parks v. Marsh*, 740 F.2d 799 (10th Cir. 1984).

29 U.S. Const. art. I, Section 8.


35 U. S. Const. art. I, § 10 requires consent of Congress to enter into compacts. However, the requirement for consent has been held to apply only to those compacts which increase political power and not to research or advisory compacts. *Virginia v. Tennessee*, 148 U.S. 537 (1893). This consent has not been required for the water compacts described in this chapter. For additional discussion, *see*, Ellis, *supra* at 524-541.

36 The Wisconsin Great Lakes Compact Commission is authorized under Wis. Stat. § 14.78. Wisconsin first authorized participation in the Commission in 1955 Wis. Law ch. 275 shortly after it was created to replace the Deep Waterways Commission which promoted the St. Lawrence Seaway project.


39The Compact and Commission were established in 1965 Wis. Laws ch. 274. Authorization for the Commission is contained in Wis. Stat. § 14.82.

40The association was created by executive order of the governors of the participating states.


43This argument is based on Winters v. United States, 207 U.S. 564 (1908), the so called “Winters doctrine.” The Winters doctrine holds that when the federal government reserves land to create a reservation, it also reserves sufficient water “to fulfill the purpose of the reservation.” The precise basis and scope of these rights is the subject of on going debate. See generally, American Indian Deskbook, supra at 170-71.

44U.S. Constitution Art I § 8; Cotton Petroleum Corp. v. New Mexico, 490 U.S. 163 (1989).

45Shively v. Bowlby, 152 U.S. 1, 36 (1894).


47See, State of Wisconsin v. Baker, 698 F.2d 1323, 1335 (7th Cir. 1983) wherein the Court held that as to the rights of the Lac Courte Oreilles Band of Chippewa Indians subject to the Treaty of 1854, the 1854 treaty did not convey to the Band sovereignty over navigable water within its reservation and that exclusive sovereignty over them is in the State.


52For example in Montana v. U.S., the court held that the tribe could not regulate hunting and fishing by non-members on non-member land within the reservation.

53In State v. Baker, the court held that under the Equal Footing Doctrine the tribe could not regulate non-member hunting and fishing.

54See, e.g., U.S. Army Corps of Engineers, Public Notice for GP/LOP-98-R issued March 26, 1999 where the Corps provides that EPA and not the states must provide water quality certification under § 404 of the Clean Water Act for activities in tribal reservations.
Section 518 of the federal Clean Water Act, 33 U.S.C. 1377 allows tribes to be treated as states (TAS) for purposes of exercising delegated authority under the Clean Water Act, provided that the water resources are held by an Indian tribe. EPA concluded that this means the tribe must have inherent authority over the resources. 56 Fed. Reg. 64880. Whether there is inherent authority then turns upon the Equal Footing Doctrine and the application of the Montana test. A TAS delegation in the state of Montana was upheld in Montana v. U.S. EPA, 137 F.3d 1135 (9th Cir. 1998). See also, State v. Wisconsin v. U.S. EPA, 7th Cir. Appeal. No. 99-2618, pending as of the date of this publication.

In Lac Courte Oreilles Band v. Voight, 700 F.2d. 341 (7th Cir. 1983), the Court concluded, “The exercise of the LCO’s rights is limited to those portions of the ceded lands that are not privately owned.”

See, Menominee Indian Tribe of Wisconsin v. Thompson, 161 F. 3d. 449 (7th Cir. 1998) (Unlike the Chippewa, the Menominee’s usufructuary rights were extinguished by the terms of their treaties with the United States.)

This concept was raised but not definitively decided in U.S. v. Washington, 694 F.2d 1374 (9th Cir. 1982); 759 F.2d 1353 (9th Cir. 1985) (en banc). In Menominee Indians, supra, 922 F. Supp. at 210, the court rejected an environmental servitude claim and noted that the courts have limited the protection of Indian fishing rights to the regulation of non-Indian fishers.


The Court concluded, “that, with respect to trapping only, private owned stream beds, river bottoms and overflowed lands are private lands within the meaning of LCO I, until such time as the Wisconsin courts should find that the owners cannot exclude members of the public from trapping in these areas.” Id. at 1426.
CHAPTER 4
Shoreland and Floodplain Management Issues

This chapter addresses the regulation of activities that take place primarily above the OHWM of lakes and streams, including shorelands and floodplains. Chapter 5 deals with the regulation of activities which take place primarily below the OHWM of lakes and streams. Wetland regulations are discussed in Chapter 10.

Agencies Regulating Activities in Shorelands and Floodplains

Development activities in shorelands and floodplains are primarily regulated by state and local governments. The state directly regulates grading along the banks of navigable waters, lateral ditches and waterway enlargements.

The state also mandates the enactment of certain local zoning restrictions for shorelands, floodplains, and wetlands within shorelands. Local governments must enact zoning regulations which are at least as restrictive as minimum standards established by DNR rules. If the local unit of government does not enact such an ordinance, the DNR has the authority to adopt an ordinance which the local government must administer.

Local governments may enact additional shoreland or floodplain zoning restrictions provided they do not conflict with state requirements.\(^1\) Many counties are adopting shoreland zoning standards that are more restrictive than minimum state standards as part of a state-wide initiative to classify lakes relative to their sensitivity to development and recreational use.\(^2\)

Federal regulations primarily govern development activities in navigable waters and wetlands rather than shorelands. However, the federal government also sets certain nationwide floodplain zoning standards which qualify states to participate in the National Flood Insurance Program.
Zoning Restrictions on Shoreland Development

Scope of Shoreland Zoning

The state requires that counties enact regulations for shorelands in unincorporated areas. Unlike other county zoning ordinances, towns do not have the right to opt-out of county shoreland zoning.

While cities and villages are not required to adopt shoreland zoning, such areas within cities and villages may be subject to shoreland zoning in one of three cases. First, cities and villages are required to adopt shoreland-wetland zoning. These requirements are discussed in Chapter 10. Second, cities and villages which annex unincorporated land subject to shoreland zoning must continue such zoning in effect. Finally, cities or villages may voluntarily enact their own shoreland zoning requirements.

The following lands are considered shorelands for purposes of shoreland zoning:

- Land within 1,000 feet of the OHWM of a navigable lake, pond or flowage;
- Land within 300 feet from the OHWM of a navigable river or stream, or lands to the landward side of the floodplain (within the floodplain) whichever distance is greater.

The area below the OHWM and the edge of the lake or stream is exposed stream or lake bed. Development activities in these areas require state permits (See Chapter 5), but are not subject to state mandated zoning. However, local governments may choose to extend shoreland zoning to areas below the OHWM.
Shoreland Zoning Requirements

The DNR rules for shoreland areas, Wis. Admin. Code ch. NR 115, contain a number of restrictions on shoreland development. The key requirements are as follows:

- **Minimum lot sizes.** Lots served by a public sanitary sewer must have a minimum average width of 65 feet and a minimum area of 10,000 square feet. Lots not served by a public sanitary sewer must have a minimum average width of 100 feet and a minimum area of 20,000 square feet. Counties apply various formulas to determine minimum average width. The larger requirement for unsewered lots reflects in part the need for adequate land for septic facilities.

- **Building setbacks.** Unless an existing development pattern exists, a setback of 75 feet from the OHWM is required for all buildings and structures except piers, boat hoists and boathouses. Recently, the Legislature created an additional exception for certain gazebo structures. However, decks and other structures are not permitted within the 75’ setback. Requirements for piers and boathouses are established by the state and may be supplemented by local governments. These requirements are described later in this chapter.

- **Cutting restrictions on trees and shrubs.** Generally, in the strip of land extending inland 35 feet from the OHWM, clear-cutting of trees and shrubs must not occur more than 30 feet in any 100 feet of width. In shoreland areas beyond 35 feet, trees and shrubs can be cut only in accordance with sound forestry and soil conservation practices.

- **Filling, grading, lagooning, dredging, ditching and excavating.** These activities are permitted only in accordance with the applicable state permits under Wis. Stat. ch. 30, county shoreland wetland zoning requirements and county approvals to ensure such activities are done in a manner designed to minimize erosion, sedimentation and impairment of fish and wildlife habitat.

Figure 4-2 shows a sample lot design sufficient to conform to the minimum standards for an unsewered lot. If the lot were sewered it could be approximately half of the size shown.
Nonconforming Use Issues

NR 115 specifically allows for the continuation of a lawful existing use of a building, structure or property which predated the shoreland ordinance even if the structure does not conform to the provisions of the ordinance. Such structures are considered a legal nonconforming use.\textsuperscript{11} The county \textit{may} prohibit the alteration, addition or repair of such a structure if the cost over the life of the building exceeds 50 percent of the equalized assessed value of the building.\textsuperscript{12} However, a county may not prohibit the reconstruction of a structure damaged or destroyed after Oct. 14, 1997 by violent wind, vandalism, fire or flood if the structure is restored to its original size, location and use.\textsuperscript{13} The discontinuation of a nonconforming use for 12 months results in the loss of the property’s legal nonconforming use status.

In addition to these nonconforming use provisions, the Legislature recently enacted a section that provides that buildings or structures in violation of shoreland ordinances may not be the object of an enforcement action if the structure has been in place for over 10 years.\textsuperscript{14}

Other Requirements

In addition to these restrictions on shoreland development, counties are required to adopt two other programs for shorelands. First, each county must review any land divisions in shoreland areas which create three or more parcels or building sites of five acres each or less within
Among other things, these subdivisions abutting navigable lakes or streams must meet statutory requirements for providing public access. Among other things, these subdivisions abutting navigable lakes or streams must meet statutory requirements for providing public access.

Second, each county must adopt sanitary regulations to protect health and preserve and enhance water quality. Where a public sewer is not available, the private sewage disposal must conform to a county private sewage system ordinance. Where public water is not available, private wells must conform to state private well construction standards.

**Lake Classification**

Recently, the Legislature created a new subcategory of lake protection grants to encourage lake classification by counties. The purpose of these lake classification projects is to tailor management and protection strategies to individual classes of lakes and occasionally rivers.

A lake’s classification is determined through analysis of several factors including size and depth of the lake, size of the lake’s watershed, type of fish and wildlife in and around the lake, potential for land to be developed around the lake, and the lake’s sensitivity to nonpoint source water pollution. Many counties have identified three general classes of lakes: a “general development” lake category with high to moderate levels of existing development, an “intermediate” class of lakes where levels of development are moderate, but the natural system is still relatively intact; and wild or pristine lakes with high resource values and little or no development.

Some of the protection strategies eligible for funding include development of local regulations and ordinances, the purchase of land or conservation easements, watershed planning and management, and information and education.

Most counties have amended their existing shoreland zoning ordinances to incorporate standards designed to be more effective in controlling runoff pollution, maintaining natural beauty, and providing habitat for wildlife. Some of the revised shoreland zoning standards adopted by counties include building setbacks that are larger than the minimum state standard (i.e. 100-125 feet), vegetation protection and land disturbance standards, stricter limitations on expansion of nonconforming uses, limits on degree of impervious surface area, and mitigation requirements in the shoreland zone (see Figure 4-3). Mitigation is the process by which some development is allowed in shoreland areas conditioned on implementing shoreland management techniques at other points on the shoreland.
Shoreland Zoning Administration

Shoreland zoning is administered by the county. However, the DNR retains continuing authority to object to any amendment to the zoning ordinance which does not comply with DNR standards. In addition, the DNR has the authority to review decisions granting special exceptions (conditional uses), variances, and appeals. A variance requires a showing of unnecessary hardship which can be a difficult standard to meet. Recent case law has been evolving on this issue. DNR may appeal these local zoning decisions to the Board of Adjustment or Circuit Court.

A party who wants to contest such a zoning decision must follow the same procedure as in other zoning decisions. Depending on the type of decision and local procedures, review may be to the Board of Adjustment or to Circuit Court through writ of certiorari.
State Regulation of Shoreland Activities

Scope of State Regulations

In addition to state mandated local zoning, the DNR directly regulates various activities in and near navigable waters under Wis. Stat. ch. 30. These regulations can restrict certain shoreland development activities above and below the OHWM. They may also be augmented by local regulations.

Among the shoreland development activities that are subject to ch. 30 permits are the following:

- Grading or removing topsoil of more than 10,000 square feet from the banks of streams or lakes;
- Constructing a pond within 500 feet of a navigable water;
- Beach development;
- Erosion control and placement of riprap or sea walls;
- Construction and maintenance of boat shelters and maintenance of boathouses.

Other Chapter 30 permits for activities primarily below the OHWM are discussed in Chapter 5.

Each Chapter 30 permit has specific requirements. Most, however, require that the applicant demonstrate that the activity will not materially impair navigation or be detrimental to the public interest or public rights. The public interest test is similar to the interests protected by the trust doctrine. Thus, the courts have held that consideration of water pollution, natural scenic beauty and the impacts on aquatic life habitat are relevant factors in determining the public interest, but economic interests are not.

Many Chapter 30 permits can be granted only to “riparian owners.” Riparian rights cannot be conveyed by easement except for a limited right of access. Such a right does not entitle a non-riparian to obtain a ch. 30 permit.

The general procedure for obtaining a Chapter 30 permit requires that the DNR either schedule a hearing or provide notice that it will proceed without one unless a specific request for a hearing is made. Any person may obtain a hearing upon the filing of a substantive written objection. Such a hearing is a formal proceeding in which evidence is taken and a decision is issued by an independent hearing examiner based on the record.

Simplified procedures are available for specified minor projects. These projects can be permitted without public notice or public hearing.
The DNR can also authorize certain activities under a “general permit.” A general permit is an authorization to proceed with an activity under the terms and conditions specified by administrative rule, rather than site specific terms and conditions. No notice or hearing is required for such permits.

General permits are currently available for the placement of riprap, the development of fords (drive through stream crossings) and construction or enlargement of waterways. To be eligible for a general permit the project must meet design criteria specified by rule. Even if a project falls under a general permit category, the DNR may require an individual permit if the project has the potential to injure public rights or interests. A pilot project for portions of the Fox-Wolf basin allows additional general permits for certain piers, wharfs, sea walls and other structures.

If a person proceeds with a project without a permit the DNR can, in exercise of its enforcement discretion, issue an after-the-fact permit.

### Regulation of Specific Activities

#### Grading on Banks

Wis. Stat. § 30.19(1)(c) requires a permit for the grading or removal of topsoil of more than 10,000 square feet from the banks of any navigable stream or lake. The term “bank” is broadly defined to include any area where water can drain “without complete interruption into the waterway.” Thus, the bank can include areas which are not immediately adjacent to the OHWM.

Such permits can be granted upon notice and hearing if the following criteria are met:

- The project will not injure public rights or interests, including fish and game habitat.
- The project will not cause environmental pollution.
- No material injury to the rights of any riparian owners on any body of water will be affected.

A permit under § 30.19 is not needed for construction and repair of public highways, any agricultural uses of land and certain activities in Milwaukee County.

Frequently, activities that require a § 30.19 permit trigger other state permit requirements. If the project involves grading more than one to five acres it must comply with the erosion control provisions under
NR 216. (See Chapter 8.) If the project site contains areas determined by the DNR to be wetlands, the DNR may condition the § 30.19 permit on compliance with state wetland standards under NR 103, even if no federal wetland permit is required. (See Chapter 10). If grading is done below the OHWM, a permit for removal of materials from the bed of a navigable water may be required under Wis. Stat. § 30.20. (See Chapter 5.)

**Constructing a Pond**

Wis. Stat. § 30.19(1)(a) requires a permit for the construction of an artificial pond in one of two circumstances: (i) where the purpose of the pond is ultimate connection with an existing navigable water or (ii) where the pond is within 500 feet of the OHWM of a navigable stream or lake. This requirement and associated standards is discussed at greater length in Chapter 5, in the context of construction and alteration of navigable waters. It is mentioned here because it is important to note that a permit can be required for pond construction even in the absence of a connection to a navigable water.

**Beach Development**

A riparian owner must obtain a permit to place materials on the lake bed adjacent to the owner’s property for the purpose of improving recreational use and may use the abbreviated procedures under Wis. Stat. § 30.12(3) to do so. This includes placing sand or similar material on the bed of a lake to develop a beach. This authorization does not, however, allow a person to place fill below the OHWM to create additional upland areas and convert them to private use.

This permit can be obtained without a public hearing upon a showing that the deposit will not materially impair navigation or be detrimental to the public interest. Projects that do not meet the requirements of 30.12(3) may be submitted under the full permit procedures under § 30.12(2).

**Erosion Control and Riprap Placement**

A riparian owner may obtain a permit under Wis. Stat. § 30.12(3) to place a riprap (loose assemblage of broken stones) or similar material on the bed or bank of a stream or lake to protect the bank and adjacent land from erosion. This permit can also be obtained without a public hearing upon a showing that the deposit will not materially have an impact on navigation or be detrimental to the public interest.

Alternatively, a riparian may also place riprap according to the terms of a general permit if the project meets certain site criteria and design
standards. These standards specify the materials to be used and the total area, thickness, length and slope of riprap placement. Notwithstanding the general permit authorization, it has been the practice of DNR to require an individual permit to place riprap.

Another erosion control structure used in certain developed areas with erodible shorelines is known as a seawall or retaining wall. These structures usually require an individual permit under § 30.12(2) unless a general permit is available. An individual permit requires a showing that the structure does not materially obstruct navigation, reduce the effective flood flow capacity of a stream and is not detrimental to the public interest.

Boat Shelters and Boathouses

Boat shelters and boathouses are subject to extensive but different types of regulation. A boat shelter is defined as a structure in navigable waters designed and constructed for the purpose of providing cover for watercraft. A boat shelter may have a roof, but no walls or sides. A boathouse has one or more walls or sides. Boathouses located above the OHWM are sometimes referred to as dry boathouses; boathouses below the OHWM are called wet boathouses.

The requirements for the design and maintenance of boat shelters is established by DNR rules. These rules distinguish seasonal boat shelters (those removed each year between December 1 and April 1) from permanent boat shelters. Seasonal boat shelters do not require a permit, but they must comply with DNR location and design standards.

Permanent boat shelters require a permit and must comply with additional location and design standards. The statute allows the DNR to adopt rules and allows municipal government to enact ordinances governing the architectural features of boat shelters. Permits are not available for boat shelters constructed after May 3, 1988 if the property also contains a boathouse.

Both temporary and permanent boat shelters must meet minimum general standards to ensure that they:

- Are placed and maintained by riparians;
- Do not interfere with public rights or have an unreasonable adverse affect on aquatic habitat;
- Do not interfere with rights of other riparians;
- Allow the free movement of water underneath;
- Comply with municipal ordinances.

Boathouses are subject to an entirely different set of regulations.
The most significant regulation is the prohibition of the construction of any boathouse below the OHWM or the conversion of such a boathouse for permanent or temporary human habitation after December 16, 1979. The DNR has jurisdiction over boathouses on artificial navigable channels if the channels are connected to natural navigable bodies of water.

The maintenance of existing wet boathouses is treated as a nonconforming use. Maintenance and repair must not exceed 50 percent of the current valuation. Wet boathouses damaged by violent wind, vandalism, or fire after Jan 1, 1984 are not subject to the 50 percent rule and may be repaired. For any repairs over 10 percent of the current value, the owner must obtain certification from DNR that the costs do not exceed 50 percent. The DNR can order the removal of existing boathouses that are in disrepair.

**Regulation of Floodplain Areas**

**Requirements for Floodplain Zoning**

Independent of shoreland zoning requirements, the state requires that cities and villages as well as counties enact floodplain zoning requirements. The process for creating floodplain zoning ordinances is similar to the shoreland zoning program. The DNR has adopted a rule which provides certain minimum standards. Counties, cities and villages must adopt ordinances which conform to those standards.

To facilitate this process, DNR has developed model ordinances and provides assistance to municipalities. DNR must also review and approve proposed ordinances and amendments. If the local government fails to adopt a conforming ordinance, DNR may enact an ordinance which the local government must administer.

The state floodplain requirements are designed to protect human life, health and to minimize property damage and economic losses. Implementing these requirements is necessary to ensure that municipalities and their residents will be eligible for flood insurance through the National Flood Insurance Program (NFIP). Floodplain management and zoning is required to be eligible for the NFIP.

The availability of flood insurance is critical because flood insurance is required by lenders to obtain a mortgage. This requirement applies to any federal loans such as Small Business Administration, Veteran’s Administration and Farmer’s Home Administration loans, and to any loans from a federally insured, regulated or supervised lending institution. If a community does not participate in the NFIP, it will not...
only be denied flood insurance, but also federal disaster relief. Aid in flood prone areas will also be denied.61

**Delineation of the Floodplain**

Each municipality is required to delineate the entire floodplain on a floodplain zoning map.62 The 100-year-flood is the national standard for protection, and is known as the “regional flood” in Wisconsin.63 The 100-year-flood means that it is a flood with a one percent chance of occurring in any given year. Thus, over the life of a typical 30-year mortgage, there is a 26 percent chance of such a flood occurring.64

To determine the regional or 100-year-flood area, different mapping techniques are used. Hydrologic and hydraulic analyses and computer models provide the most detailed means of delineating a floodplain area.65 However, approximate mapping methods may also be used. These techniques include the data from soil maps, actual high water profiles, aerial photographs of previous floods and other available historic information.66 The DNR, the federal Natural
Resources Conservation Service (NRCS), the Federal Emergency Management Agency (FEMA) and private engineering consultants can provide technical assistance in developing such maps.

Each floodplain zoning map must delineate two separate areas – a floodway and a flood fringe. For areas adjacent to Lake Superior or Lake Michigan, coastal floodplains must also be delineated. The floodway is the channel of the river or stream and those adjoining portions of the floodplain required to carry the regional flood discharge. The flood fringe is that portion of the floodplain outside of the floodway which is covered by water during the regional flood. The flood fringe is generally associated with standing, rather than flowing water. Figure 4-4 illustrates the floodplain and associated floodway and flood fringe areas.

**Floodplain Restrictions**

Development in a floodplain is restricted in the floodway and flood fringe based on the projected flood hazards.

**Floodways**

Floodway areas must be able to convey flowing waters during floods. As a result, most uses are prohibited and other uses are permitted only if development standards are met. In general, the standards prohibit:

- Development which will cause an obstruction to flood flows, an increase in regional flood discharge, or an adverse effect on existing drainage courses or facilities.
- Structures in, on or over floodways if the structure is designed for human habitation, associated with high flood damage potential or is not associated with permanent open space uses.

In addition, the following development uses are prohibited:

- Storing materials that are buoyant, flammable, explosive or injurious to human, animal, plant, fish or aquatic life;
- Uses which are not in harmony with or detrimental to uses permitted in adjoining districts;
- Any private or public sewage system;
- Any private or public well for human consumption;
- Any solid or hazardous waste facility;
- Any wastewater treatment pond or facility;
- Any sanitary sewer or water line except those used to service existing developments or proposed developments outside of the floodway.
A few limited uses are allowed if a permit is granted. Generally, to obtain such a permit, the use must be an open space use and have relatively low flood damage potential such as agriculture, recreation, parking lots, storage yards and certain sand and gravel operations. A number of specific permitted uses are also delineated.

**Flood Fringe**

Development is restricted in flood fringe areas, but the restrictions are less onerous. The basic requirements for flood fringe areas are to ensure that the activities in the flood fringe will not obstruct flood flows or increase the regional flood discharge.

For most construction in the flood fringe, the development must be protected to meet the flood protection elevation (FPE). This elevation is the regional flood elevation (RFE) plus two feet. Structures in the floodplain can be floodproofed to the flood protection elevation by building on fill. Special requirements apply to specific uses in flood fringe areas for residences, commercial, manufacturing and other uses.

Nonconforming uses and buildings may be continued unless there are modifications exceeding 50 percent of its present equalized assessed value or if the use is discontinued for 12 consecutive months. Nonconforming buildings that are damaged or destroyed by tornado, icestorm, mudslide, windstorm or other natural event, excluding a flood, may be repaired or rebuilt. Any modifications made to a nonconforming use must be granted by permit, special exception, conditional use or variance. To obtain such approval the applicant must meet certain minimum criteria including certification that the building has been floodproofed according to state standards.

Floodproofing means using a variety of techniques to lessen the effects of a flood on a structure. These techniques can include anchoring structures, reinforcing walls and floors, installing cutoff valves on sewer lines, and other measures. Floodproofing measures must be certified by a registered professional engineer or architect before a permit is issued.
Chapter 4 Notes

1 For example, a county cannot prohibit uses specifically permitted in shoreland wetlands. See, Wis. Admin. Code § NR 115.05(2)(c) for a list of uses which counties “shall permit” within shoreland wetland zones.

2 1997 Wis. Act 27, amending Wis. Stat. § 281.69. In Act 27 the Wisconsin Legislature expanded the existing Lake Protection Grants program to include additional funding for lake classification projects. The Lake Classification project grant is targeted towards counties and may cover up to 75% of total project costs with a total cap of $50,000.

3 Wis. Stat. § 59.692; Wis. Admin. Code ch. NR 115. This requirement has been upheld by the Courts in Town of Salem v. Kenosha County, 57 Wis. 2d 432, 434, 204 N.W.2d 467 (1973); and Just v. Marinette County, 56 Wis. 2d 7, 201 N.W.2d 701 (1972).

4 Compare Wis. Stat. § 59.692(2)(a) with Wis. Stat. § 59.69(5). Towns which have zoning authority can also adopt their own shoreland zoning provided it is not inconsistent with county zoning for the area. Existing town zoning ordinances which are more restrictive than county ordinances may remain in effect as to the more stringent requirements. See, Wis. Stat. § 59.692(2)(b) and (c).

5 Wis. Stat. § 59.692(7)(a). Existing county zoning continues in effect unless the city or village adopts an ordinance which complies with state standards and is at least as restrictive as the existing county ordinance.

6 Wis. Stat. § 59.692(1); Wis. Admin. Code § NR 115.05(8). The exception to these rules is that the distance from glacial pothole lakes is measured from the high water mark, not the ordinary high water mark.

7 Local governments have authority to regulate certain lands “under, abutting or lying close to navigable waters.” Wis. Stat. § 281.31. This would include lands below the ordinary high water mark.


9 See, Wis. Adm Code § NR 115.05(3)b. The exception for an existing pattern of development is set forth in Wis Adm. Code § NR 115.05(3) b 1., but is not further defined. Generally, counties have defined this to allow set back averaging based upon some minimum number of structures within a specified distance from the subject property.

10 1999 Wis. Act 9, creating Wis. Stat. § 59.692(1v). This exception applies to structures within 75 feet of the shore if the part of the structure nearest the water is at least 55 feet landward of the OHWM, the total floor area does not exceed 200 feet, and the structure has open, screened sides, or no sides at all. As a condition of permit approval, the property owner must establish a vegetative buffer covering at least 70% of the portion of the setback area that is nearest to the water.
Wis. Admin. Code § NR 115.05(3)(e). These provisions parallel the general nonconforming use provisions in Wis. Stat. § 59.69(10).

12 For additional analysis on the law of nonconforming uses and the 50% rule, see OAG 2-97 (Informal opinion).

Wis. Stat. § 59.692 (1s)(a).

14 Wis. Stat. § 59.692 (1t).

15 Wis. Admin. Code § NR 115.05(4).

16 Wis. Stat. §§ 236.16(3), (4).

17 Wis. Admin. Code § NR 115.05(5).

18 Wis. Stat. § 281.69(5), as amended by 1997 Wisconsin Act 27. The law only allows lake classification grants to be awarded to counties. However, towns, villages, cities, tribes, qualified lake associations, town sanitary districts and other local units of government may seek funding for certain elements of a lake classification project (i.e. ordinance development) under the general lake protection grant category. Wis. Admin. Code § NR 191.02.


20 Wis. Stat. § 281.69(5). The law requires that certain factors be considered in the classification of lakes. These include:

   “1. The size, depth and shape of the lake;
    2. The size of the lake’s watershed;
    3. The quality of the water in the lake;
    4. The potential of the lake to be overused for recreational purposes;
    5. The potential for the development of land surrounding the lake;
    6. The potential of the lake to suffer from nonpoint source water pollution;
    7. The type and size of the fish and wildlife populations in and around the lake.”

21 Classification and the management activities selected to implement the program may not lower existing state minimum standards for lake protection. Wis. Admin. Code § NR 191.04.


23 Wis. Admin. Code § NR 115.06(2)(c).

24 See, State v. Kenosha County Board of Adjustment, 218 Wis. 2d 396, 577 N.W. 2d 813 (1998) in which a variance in shoreland setback from 75 to 64 feet was denied. The court said that unnecessary hardship can only be demonstrated when the applicant “will have no reasonable use of the property in the absence of a variance.” See also, Sawyer County v. Wisconsin Dept. of Workforce Development, 231 Wis. 2d. 534, 605 N.W. 2d 627 (Ct. App.1999) where the court upheld the denial of a shoreland setback ordinance to accommodate the needs of a disabled property owner. But, see State v. Outagamie Co. Bd. of Adjustment, Case No. 98-1046, pending before the Wisconsin Supreme Court at the time of publication which may modify this standard.
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28. Wis. Stat. §§ 30.12(3)(b), structures or fill material; 30.13(1)(a) piers and wharfs; and 30.19(4) enlargement of public waters.

29. Reuter v. Dep’t of Natural Resources, 43 Wis. 2d 272, 168 N.W.2d 860 (1969); Claflin v. Dep’t of Natural Resources, 58 Wis. 2d 182, 206 N.W.2d 392 (1973); Wisconsin’s Envt’l Decade, Inc. v. DNR, 115 Wis. 2d 381, 340 NW2d 722 (1983). The DNR has broad discretion in applying the public interest test and may consider fill’s cumulative impacts in a navigable water. Hixon v. Public Service Comm., 32 Wis. 2d 608, 146 N.W.2d 577 (1966); Sterlingworth Condominium Ass’n v. DNR, 205 Wis. 2d 710, 556 N.W.2d 702 (Ct. App. 1996). For further discussion on the public interest test, see text at Chapter 5, note 35.


31. In this respect, Wis. Stat. § 30.133 is consistent with the holdings in Stoeser v. Shore Drive Partnership, 172 Wis. 2d 660, 669-70, 494 N.W.2d 204 (1993); Cassidy v. Dept. of Natural Resources, 192 Wis. 2d 153, 161, 390 N.W.2d 81 (Ct. App. 1986); and de Nava v. DNR, 140 Wis. 2d 213, 409 N.W. 2d 151 (Ct. App. 1989).

32. Wis. Stat. § 30.02.

33. Wis. Stat. § 30.12(3).


35. Wis. Admin. Code § NR 322.04.

36. Wis. Admin. Code § NR 322.08(6).


38. See, Capoun Revocable Trust v. Ansari, 234 Wis. 2d 355, 610 N.W.2d 129, 2000 WI App. 83 (Ct. App. 2000) and Wis. Stat. § 30.28. For further discussion of enforcement see Chapter 11.


41. Wis. Stat. § 30.12(3)(a)3.

42. Wis. Admin. Code § NR 322.05.

43. Wis. Stat. § 30.01(1c).
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44Wis. Stat. § 30.01(1d).


46Wis. Admin. Code § NR 326.055(3).

47Wis. Stat. § 30.12(3)(c).


50Klingrison v. DNR, 163 Wis. 2d 921, 472 N.W.2d 605 (Ct. App. 1991).

51Wis. Stat. § 30.121(3r). This exception was upheld in Pace v. Oneida County, 212 Wis. 2d 448, 569 N.W.2d 311 (Ct. App. 1997).

52Wis. Admin. Code § NR 325.06.

53Wis. Stat. § 30.121(4); Wis. Admin. Code §§ NR 325.11, NR 325.12.


55These regulations have been upheld by the courts on numerous occasions. See, State v. Trudeau, 139 Wis. 2d 91, 408 N.W.2d 337 (1987); State v. Ozaukee County Board of Adjustment, 152 Wis. 2d 552, 449 N.W.2d 47 (Ct. App. 1989).

56Wis. Admin. Code § NR 116.22(1).


58Wis. Admin. Code § NR 116.01(1).


6042 U.S.C. § 4022 of National Flood Insurance Act provides:

“After December 31, 1971, no new flood insurance coverage shall be provided under this chapter in any area (or subdivision thereof) unless an appropriate public body shall have adopted adequate land use and control measures (with effective enforcement provisions) which the Secretary finds are consistent with the comprehensive criteria for land management and use under section 4102 of this title.”


63Wis. Admin. Code § NR 116.05(41).

64Id.

Wis. Admin. Code § NR 116.09(2).

Wis. Admin. Code § NR 116.09(1).

Wis. Admin. Code § NR 116.05(22).


Wis. Stat. § 87.30(1d).

Floodproofing standards are contained in Wis. Admin. Code § NR 116.16.

Wis. Admin. Code § NR 116.16(2).
CHAPTER 5
Lake and Stream Management Regulations

This chapter discusses the regulations that apply to activities taking place below the ordinary high water mark in natural streams and lakes. It reviews structures and fill activities, dredging and channelization activities, surface water withdrawal or diversion, boating regulations, and fish and aquatic life management regulations.

Activities which take place on shorelands and floodplains are discussed in Chapter 4. Issues relating to dams and flowages, water drainage and discharge are addressed in subsequent chapters.

Agencies Regulating Activities in Streams and Lakes

While each level of government has some ability to regulate activities in lakes and streams, the state acts in accordance with its public trust authority with primary regulatory responsibility. The federal government retains certain jurisdiction over navigable waterbodies under federal standards, but its activities are usually coordinated with the state’s regulatory activities.

Local governments also have general authority to regulate activities in streams and lakes. However, unlike shoreland and floodplain zoning where the state has mandated local regulations, local regulation of activities in lakes and streams is often specifically limited by state statute. For example, local governments cannot enact boating regulations except where they meet certain specified standards described below.

In addition to regulations enacted by general purpose local governments, the Wisconsin Legislature has also authorized the creation of special purpose districts known as Public Inland Lake Protection and Rehabilitation Districts. These districts can be created according to Wis. Stat. ch. 33 for the purpose of undertaking programs to protect and rehabilitate lakes.

A municipality may establish such a district if it encompasses all of the lake frontage within its boundaries. Otherwise, a county board may establish such a district provided that any portion of the district within a city or village has been approved by the city council or village board.
The district is governed by a board of commissioners established by statute and subject to the powers and directives of the annual or a special meeting. Each such district may borrow money or levy special assessments and special charges for the purpose of carrying out district protection and rehabilitation projects. Districts may enact and enforce ordinances relating to certain boating regulations. Districts may assume the powers of town sanitary districts.

The DNR and other state agencies such as the UW-Extension provide technical support and assistance. Financial assistance is also available under guidelines established by the DNR.

Regulations that Apply to the Placement of Structures and Fills in Streams and Lakes

General State and Federal Requirements

The state regulates various activities in and near navigable waters under Wis. Stat. ch. 30. An overview of these permit requirements and procedures was given in Chapter 4.

Among the activities that could occur in lakes and streams subject to ch. 30 permits are the placement of the following structures:

- Piers and wharfs;
- Pilings;
- Fish cribs and other habitat improvement structures;
- Water ski jumps and related structures;
- Swimming rafts;
- Fishing rafts;
- Fords;
- Bridges and culverts.

The federal government also has jurisdiction over the placement of structures or fill in navigable waters. One of the oldest federal regulations of the nation’s waters is the Rivers and Harbors Act of 1899. Section 10 of the Act, much like ch. 30 in Wisconsin, is designed to prevent obstructions to navigable waters. It regulates the placement of structures and dredge and fill activities in navigable waters. However, unlike ch. 30 jurisdiction, jurisdiction under § 10 is restricted to a limited definition of navigable waters. The federal definition applies only to those waters which are or have been used to transport interstate or foreign commerce.
Federal permits are issued by the U.S. Army Corps of Engineers (COE) subject to criteria which focus on navigational concerns. The COE’s § 10 program and Wisconsin’s ch. 30 programs have been coordinated although they are legally separate.

In addition to permits under § 10 of the Rivers and Harbors Act, the COE also issues permits under § 404 of the Clean Water Act for the discharge of materials into navigable waters. The term “navigable waters” is defined much more broadly for purposes of § 404 of the Clean Water Act to include all “waters of the United States.” Under the broad definition of waters of the United States, COE jurisdiction includes ditches and canals, wetlands “adjacent” to navigable waters and artificially created wetlands. COE had also asserted jurisdiction over waters or wetlands isolated from navigable waters that could be used by migratory birds, but that rule was overturned by the U.S. Supreme Court.

While the scope of the waters covered by § 404 is broader than § 10, the scope of the activities is narrower. Section 404 only addresses discharges of dredge and fill materials. Other activities such as draining are not covered under § 404 unless there is discharge associated with such activities.

In many cases where a § 404 permit is required, the DNR may also require a permit under Wis. Stat. ch. 30. Here, too, the DNR attempts to coordinate its efforts with the COE with respect to these permits.

**Regulation of Specific Structures and Fill Activities under Chapter 30**

**Piers and Wharfs**

As lakeshore development has increased, more attention has been brought to bear on the regulation of piers. This section will review the extent to which piers require permits, the scope of pier permit standards and the issue of riparian easements and dockominiums. A pier is defined as any structure extending into navigable waters from the shore with water on both sides, built or maintained for providing a berth for watercraft or loading or unloading watercraft. A wharf is similar except that it is parallel to and connected with the shore throughout its length.

**The Need for a Permit**

Historically riparian rights included a general right to construct a pier to navigable depth in aid of navigation. That right is subject to state and local restrictions. Nevertheless, certain piers may still be
constructed without state permits. A riparian may construct a pier or wharf without a state permit under Wis. Stat. § 30.13 if all of the following conditions are met:

- It does not interfere with public rights.
- It does not interfere with the rights of other riparians.
- It is constructed to allow the free movement of water underneath.
- It does not extend beyond any pierhead line established by a municipality.
- It does not violate a local ordinance.

Each of these requirements will be discussed below. However, it should be noted that an administrative rule also provides that piers cannot extend beyond the line of navigation, unless a need can be demonstrated that a greater depth is required. The line of navigation is the 3-foot depth contour or the contour required by the draft of the craft using the pier based on the normal summertime low levels of the waterway (see figure 5.1). If the line of navigation is exceeded a permit is required.

The requirements that a pier conform to pierhead lines and local ordinances are fairly straightforward. The statutes provide that local governments may establish a pierhead line. A pierhead line is the maximum length of piers allowed in a waterbody unless a permit is granted, or it is a use which existed before the pierhead line was established. A pierhead line may be established by a municipality in accordance with the same procedures used to establish a bulkhead line, and is subject to DNR approval. Unless specifically authorized, piers which extend beyond a pierhead line are unlawful obstructions which can be removed by the municipality.
The requirement for free flow of water under the pier is also straightforward. The remaining requirements of § 30.13 are less well defined.

Whether a pier interferes with the rights of other riparians is a matter of allocating the riparian zone. There is no set rule in Wisconsin for establishing riparian space of shoreline properties, but several methods have been devised to equitably apportion access to the line of navigation.\textsuperscript{30} The most common are referred to as the extended property line method and the coterminous riparian rights line method.\textsuperscript{31}

The extended property line method simply extends the lot lines from upland to the line of navigation. This method is usually used where the shoreline is relatively straight and the property lines are at right angles to the shore.\textsuperscript{32}

The coterminous riparian rights line method is usually used where the property lines themselves do not meet the shore at right angles and involves two steps.\textsuperscript{33} First, for each lot, a line (known as a chord) is drawn to connect the points where the lot lines meet the OHWM. Then, the angle formed by adjacent chords is divided in two (bisected). The lines which bisect the angles are the coterminous riparian rights lines.\textsuperscript{34} Where the shoreline itself is fairly straight, the lines are drawn at right angles to the shoreline. Thus, this method is sometimes known as the right angle method.

These methods are illustrated below.

**Riparian Zones**

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![Diagram of Riparian Zones](image-url)

Figura 5-2
The line of navigation on the waterward side and the apportionment of access between adjacent riparians defines an area known as a riparian zone or zone of influence. This zone describes the area where a riparian may place a pier or structure if other applicable standards are met.

The most difficult standard to assess is the question of interference with public rights. This standard is closely tied to the standard in § 30.12 for granting a permit, i.e., whether structure is detrimental to the public interest. In general, courts have not drawn a distinction between these two concepts. The result is that if the pier interferes with public rights the riparian needs a permit, but probably will not get one without changes to the pier. The scope of the public interest test is set forth at greater length in discussing pier permit standards.

There are, of course, many existing piers that exceed the standards in § 30.13, but do not have a permit. Wis. Stat. § 30.122 provides that if the pier was constructed before December 9, 1977 and did not require a permit at the time of construction, it shall be presumed in conformity with the law. This section however only creates a presumption and does not grandfather piers that required a permit when installed.

**Permit Standards**

If a pier or wharf does not meet the requirements of § 30.13, it requires a permit under Wis. Stat. § 30.12(2). A permit under this section requires a public notice and hearing. Such permits are not available to non-riparians. A permit will be granted if the pier does not materially obstruct navigation, reduce the effective flood flow capacity of a stream and is not detrimental to the public interest.

So, what is in the public interest? Public interests in navigable waters is broadly defined under the public trust doctrine to include navigation, water quality, natural scenic beauty, recreation, aquatic habitat and other uses. The DNR has attempted to answer some of the public interest questions in the context of piers through a guidance document known as the pier planner. This document addresses pier length, width, placement and other factors. While this document is not an administrative rule and is not enforceable as such, it represents DNR’s current framework for analysis and serves as guidance for pier decisions. Recent court rulings have upheld the use of the pier planner in pier decisions made by the DNR when the conclusions drawn are reasonable.
Among the key provisions of the pier planner are the following:

- Piers can have two slips for the first 50 feet of shoreline and one additional slip for each additional 50 feet of shoreline.
- Piers cannot extend beyond the line of navigation or pierhead line.
- Piers should be no more than six feet wide, because this size is adequate for loading and unloading watercraft.
- Piers should not have decks.

In addition, recent court cases have upheld the DNR’s policy to look at cumulative impacts in assessing the public interest. Thus, even if a particular pier is not necessarily detrimental to the public interest, the DNR may deny the permit if the cumulative impacts of this pier with other piers would have a detrimental impact.

**Riparian Easements and Dockominiums**

Permits under Wis. Stat. § 30.12 may only be granted to riparian owners. The courts have held that a riparian easement holder is not a riparian owner for purposes of this requirement. Subsequently, the legislature enacted Wis. Stat. § 30.131 which allows piers and wharfs to be maintained by non-riparians under the following circumstances.

- The riparian owner entered into a written easement recorded before December 31, 1986 authorizing access to the shore by a non-riparian.
- The easement is granted to a person (or successor in interest) who has placed a pier seasonally in the same location at least once every four years since the easement was granted.
- The pier is not prohibited by or inconsistent with the easement.
- The pier is substantially the same size and configuration since April 28, 1990 or the last placement prior to that date.
- The pier complies with all other provisions of Chapter 30.

Whether a particular riparian easement that grants access is sufficient to allow the placement of a pier depends on the facts of the case. However, once established, a riparian easement under this section may be transferred notwithstanding the general prohibition on the conveyance of riparian rights.

Evolving uses of waters and shorelands continues to challenge the state’s ability to balance public and private interests in waterways. A dockominium, for example, represents a relatively new development in the area of water law. The dockominium refers to a condominium
unit or lock box, the purchase of which gives the buyer rights to use a pier slip. The issue has spawned a number of questions, the primary one being whether the use represents a reasonable use of public waters, or, in fact, a use inherently inconsistent with the public trust. At the time of this writing, the dockominium issue was before the Wisconsin Court of Appeals.

**Pilings and Other Structures**

A riparian owner can apply for a permit to drive a piling into a bed of a navigable water adjacent to the owner’s property for the purpose of deflecting ice, protecting existing structures or providing a pivot point for watercraft.49

A riparian can also apply for a permit to install intake structures on the bed of a navigable water for the purpose of facilitating withdrawal of water for fire and emergency use.50

These permits may be obtained without a public hearing upon a showing that the structure will not materially impair navigation or harm the public interest.

**Fish and Bird Habitat Structures**

A riparian owner may obtain a permit under Wis. Stat. § 30.12(3) for the placement of a fish crib, spawning reef, wing deflector or similar device on the bed of a navigable water for the purpose of improving fish habitat.51

Such a permit may be obtained without a public hearing upon a showing that such a structure will not materially obstruct navigation or be detrimental to the public interest.

A riparian owner may place a bird nesting platform, wood duck house or similar structure on the bed of a navigable water to improve wildlife habitat without a permit if the structure conforms to rules promulgated by DNR and 10 days advance notice is given to DNR.52

**Water Ski Platforms and Jumps**

Ski jumps and platforms anchored to the bed of a navigable water are largely subject to the same criteria that apply to other structures.53 Wis. Stat. § 30.135 provides that a riparian may place a waterski jump or platform in a navigable waterway without a permit if the following conditions are met:

- It does not interfere with the public’s rights in navigable waters.
• It does not interfere with the rights of other riparians.
• It is located at a site that affords sufficient water depth and clearance for water skiing.

If these conditions are not met, the riparian must apply for a permit.\textsuperscript{54}

Upon receipt of an application for a permit, the DNR may either order a hearing or proceed without one unless it receives a written objection. If no written objection is received within 30 days of publication of the notice, the DNR has five days in which to either approve or disapprove the permit.\textsuperscript{55}

**Fishing Rafts**

Wis. Stat. § 30.126, governs the use of fishing rafts. Generally, a fishing raft is defined as a raft or float used for fishing which is not normally used for navigation and is normally retained in place by means of a permanent attachment (such as poles or cables) or semipermanent attachment to the shore or bed of the waterway.\textsuperscript{56} In general, the statutes prohibit the use of fishing rafts except for certain locations in Wisconsin including portions of the Mississippi and Wolf Rivers.\textsuperscript{57} Special state and local regulations govern the use of such fishing rafts.\textsuperscript{58}

**Swimming Rafts**

Swimming rafts would normally be subject to the same requirements as piers and other structures noted above. However, Wis. Stat. § 30.13(1m) allows the use of certain swimming rafts without a permit. This section provides that a riparian may place a swimming raft in a navigable waterway for swimming and diving without a permit under § 30.12 under the following conditions:

• It does not interfere with public rights and navigable waters.
• It does not interfere with rights of other riparian proprietors.
• It is placed within 200 feet of shore.

If these conditions cannot be met, a person can still seek an individual permit under § 30.12(2).

**Fords and Boat Landings**

A riparian owner may obtain a permit under Wis. Stat. § 30.12(3) to construct a ford to cross a navigable stream. This permit can be obtained without a public hearing upon a showing that the ford will not materially impact navigation or be detrimental to the public.
interest. The ford may consist of crushed rock or gravel, reinforced concrete planks, adequately secured timbers or similar materials placed on the bed of a navigable stream for the purpose of developing a water crossing. An equal amount of material must be removed from the streambed to preserve the stream’s hydraulic capacity. A similar permit is available for the purpose of building a boat landing.

Alternatively, a riparian owner can seek authorization for a ford under the DNR’s general permit authority if the project meets certain design criteria established by rule. These regulations specify the width of the ford, the slope, thickness, and other locational and design requirements. If a ford cannot meet those provisions, an applicant can apply for an individual permit under § 30.12(3).

**Bridges and Culverts**

The construction of bridges is regulated under Wis. Stat. § 30.123. By statutory definition, the term bridge includes culverts. No person may construct or maintain a bridge in, on or over navigable waters unless a permit under § 30.123 has been issued. This permit can be obtained upon evidence of permission from the riparian owner and a demonstration that the bridge will not be an obstruction to navigation, adversely affect the flood flow capacity of the stream, or be detrimental to the public interest.

On receipt of a complete application, the DNR follows the general Chapter 30 public notice and hearing provisions. However, no notice or hearing is required for bridges that cross navigable waters less than 35 feet wide. Regulations governing design standards for bridges are also established by rule.

These requirements are primarily applicable to private bridges. Municipalities which construct highway bridges are governed by standards developed under Wis. Stat. § 84.01(23). Department of Transportation (DOT) activities which would otherwise require a permit under § 30.12 have a qualified exemption under § 30.12(4) which establishes a liaison procedure through which environmental issues and floodplain zoning are resolved.
Dredging, Construction and Alteration of Waterways

Dredging Requirements

The removal of material from the beds of a stream or lake requires a permit or contract under Wis. Stat. § 30.20. This requirement applies regardless of whether the lake or stream is navigable.64

Contracts for removal apply to any removal of material from the bed of a natural navigable lake or from the bed of an outlying water of the state.65 A contract is used even where the removal of material is not for resale. In essence it functions like a permit, but has an additional potential purpose of requiring the permittee to pay the state for extracted materials, because the state owns the lakebed.66

A more traditional permit mechanism applies for the removal of material from the bed of streams.67 Where a permit is required, the only standard is that the permit be consistent with the public interest in the water involved.

Even though this section applies to non-navigable as well as navigable waterbodies, an exception is provided for the removal of material from the bed of a farm drainage ditch which was not navigable before ditching. However, the general exemption for farm drainage ditches would not apply if there is a long-term adverse effect on cold water fishery resources or fish spawning beds or nursery areas.68

Construction and Alteration of Waterways

Several sections govern work which creates or alters waterways. The rules which apply depend on whether the waterway affected is natural or artificial and on the nature of the work proposed.69

Any work to change or straighten a natural navigable stream requires a permit under Wis. Stat. § 30.195. This section provides that the DNR shall grant a permit to the owner of land to change the course of or straighten a navigable stream if such a change will improve the economic or aesthetic value of the owner’s land, and will not adversely affect the flood flow capacity of the stream, be detrimental to public rights or be detrimental to the rights of other riparians located on the stream. The permit may be granted on the DNR’s own motion after its investigation or after a public notice and hearing.

Wis. Stat. § 30.19(1) (a) requires a permit for the construction, dredging or enlargement of an artificial waterway, canal, channel, ditch, lagoon or pond where the purpose is ultimate connection with an existing navigable stream or lake or where any part of the artificial
waterway is located within 500 feet of the OHWM of an existing navigable stream or lake. These projects are often generically referred to as “enlargements,” but can include the creation of dug ponds as well as constructing a channel or ditch. A permit under this section can be issued without a hearing.

This subsection does not apply to dredging in natural waters because such activities are governed by Wis. Stat. § 30.20. In addition, this section does not authorize the connection of a channel or ditch to a drainage district ditch.

Wis. Stat. § 30.19(1)(b) provides that the actual connection of a natural or artificial waterway with an existing navigable water also requires a permit. Such a permit can be issued only after notice and opportunity for a hearing.

Section 30.19 does not apply to agricultural uses of land, certain lakes or streams in Milwaukee County, or work to maintain the original dimensions of an enlargement authorized under this section.

The DNR can issue a § 30.19 permit if it finds:

- The project will not injure public rights or interests including fish and game habitat.
- The project will not cause environmental pollution.
- Any enlargement conforms to the requirement of laws for sanitation and for the platting of land (including provisions requiring public access).
- No material injury to the rights of any riparian owners on any body of water affected will result.

The DNR must provide that all artificial waterways constructed under this section which are connected to navigable waterways be deemed to be public waterways. The DNR can also impose other conditions it finds necessary to protect public rights and interests.

Under general common law principles, the bed of any such artificially created waterway remains with the owner of the land. However, once an artificial navigable waterway is connected to a natural navigable water, the public has access to the water for all public trust uses.

### Surface Water Withdrawal

In a water abundant climate such as Wisconsin, normal water withdrawal is usually not a concern. One of the basic rights of a riparian is the right to the reasonable use of water including withdrawal for consumptive purposes. However, the withdrawal of surface water is subject to regulation by DNR in two circumstances:
diversions for irrigation or to maintain water levels and large scale diversions. Water diversions for other purposes do not require a permit.76

**Diversions for Irrigation or to Maintain Water Levels**

Wis. Stat. § 30.18(2)(a) requires a permit for water diversion for two types of activities:77

- Diversion of water from a stream if the diversion is for the purpose of maintaining or restoring the normal level of a navigable lake or the normal flow of a navigable stream.
- Diversion of water from a stream if the diversion is for the purpose of agriculture or irrigation (including watering plants or grass).

The permits required for diversions from streams apply to non-navigable as well as navigable waters.78 However, the cranberry law exempts cranberry bogs from regulation under § 30.18.79

If a permit is required, an application must be submitted to the DNR specifying the location of the diversion and riparian status of land to which the water is to be diverted, the means by which the water will be diverted, the amount to be diverted, the period when the diversion will occur, plans, maps and other information.80 For diversions of water from streams for agriculture or irrigation, statements of consent must be obtained from all riparian owners who are making beneficial use of the water to be diverted.81

Upon receipt of a completed application, the DNR will follow the standard Chapter 30 notice and hearing requirements except that notice must also be sent to persons upon whose land water diversion structures will be located and to downstream towns, villages and cities.82

The DNR shall issue a permit for diversion from streams if the DNR concludes that the proposed diversion will not injure any public rights in navigable waters and that the diverted water is surplus water or, if it is not surplus water, all riparians who may be adversely affected by the diversion have consented.83

The DNR also has independent authority to raise water levels in any navigable lake or stream for conservation purposes.84 If any lands are damaged by raising water levels and the DNR cannot acquire rights to flood such lands by agreement with the owner, it can acquire such rights by condemnation.85
Large Scale Diversions

Large scale diversions of water from a lake or stream resulting in a water loss averaging 2,000,000 gallons per day in any 30 day period above the person’s authorized base level of water loss require a permit under Wis. Stat. § 30.18(2)(b). Approval for large scale diversions from streams or lakes must meet the standards under Wis. Stat. § 281.35. If a large scale diversion involves activities regulated under Wis. Stat. § 30.18(2)(a), discussed above, those standards must also be met.

Additional restrictions apply to diversions of 100,000 gallons per day in any 30-day period from the Great Lakes basin to another water basin. In addition, federal law requires that diversions of water from the Great Lakes Basin also receive the approval of the Governors of the other Great Lakes states.

Permits contain reporting requirements and other conditions on water use. Any plans for canals or structures are subject to separate approval by the DNR applying appropriate statutory standards.

Boating Regulations

Subchapter V of Wis. Stat. ch. 30 provides for extensive state regulation of boating activities. These regulations include boat registration and title, regulation of boating equipment, regulation of boating conduct and operation and numerous other items. The DNR has, pursuant to this authority, enacted rules governing boat regulation and registration requirements.

Local regulation of boating is specifically limited by statute. In general, a town, village, city, town sanitary district or public inland lake district may enact ordinances which are in strict conformity with state statutes and rules. It may also adopt additional local regulations on waters within its jurisdiction if the regulation is not contrary to or inconsistent with state laws and if it relates to the equipment, use or operation of boats. These ordinances may be enacted in the interest of public health, safety or welfare, as well as in the interest of preserving the state’s natural resources. There are two ways in which such regulations may take effect. All towns, cities and villages with jurisdiction on the lake may enact identical boating regulations. Alternatively, at least 50 percent of the towns, villages and cities having jurisdiction on the lake may adopt an identical ordinance, provided at least 60 percent of the shoreline frontage is within their boundaries.
The authority to adopt a boating ordinance for a particular lake may also be delegated to a public inland lake and rehabilitation district or a town sanitary district. Each municipality with jurisdiction must adopt a resolution granting this authority or at least 50 percent of the municipalities with at least 60 percent of the shoreline must do so. Counties may adopt local regulations on any river or stream within its jurisdiction. Local regulations pertaining to equipment use or operation of boats are subject to advisory review by the DNR.

Specific provisions address DNR supervision of municipal mooring and designated mooring area ordinances. Other provisions address local regulation of seaplanes, water safety patrols and icebound waters.

### Fish and Aquatic Life Management

#### Regulation of Fishery Resources

The DNR is charged with the management of fishery resources in Wisconsin. It’s stated goal is to provide opportunities for the optimum use and enjoyment of Wisconsin’s aquatic resources both sport and commercial. The Legislature has given the DNR broad authority in this area. Among the key components of the DNR’s regulatory and management programs are:

- Regulation of private fishing through issuance of licenses, restrictions on methods, times of harvest, size and quantity of fish taken,
- Regulation of commercial fishing,
- Establishment of fish refuges and protection of endangered aquatic species,
- Propagation of fish through state fish hatcheries.

While the state has taken a preeminent role in the management of the fishery resource, there are specific provisions that allow private fish management subject to state permit. However, absent a permit granted pursuant to these sections, the stocking or introduction of fish is prohibited. In particular, individuals may undertake the following activities:

- Remove, destroy or introduce fish in a lake under a private management permit if the person or persons applying for the permit own all of the land bordering the navigable lake.
- Construct and operate a fish farm under a private fish farm license following registration with the Department of Agriculture, Trade and Consumer Protection.
- Stock or introduce fish or spawn as allowed by a permit.
Aquatic Plant Management

The DNR is authorized under several sections to control aquatic nuisances through the use of aquatic herbicides or other means. Recent DNR educational and management efforts have centered on the control of watershed sources of nutrients that promote nuisance aquatic plant growth, the protection of native aquatic plants and the prevention of Eurasian water milfoil.107

The DNR has general authority to supervise chemical treatment of waters for the suppression of algae, aquatic weeds, swimmer’s itch and other nuisance producing plants and organisms.108 Local units of government may not prohibit the application of such chemicals where they have been authorized by DNR.109

The cutting of weeds in navigable waters and not removing such weeds is deemed a nuisance and subject to enforcement by DNR.110 Moreover, the state has the authority in certain areas to cut aquatic vegetation without removing the vegetation for the purpose of providing waterfowl nesting, brood and migration habitat.111
Chapter 5 Notes

1 Wis. Stat. § 281.31.
2 See Chapter 3 for a discussion of local jurisdictional issues.
4 Wis. Stat. §§ 33.28-33.305.
5 Wis. Stat. §§ 33.31, 33.32.
6 Wis. Stat. §§ 30.77(3), 30.78, 30.81, 66.0119, 66.0114.
7 Wis. Stat. § 33.22(3). Town sanitary district powers are specified in Wis. Stat. § 60.77 and include the powers to contract, issue rules or orders, administer the private sewage system program if authorized, construct and maintain sewer and water supply systems and provide for chemical or mechanical treatment of waters for specified purposes.
8 Wis. Stat. §§ 33.03, 33.11.
12 The COE and DNR have developed a general permit which effectively delegates to DNR primary authority to issue permits which fall under joint jurisdiction of the COE and DNR. This covers permits under § 10 of the Rivers and Harbors Act and § 404 of the Clean Water Act. See, “Coordination Agreement Between the St. Paul District Corps. of Engineers and the State of Wisconsin Department of Natural Resources, General Permit Number GP-001-WI,” April 4, 1984. The latest version of the permit was issued December 23, 1998.

The placement of certain structures such as bridges, dams, and causeways is regulated under 33 U.S.C. § 401, Section 9 of the Rivers and Harbors Act. Under this section, activities in waters located entirely in Wisconsin can be permitted by DNR without a federal permit provided the plans for such structures are submitted and approved by COE or the Department of Transportation.

14 See 33 CFR § 328.3
15 United States v. Eidson, 108 F.3d 1336 (11th Cir. 1997).
17 Swanson v. United States, 789 F.2d 1368 (9th Cir. 1986).
The “migratory bird” rule by which COE regulated isolated waters and wetlands (51 Fed. Reg. 41217, Nov. 13, 1986) was overturned in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, Case No. 99-1178 (Jan. 9, 2001). This case effectively overturned prior cases including Hoffman Homes, Inc. v. Administrator, USEPA, 999 F.2d 256 (7th Cir. 1993) and State of Utah By & Through Div. of Parks v. Marsh, 740 F.2d 799 (10th Cir. 1984). As of the date of publication, COE has not reacted to this ruling, but further COE definition of the terms “adjacency” and “isolated” is anticipated, since the Supreme Court reaffirmed that adjacent wetlands are still within COE jurisdiction.

Issues associated with discharges to wetlands are discussed in Chapter 10. For a discussion of the extent to which § 404 of the Clean Water Act applies to activities such as draining, see, Save Our Community v. U.S. Environmental Protection Agency, 971 F.2d 1155 (5th Cir. 1992).

See note 12.

Wis. Stat. § 30.01(5)

Wis. Stat. § 30.01(8).

Northern Pine Land Co. v. Bigelow, 84 Wis. 157, 54 N.W. 496 (1893); McCarthy v. Murphy, 119 Wis. 159, 96 N.W. 531 (1903).

Wis. Stat. § 30.13(1).

Wis. Admin. Code § NR 326.05. In Sea View Estates Beach Club, Inc. v. DNR, 223 Wis. 2d 138, 588 N.W. 2d 667 (Ct. App. 1998) held that an applicant must satisfy the requirements of § NR 326.05 to escape the permit process.

Wis. Stat. § 30.13(3).

Wis. Stat. § 30.13(4)(c).

Wis. Stat. § 30.13(3). Bulkhead lines may be established under Wis. Stat. § 30.11. See discussion in Chapter 1.


These methods are outlined in Wis. Admin. Code § NR 326.07 and discussed in Borsellino v. Wisconsin Dept. of Natural Resources, 232 Wis. 2d 430, 606 N.W.2d 255 (Ct. App. 1999); Borsellino v. Kole, 168 Wis. 2d 611, 484 N.W.2d 564 (Ct. App. 1992) and Nosek v. Stryker, 103 Wis.2d 633, 309 N.W.2d 868 (Ct. App. 1981).

Other methods including the apportionment of the line of navigation method has been applied to equitably allocate shore lines on irregular parcels. Wis. Admin. Code § NR 326.07(2)(a); Thomas v. Ashland, Siskiwit v. Iron River Logging Railway, 122 Wis. 519, 100 N.W. 993 (1904).

This method was illustrated in Nosek, 103 Wis.2d at 635, and Rondesveldt v. Running, 19 Wis. 2d 614, 121 N.W.2d 1 (1963). This method can, however, be used even when the property lines are not at right angles. Borsellino, 168 Wis. 2d at 617-18.

This method was applied in Nosek, 103 Wis. 2d at 636. Variations on this method, referred to as the Knitter method or Colonial method, are codified in Wis. Admin. Code § NR 326.07(2)(b). See, Borsellino, 168 Wis. 2d at 615 and Godfrey, 164 Wis. 2d at 359 for additional applications of this method.

Both §§ 30.12 and 30.13 STATS., prohibit structures that are detrimental to the public interest. Both statutes authorize the DNR to weigh the relevant policy factors which include the desire to preserve the natural beauty of our navigable waters, to obtain the fullest public use of such waters, including, but not limited to navigation, and to provide for the convenience of riparian owners.

While there are no reported pier cases under this section, it is interesting to note that it was enacted prior to Wis. Stat. § 30.13 which provides the exemption from permit requirements. But see, Otte v. State Department of Natural Resources, 142 Wis.2d 222, 418 N.W.2d. 16 (Ct. App. 1987) which applies this section to the filling of an artificial drainage ditch, and Assmann v. DNR, 128 Wis.2d 555, 381 N.W.2d 620 (Ct. App. 1985) (unpublished) which applies this section to the placement of mooring buoys.

Wis. Admin. Code § NR 326.05. Solid piers may be permitted only on certain waters such as the Great Lakes, Mississippi, portions of the Fox River and Lake Winnebago. Wis. Admin. Code § NR 326.04(3) (a).

Holder of riparian easements cannot apply for such permits. Stoesser v. Shore Drive Partnership, 172 Wis.2d 660, 670, 494 N.W.2d 204 (1993); Cassidy v. Department of Natural Resources, 132 Wis.2d 153, 161, 390 N.W.2d 81 (Ct. App. 1986).

In Sterlingworth Condominium Ass’n v. DNR, 205 Wis.2d 710, 556 N.W.2d 791 (Ct. App. 1996) the court reaffirmed that impacts on aquatic habitat and natural shoreland beauty are legitimate factors to consider in assessing harm to the public interest.


Pier Planner, WDNR WZ-017-93.

Sterlingworth, 205 Wis.2d at 732; Sea View Estates Beach Club, Inc., 223 Wis.2d at 155.

Hixon v. Public Service Comm., 32 Wis. 2d 608, 146 N.W.2d 577 (1966); Sterlingworth, supra, at 722.

See, Wis. Stat. § 30.12(2) and (3).

Cassidy v. Dept. of Natural Resources, 132 Wis.2d 153, 390 N.W.2d 81 (Ct. App. 1986); de Nava v. Wisconsin Dept. of Natural Resources, 140 Wis.2d 213, 409 N.W.2d 151 (Ct. App. 1987).

See generally, Godfrey Co. v. Lopardo, 164 Wis.2d 352, 474 N.W.2d 786 (Ct. App. 1991).

See, Ellingsworth v. Swiggen, 195 Wis.2d 142, 536 N.W.2d 112 (Ct.App. 1995) where the court held a riparian easement granting access did not necessarily imply the right to build a pier. Compare Godfrey & Lopardo, supra.

Wis. Stat. § 30.131(2).

Wis. Stat. § 30.12(3)(a)8.

Such structures are referred to as dry fire hydrants and are authorized by Wis. Stat. § 30.12(3)(a)7.
Wis. Stat. § 30.12(3)(a)2.

Wis. Stat. §§ 30.12(3)(a)2m, and 30.12(3)(bn); Wis. Admin. Code ch. NR 323.

This specific issue was addressed in the case of State v. Bleck, 114 Wis. 2d 454, 338 N.W.2d 492 (1983), in which case the court held that a ski jump was a structure subject to the requirements of § 30.12 even though it was a temporary structure. Wis. Stat. § 30.135 was subsequently created by 1997 Wisconsin Act 27.

Wis. Stat. § 30.135(1).

Wis. Stat. § 30.135(2). This legislation requires the DNR to adopt rules identifying the specific reasons that would justify a permit denial.

Wis. Stat. § 30.01(1p).

Wis. Stat. § 30.126.


Wis. Stat. § 30.12(3)(a)4.

Wis. Stat. § 30.12(3)(a)5.

Wis. Admin. Code § NR 322.06.

Wis. Stat. § 30.01(1g).


State v. Dwyer, 91 Wis. 2d 440, 283 N.W.2d 448 (Ct. App. 1979).

An outlying water means Lake Superior, Lake Michigan, Green Bay, Sturgeon Bay, Sawyer’s Harbor and the Fox River from its mouth up to the dam at De Pere. Wis. Stat. §§ 30.01(4r), 29.001(63).

Wis. Admin. Code ch. NR 346 establishes dredging contract fees, while NR 347 establishes sediment sampling, monitoring and disposal evidence for dredging projects. See also, Angelo v. Railroad Commission, 194 Wis. 543, 217 N.W. 570 (1928).


Wis. Stat. § 30.20(1)(c).


Wis. Stat. §§ 30.19(1)(a) and (b).


See, Wis. Stat. § 88.31 discussed in Chapter 7.

Wis. Stat. § 30.19(4) and (5).
Klingeisen v. DNR, 163 Wis. 2d 921, 927, 472 N.W.2d 603 (Ct. App. 1991). This rule is codified in Wis. Stat. § 30.19(5). See discussion in Chapter 2.


Large scale withdrawal of groundwater requires a high capacity well permit under Wis. Stat. § 281.17(1). Groundwater withdrawal is discussed in Chapter 9.

Wis. Stat. § 30.18(2).

Omernick v. State, 64 Wis. 2d 6, 13, 218 N.W.2d 734 (1974).

Wis. Stat. § 94.26; State v. Zawistowski, 95 Wis. 2d 250, 290 N.W.2d 303 (1980).

Wis. Stat. § 30.18(3) (a) 1.

Wis. Stat. § 30.18(3) (a) 3.

Wis. Stat. § 30.18(4).

Wis. Stat. § 30.18(5).

Wis. Stat. § 30.18(8).

"Authorized base level of water loss" is defined in Wis. Stat. § 281.35 (1) (b).

Regulations implementing Wis. Stat. § 281.35 are contained in Wis. Admin. Code ch. NR 142.

Wis. Stat. § 281.35(3), (5)(b).


Wis. Stat. § 30.18(6).

Wis. Stat. § 30.18(7).


Wis. Stat. § 30.77.

Wis. Stat. § 30.77(3).

Wis. Stat. § 30.77(3)(b).

Wis. Stat. §§ 30.77(2) and (3).


Wis. Stat. §§ 30.78, 30.79 and 30.81.
Wis. Admin. Code § NR 1.01.


Wis. Stat. § 29.709.

Wis. Stat. § 29.737. The DNR is required to hold a public hearing on the permit application. If the permit is issued, the permittee may only manage the lake under the supervision of the DNR.

Wis. Stat. § 95.60; Wis. Admin. Code § ATCP 10.68. Fish farms continue to be subject to the permit requirements of Wis. Stat. chs. 29 and 30.


See, Wis. Admin. Code § NR 107.01. See also, Wis. Stat. § 30.1255 which requires the DNR to submit biennial reports to the Legislature describing the ecological and environmental impact of aquatic nuisance species on state waters and potential strategies to control these species.


Wisconsin’s Envtl. Decade v. DNR, 85 Wis. 2d 518, 271 N.W.2d 69 (1978), wherein the court found that the City of Madison could not restrict the use of aquatic herbicides in Lake Mendota when those herbicides were authorized under this section by DNR.


CHAPTER 6
Dams and Flowages

This chapter addresses dams and flowages, including regulation of lake levels. Related issues associated with artificial channels and drainage ditches are addressed in Chapter 7.

Agencies Regulating Dams, Flowages and Artificial Ponds

Historically, certain types of dams such as mill and cranberry dams were encouraged under state law to aid in the development of the state. Federal and state law also encouraged construction of power dams and flood control dams. Today, there are approximately 3,700 dams in Wisconsin. While some of the laws encouraging dams continue, current regulations recognize that construction and operation of dams also have the potential to significantly affect the environment, impair public navigational rights, and present threats to public safety.1

The DNR is the primary agency that regulates dams and flowages in Wisconsin.2 As set forth in greater detail below, the DNR requires permits for creating, maintaining and removing dams in Wisconsin. On the federal level, the United States Corps of Engineers (COE) requires permits for construction of dams on navigable waters. In addition, certain power dams in Wisconsin are licensed by the Federal Energy Regulatory Commission (FERC).

While the maintenance and operation of dams is heavily regulated, the rights of access and use of the waters created by dams is largely a matter of common law in Wisconsin. That common law is impacted by several specific statutes relating to water powered mills and cranberry bogs (described below).

Artificial ponds created by means other than dams are regulated by the DNR under Wis. Stat. ch. 30. Those regulations and related common law issues are discussed in Chapter 5.
Regulations that Apply to the Construction and Operation of Dams

General State Law Requirements

Any person intending to construct, operate or maintain a dam on a navigable stream must obtain a permit from the DNR. Permits are not required for dams across non-navigable streams but such dams are still subject to DNR requirements including plan approval. Permit applications must include detailed information about the location and design of a dam and the potential area affected. Upon receipt of an application for a permit, the DNR may order a hearing or it may proceed without a public hearing unless a request is filed.

The DNR may grant the permit if the proposed dam is in the public interest considering ecological, aesthetic, economic and recreational values. The DNR is given specific authority to deny a permit if the river in its natural state offers greater recreational and scenic value, and the economic need of electric power does not outweigh those values. A similar process applies if an owner of an existing dam wishes to raise or enlarge the dam.

In addition to the substantive requirements for obtaining a permit for a dam, an applicant must demonstrate proof of financial ability to maintain it.

No property transfer or assignment of any permit granted to construct or operate a dam is effective absent DNR approval. Among other things, the DNR must receive a certified copy of any transfer or assignment and determine that the transferee has demonstrated financial responsibility and that the transfer does not constitute an unlawful trust. Approval will not be given for transfers to foreign corporations or for transfers from municipalities to individuals.

In addition to the obligations imposed by permit, the statutes also impose general obligations on the owners of dams whether subject to DNR permit or not. These general obligations require that the dams be operated to protect public rights, to preserve life, health and property and that dams be maintained in good repair and condition. Towards this end, the DNR may require the construction of fishladders, spillways and other structures in the interests of promoting safety and protecting public interests in navigable waters. As discussed below, dams may not be removed except on approval of the DNR. The Department also retains the ability to order removal of standing or fallen timber and brush in the flowed area prior to or subsequent to the erection of the dam.
Special State Provisions for Mill Dams and Cranberry Dams

Special provisions apply to mill dams and cranberry bog dams under Wisconsin law.

The Mill Dam Act was initially adopted in 1840 and authorized the erection of dams on non-navigable streams to develop a head of water to operate mills. In addition, the law authorized the flowage of water on to neighboring property subject only to payment for the lost value of the property. The owner of land onto which water was flowed could not object to the flowage. Under the pre-1911 definition of navigability, this provision authorized the erection of a substantial number of mill dams throughout the state. The Mill Dam Act was repealed and reenacted several times in the 1800’s and now appears in ch. 31 under the authority of DNR.14

Today, this law has little continuing relevance for new dams.15 The most significant continuing impact of the law is from mill dams that were erected years ago and now need to be maintained or removed. These issues will be discussed later in this chapter.

In 1867, the Wisconsin Legislature created a law modeled after the Mill Dam Act to encourage the development of cranberry bogs. That law provided that a person owning land adapted to the culture of cranberries could build and maintain such dams and ditches as was necessary for the purpose of providing water for such lands.16 However, the person whose lands were overflowed or injured by the dam has a right to seek compensation for damages under the procedure set by statute. The cranberry law remains on the books to this day and is still used and defended by the cranberry industry in Wisconsin.17

The flowage rights authorized by the cranberry law do not supersede public rights. As a result, a cranberry flowage cannot damage drainage ditches authorized by a drainage district.18 However, recent cases have confirmed that persons constructing and operating dams pursuant to the cranberry law are not subject to many of the regulatory requirements imposed by ch. 31 administered by DNR.19

Federal Law Requirements

As noted above, the placement of structures or fill such as dams or dikes in navigable waters of the United States requires permits from the COE.20 Specific regulations apply to the erection of dams and dikes.21
In addition to the COE requirements relating to the erection of dams, FERC licenses dams generating power on navigable waters. FERC licenses were originally issued for 50 years and are subject to renewal. Of the 3700 dams in Wisconsin, only 150 produce hydropower and, of these, 120 are subject to FERC regulation.

While the original licensing requirements focused on assessment of the plant’s ability to generate power, the Electric Consumer’s Protection Act passed in 1986 added environmental criteria in the relicensing process. Now, FERC must also give consideration to non-power issues such as fish and wildlife habitat, recreational use and environmental quality before deciding whether to grant or reissue a FERC license.

Public and Private Rights in Flowages

Rights of the Dam Owner to Create a Flowage

In most cases a dam creates an impoundment of water, or flowage. Apart from regulatory requirements on dams, the owner of a dam must obtain the legal right to place the water on the lands in back of the dam, including seasonally high water and floods. Typically, this is accomplished through one of three means.

First, the dam owner can be granted a property right in the lands to be flowed. In some cases, the dam owner simply owns the lands outright. In other cases, however, it is not feasible to purchase all of the land to be flowed. In such cases, a dam owner can obtain what is known as a flowage easement. A flowage easement is a right or a privilege granted by the property owner to the dam owner and attaches to the land upon which the dam is constructed. Thus, flowage easements transfer with any transfer of land upon which the dam is located.

Second, flowage rights can be obtained through operation of a statute such as the Mill Dam Act or the Cranberry law described above.

Finally, flowage rights may be obtained through “prescription.” This means that if the lands have been flowed for more than 20 years in an “open, notorious and continuous” fashion, a right to continue the flowage is created. Such a right cannot, however, be obtained against certain state owned lands unless the claim continues uninterrupted for more than 20 years and is based on a fence line that reflects a mutually agreed upon decision by the current landowners.
In the absence of a title claim, a statutory right, or prescriptive right or some other agreement, the dam owner cannot lawfully flow water on lands regardless of whether a permit has been obtained from DNR. Of course, a permit for a new dam will not issue without proof of flowage rights.

Public and Private Rights to Flowed Lands

Artificially created waterbodies such as flowages create special issues concerning property ownership and public access. These rules were described in Chapter 2 and are briefly summarized below.

First, where a navigable stream has been dammed to create a flowage, the rights applicable to streams apply. Thus, the riparian property owner continues to own the newly formed flowage bed to the center of the original streambed. Although the new flowage may function as a lake, the lake bed does not pass to the state. However, the public has immediate and full rights of access to use of the flowage just as it would have to use of the original navigable stream.

Second, where an existing natural lake has been enlarged by the erection of a dam, the state retains its ownership of the original lake bed and the riparian property owners retain the right of ownership to the original ordinary high water mark. Again, the public has immediate rights of access and use to the entire waterbody so created.

Finally, where a dam creates a flowage from a non-navigable stream, the title of the land remains with the property owner. Access to such a flowage is limited to that allowed by the owner unless the flowage is connected to a natural navigable water. The theory is that since the public does not have access to non-navigable streams, it should not have access to a flowage created from a non-navigable stream. Of course, the owner’s consent to public use could create an implied right of public use. Similarly, if the flowage is connected to a natural navigable water, the flowage would be declared a public water as a condition to receiving a § 30.19 permit even if actual access was limited.

Removal and Abandonment of Dams

Once a dam has been established, the neighboring property owners and the public often rely on the existence of the waterbody that has been created. As a result, the removal of dams, particularly those which have been in existence for long periods of time, can be disruptive. At the same time, dams can be costly to maintain and a failure to properly maintain a dam can threaten public safety. Statutory and common law provisions affect the ability of a person to remove a dam.
Regulatory Restrictions on Dam Removal

The statutes require that a dam may not be abandoned, removed or altered without obtaining a permit from the DNR. Such a permit requires an application, public notice and a hearing. The DNR may grant or deny the permit subject to conditions it deems reasonably necessary to preserve public rights in the navigable waters, to promote safety and to protect life, health and property.

Except in cases of immediate and significant hazards, the DNR provides a public notice and opportunity for a public hearing prior to seeking or causing the removal of a dam. If opposition is registered, the DNR defers action on the application for 120 days after the hearing. Where a dam has been abandoned, the DNR may have it removed upon giving 60 days notice to the owner or by publishing a notice. Once the DNR decides to remove a dam, the agency has broad discretion in terms of the dam removal process.

As a practical matter, these procedures allow time for individuals, local governments or public inland lake and rehabilitation districts who have an interest in preserving the flowage to come forward and agree to take over ownership of the dam. To facilitate this process, a financial assistance program is available to municipalities and public inland lake protection and rehabilitation districts for dam safety projects. These projects may include dam maintenance, repair, modification, abandonment, removal, and other efforts designed to improve the safety of a dam. Financial assistance may also be provided to individual owners for the removal of small dams and other persons proposing to remove abandoned dams. Under this provision, the state may provide up to 50 percent of the cost of a particular project. Proposals to remove abandoned dams are not subject to the 50 percent limit.

Private Rights in Maintaining Dams

Apart from regulatory requirements, the courts have in some cases held that neighboring landowners who have relied on the water created by the dam may have a right to seek to have the dam continued. In general, if an artificial body of water is created and maintained for at least 20 years, the owners have a right to have that water level continued if they have reasonably relied on its use. Other cases, however, note the practical problems of forcing a dam owner to make repairs particularly if the owner is bankrupt.
Regulation of Lake Levels

As noted in Chapter 5, the DNR has general authority under Wis. Stat. § 30.18(8) to raise water levels in navigable lakes and streams for conservation purposes. Wis. Stat. ch. 31 provides the DNR with additional authority to “regulate and control the level and flow of water on all navigable waters” as part of its authority to regulate dams. Pursuant to this authority, the DNR may order benchmarks to be erected, establish gauging stations to designate maximum and minimum flow levels, and require records of water levels to be maintained.

The statutes require that a person maintaining a dam on a navigable stream pass at least 25 percent of the natural low flow of water at all times except where the water is discharged into a lake, mill pond, storage pond or cranberry marsh. Lake levels can be enforced by DNR order if a complaint is filed with the DNR.

Reduction in water levels may be ordered if the dam is determined to be unsafe. Water levels could also be affected by DNR orders regarding allowable diversions from streams or lakes under Wis. Stat. § 30.18.
Chapter 6 Notes

1 The scope and purpose of the DNR’s regulatory authority over dams is set forth in Wis. Stat. § 31.02(1). It has long been recognized that the state may refuse permission to a riparian owner to build a dam or may conditionally approve such structures. City of Baraboo v. Railroad Comm., 195 Wis. 525, 218 N.W. 819 (1928).

2 Historically, because of the relationship between dams to transportation and commerce, dams were regulated in Wisconsin by the Railroad Commission and then subsequently by the Public Service Commission. The Wisconsin Department of Natural Resources undertook these functions in 1967 when the Department was reorganized from the Conservation Department and other agencies. See, 1967 Wis. Laws ch. 75.

3 Wis. Stat. § 31.01(6). In addition to the general permit application requirements in § 31.05, maps and profiles are required under Wis. Stat. § 31.12. Power dams require additional application information. Wis. Stat. § 31.08. Dam design and construction standards are contained in Wis. Admin. Code ch. NR 333.

4 Wis. Stat. § 31.31. Dams on non-navigable streams are subject to the general DNR authority under § 31.02; plan review under § 31.12; general obligation to maintain dams under § 31.18; DNR jurisdiction to inspect dams and issue orders under § 31.19; requirement for nuisance abatement under § 31.25; and responsibility for civil liabilities under § 31.26.

5 Wis. Stat. §§ 31.02 and 31.05. For existing dams constructed in or across navigable waters without legislative permission prior to 1915, a permit to operate and maintain the dam is required. Wis. Stat. § 31.07. The permit applicant must provide information concerning construction, location and operation of the dam and is subject to the same hearing procedure as applications to construct new dams. A permit for an existing dam is granted if the DNR finds that such operation and maintenance does not materially obstruct existing navigation, violate other public rights and will not endanger life, health or property. Wis. Stat. § 31.08. Proof of financial ability to maintain the dam is also required.

6 Wis. Stat. § 31.06.

7 Wis. Stat. § 31.06(3). See, Daly v. National Resources Board, 60 Wis. 2d 208, 208 N.W.2d 839 (1973) which discusses the application of these criteria in granting a permit, over the objections of various citizens and landowners.

8 Wis. Stat. § 31.15.

9 Wis. Stat. § 31.14. These requirements can be avoided if the applicant owns or has an option to buy all lands to be flowed by the impoundment; agrees not to convey the dam without DNR approval, and will dedicate a parcel for public access. Wis. Stat. § 31.14(3).

10 Wis. Stat. § 31.21.

11 Wis. Stat. § 31.18.

12 Wis. Stat. § 31.02(4), as amended by 1999 Wisconsin Act 9. The DNR may not require the installation of fishways or fishladders until rules are promulgated that set forth public rights in dammed navigable waters and cost-sharing grants become available.

13 Id.

There is little need for new water driven mills. In addition, the current definition of navigability makes it unlikely that there would be sufficient water for the development of any such mill on a non-navigable stream.

Wis. Stat. §§ 94.26–94.32; A. Kannenberg, 46 Wis. L. Rev. at 356.

Wis. Stat. § 94.35

Cranberry Creek Drainage District v. Elm Lake Cranberry Co., 170 Wis. 362, 174 N.W. 554 (1919).

Tenpas v. DNR, 148 Wis. 2d 579, 436 N.W.2d 297 (1989). In Tenpas, the Court held that the financial responsibility requirements in Wis. Stat. § 31.14 did not apply to cranberry bogs. However, its rationale was substantially broader and indicated that other provisions of Chapter 31 would likewise be inapplicable to dams under the cranberry law. The exceptions would appear to be the provisions of Wis. Stat. § 31.18 discussed above which create obligations on the owner of “any dam,” and Wis. Stat. § 31.185, which prohibits the removal of dams without a permit.

Permits may be required under Section 9 or 10 of the Rivers and Harbor Act of 1899, 33 U.S.C. §§ 401, 403; and under Section 404 of the Clean Water Act, 33 U.S.C. § 1344.


See, Federal Power Act as amended by the Electric Consumers Protection Act, 16 U.S.C. § 791a, et seq. This requirement relates to non-federal facilities which meet one of the following four criteria:

- is located on federally navigable waters;
- is located in part on federally owned lands or reservations;
- uses a federal dam or surplus water or water power from a federal dam; or
- is tied to an interstate power grid.

16 U.S.C. §§ 797(3), 803(j) and related sections as amended by Electric Consumers Protection Act, Pub. L. 99-495

See, Union Falls Power Co. v. Marinette Co., 238 Wis. 134, 298 N.W. 598 (1941).


Wis. Stat. § 893.29(1).

Union Falls Power Co., supra. It is in part for this reason that the current statutes for obtaining permits require that proof be established demonstrating that flowage rights have been obtained on at least 65 percent of the land to be flowed prior to applying for the permit. Wis. Stat. § 31.05(3).

Wis. Stat. § 31.05.
29 Haase v. Kingston Cooperative Creamery Assoc., 212 Wis. 585, 250 N.W. 444 (1933).

30 Village of Pewaukee v. Savoy, 103 Wis. 271, 79 N.W. 436 (1899), Klingeisen v. DNR, 163 Wis. 2d 921, 927, 472 N.W.2d 603 (Ct. App. 1991) citing Haase, supra.

31 Id. For further discussion see, H. Ellis, et al., §§ 3.10c and 10.03.

32 This is the same rule as in Mayer v. Grueber, 29 Wis. 2d 168, 138 N.W.2d 197 (1965), in which the Court held that an artificial lake created from springs was owned by the property owner and access could be restricted.

33 Haase v. Kingston Coop Creamery Assoc., 212 Wis. at 588.


35 Wis. Stat. § 31.185(5). In addition, permits for the construction or operation of a dam may include terms which impose obligations on maintaining a dam and conditions for abandonment. This section applies to private parties that wish to remove a dam; the DNR is subject to the standards of Wis. Stat. § 31.187. Froebel v. DNR, 217 Wis.2d 652, 579 N.W.2d 774 (Ct. App. 1998).


37 Wis. Stat. § 31.187(1). Where the dam is located wholly on state lands the DNR may maintain and repair the dam to conserve species or wild animals. Wis. Stat. § 31.187(2).

38 Froebel, 217 Wis.2d at 671.


40 Tiedeman v. Middleton, 25 Wis. 2d 443, 130 N.W.2d 783 (1964). For example, in Smith v. Youmans, 96 Wis. 103, 70 N.W. 1115 (1897), the owner of a dam created a flowage which established a navigable body of water for over 40 years. Plaintiffs made sizeable expenditures building summer cottages along this flowage. Court proceedings began when the defendants threatened to lower the water level. The court enjoined the defendants from interfering with the lake level on the theory that a prescriptive right arose which prohibited the defendants from interfering with the lake levels. See also, Charnley v. Shawano Water Power & River Improvement Co., 109 Wis. 563, 85 N.W. 507 (1901); and In re Horicon Drainage District, 136 Wis. 227, 235, 116 N.W. 12 (1908).

41 The court in Haase v. Kingston Cooperative Creamery, 212 Wis. at 587-88 observed:

While a dam is a fairly permanent institution, it is by no means an agency of perpetual existence. It will decay and wear away in time, and, when it does, the waters will recede to their natural level. While the owner of the dam may be restrained from affirmatively interfering with the artificial level which he has created, it is not at all clear how he could be coerced to make the repairs necessary for its perpetual existence, especially when the proprietor of the dam becomes bankrupt, as occasionally happens. Under such circumstances, the application of the principle in the Savoy case would strip the riparian owners of their titles and vest the same in the state, when the water receded, a result against equity and justice.

42 Wis. Stat. § 31.02(1). This authority does not, however, permit the DNR to order a riparian landowner to reopen and maintain a filled ditch at the owner’s expense. Otte v. DNR, 142 Wis. 2d 222, 418 N.W.2d 16 (Ct. App. 1987).
Wis. Stat. § 31.34. See, State ex rel. Priegel v. Northern States Power Co., 242 Wis. 345, 8 N.W.2d 350 (1943); Wisconsin Power & Light Co. v. Public Service Commission, 5 Wis. 2d 167, 92 N.W.2d 241 (1958). Generally, low flow conditions are considered to be the 7Q_{10} flow, i.e., the lowest 7-day flow occurring in a 10-year period.

DNR has general authority to investigate dams to conserve and protect public rights under Wis. Stat. § 31.02(2). The DNR may also set levels as part of a permit proceeding under Wis. Stat. § 31.06 or as part of an enforcement proceeding.

Wis. Stat. § 31.19(5).

See Chapter 5.
CHAPTER 7
Water Drainage

This chapter discusses the rights and regulations governing drainage of water from property. This chapter includes a review of the statutes governing private and public drainage, drainage districts and common law doctrines governing the drainage of diffused surface water. Storm water runoff containing contaminants and other discharges of pollutants to surface waters is covered in Chapter 8.

Agencies Regulating Water Drainage

The drainage of water from land to allow agricultural development was a common practice when the state was settled. Recent estimates indicate that approximately one-third of Wisconsin’s 78,000 farms utilize drainage systems. Of these, 90 percent are private drains which operate on a single farm or on multiple farms through voluntary cooperation. The remaining 10 percent are organized as drainage districts under Wis. Stat. ch. 88.

There are common law restrictions on drainage as well as regulatory restrictions on drainage. The drainage of lands is subject to regulation by the DNR if the drainage activities affect navigable waters or involve dredging non-navigable streams. If the drainage activities take place in wetlands, the activity may be subject to wetland regulations of the COE, the DNR and local governments.

If the drainage activities involve drainage districts organized under ch. 88, Stats., the drainage activities are subject to supervision by county drainage boards, and the Department of Agriculture, Trade, and Consumer Protection (DATCP). It should also be noted that town sanitary districts have the authority to make drainage improvements.

Private Rights of Drainage

This section addresses the private rights of drainage under common law and statutory law in the absence of an organized drainage district. Approximately 90% of agricultural drains in Wisconsin fall within this category.

Common Law Rights

Diffused surface water is generally defined as waters from rains, springs or melting snow which lie or flow on the surface of the earth.
but which do not form part of a stream or lake. Historically, drainage of diffused surface water was encouraged. Indeed, diffused surface water was viewed as a “common enemy” which could be discharged by private land owners with virtual impunity. Under this doctrine, a landowner could drain diffused surface water onto another’s property regardless of the harm it caused.

By 1974 it became clear that this rule was neither equitable nor sound public policy. In State v. Deetz, the Wisconsin Supreme Court adopted the reasonable use rule. This rule is similar to the concept of reasonable use utilized in other water law contexts such as riparian rights and groundwater withdrawal.

As applied in the drainage context, the reasonable use rule means that persons can drain or direct diffused surface water on to another person’s land unless such drainage is unreasonable. A discharge is unreasonable if there is an intentional invasion of another’s land and either:

- The gravity of the harm caused by the discharge outweighs the utility of the conduct causing the discharge, or
- The harm caused by the discharge is substantial and the financial burden of compensating for the harm does not render the conduct causing the discharge to become infeasible (e.g. compensating for the harm would not put the discharger out of business).

In Deetz, the state brought an action against a residential developer because diffused surface water running off of the development carried substantial quantities of soil into Lake Wisconsin. The Wisconsin Supreme Court suggested that the developer’s actions were unreasonable and sent the case back to the trial court for further proceedings.

In a subsequent case, Crest Chevrolet v. Willemsen, the owners of a car dealership sued a neighboring landowner, who raised the elevation of his property, causing water to back up onto the car dealer’s parking lot. The court concluded that the dealership suffered serious harm caused by the neighbor and that the harm was unreasonable.

Like many common law doctrines, this test leaves room for debate in specific cases. Nevertheless, it is a substantially different presumption and nature of inquiry than had existed under the “common enemy” doctrine.
Statutory Rules Governing Drainage

Wis. Stats. ch. 88 establishes a number of special statutory rules for private drainage even where drainage districts are not involved. The more significant provisions are summarized below.

**Private Drains**

Individual landowners who wish to drain not more than 80 acres of agricultural land may present a petition for a drain to cross neighboring property. Such a petition must be presented to the county drainage board or town supervisors. The drain may be approved after notice and hearing if the board or supervisors decides that the drain is necessary and that the benefits exceed the cost of construction. An order laying out a drain must specify benefits and damages to lands of others through which the drain will be laid out. An order must also provide that the drain may not be constructed until the excess of damages over benefits has been paid to the affected landowners.

Private drains which do not cross other lands or voluntary agreements between landowners do not need special approval unless the drains are connected with drainage district drains or navigable waters. Private drains can be connected with the district drains only on approval of the drainage board. Extension of private drains already connected with district drains also requires drainage board approval. A private drain connected with navigable waters requires a § 30.19 permit unless it is an agricultural drain.

**Road and Railroad Embankments**

Special rules apply to road and railroad embankments. Whenever a county, town, city, village, railroad company or the Wisconsin Department of Transportation has constructed a highway or railroad grade across any natural watercourse or natural or manmade drainage way, it must not impede the flow of the water in an unreasonable manner and it must be consistent with sound engineering principles.

There is a corresponding duty imposed on landowners to maintain sufficient drainage to protect downstream or upstream highways and railroad grades from water damage or flooding caused by any obstructions on their property.

**Drainage Obstructions**

Where obstructions in natural watercourses on another person’s property are interfering with drainage, the person injured may take action to force removal of the obstruction. If the obstruction is due
to negligence of the owner, the person injured may get an order from the village or town board to have the obstruction removed at the owner’s expense. ¹⁹

If the obstruction is the result of natural causes, such as a beaver dam or fallen trees, the person injured may remove the obstruction at his own expense. Such person is not guilty of trespass, but is liable for damages to crops or structures that may result from the removal. ²⁰

Regardless of the cause of the obstruction, the removal of materials from the beds of any watercourse requires a permit from the DNR. ²¹

**Cranberry Law Provisions**

Separate rules apply to the creation of drains for cranberry bogs. As noted in Chapter 6, the Legislature has encouraged the production of cranberries in Wisconsin. To that end, it has exempted cranberry bogs from certain laws regarding water impoundment, diversion and drainage. The cranberry law, Wis. Stat. § 94.26, states:

Any person owning lands adapted to the culture of cranberries may build and maintain on any land owned by him such dams upon any water course or ditch as may be necessary for the purpose of flowing such lands, and construct and keep open upon, across and through any land such drains and ditches as shall be necessary for the purpose of bringing and flooding or draining and carrying off the water from such cranberry growing lands, or for the purpose of irrigation, fertilization and drainage of any other lands owned by such person; provided, that no such dams or ditches shall injure any other dams or ditches theretofore lawfully constructed and maintained for a like purpose by any other person. [Emphasis added.]

Case law makes clear, however, that the cranberry law does not supersede the rights of drainage districts established under Wis. Stat. ch. 88. In *Cranberry Creek Drainage Dist. v. Elm Lake Cranberry Co.*, the Court concluded that drains organized under the Drainage District served a public interest which was not superseded by the rights granted under the cranberry law. ²²

**Drainage Districts**

Wis. Stat. ch. 88, which authorizes the formation of drainage districts, dates from 1891. It remained virtually unchanged for nearly 100 years. Although the drainage district law still reflects the original 1891 law, a number of significant changes were made by the 1991 and 1993 legislative sessions. ²³

Drainage districts are now administered by county drainage boards. Today, 26 counties have drainage boards which administer a total of 178 drainage districts. ²⁴
Each drainage board consists of three persons appointed by the circuit court. The drainage board has the authority to levy assessments for the cost of construction, maintenance, and repair of drainage ditches. It also borrows money for such purposes.

In addition, the drainage board can:

- Employ engineers, legal counsel and other assistants;
- Purchase or condemn land;
- Level or permit the leveling of spoil banks and excavated materials;
- Purchase or lease and maintain and operate equipment and machinery necessary to construct, maintain, or repair drains;
- Purchase, construct, maintain and operate levees, bulkheads, reservoirs, silt basins, floodways, floodgates, and pumping machinery needed for successful drainage.

Although the circuit court had supervisory authority over many of these actions, that authority was eliminated by 1993 Wis. Act 456 except for decisions regarding the formation and dissolution of a drainage district. As a result, most decisions of a drainage board are now reviewable by the circuit court only on a petition for a writ of certiorari (a form of judicial review similar to review of county board decisions).

Recent legislative changes have also subjected drainage districts to regulation by the DNR and DATCP. When a drainage board determines that it is necessary to remove dams or obstructions from navigable streams or to clean out, widen, deepen or straighten navigable streams, the board must apply for a permit to DNR. The DNR may grant the permit after a public hearing if it finds that the public health and welfare will be promoted, the project is necessary to the proper operation of the drainage system, and that the project will not materially impair the navigability of such stream or public rights in such water.

Under 1991 Wis. Act 309, DATCP was given authority to develop rules applicable to drainage districts. The rules prescribe mapping requirements, performance and design standards for drainage districts, and procedures for drainage district assessments, inspections, construction and maintenance. Among other things, drainage districts must establish a district corridor extending 20 feet from the top edge of each district ditch to reduce the potential for soil erosion and runoff. Owners of land within drainage districts are also expected to implement adequate erosion control practices on their land to reduce soil erosion. Individual landowners must notify the board before taking any action that will obstruct or alter the flow of water into or from a district drain or increase erosion into a district drain.
In addition, these rules outline department requirements for project approvals, records retention and enforcement of standards. As a result of 1993 Wis. Act 456, drainage boards must file an annual report with DATCP.
Chapter 7 Notes

1 The number of farms for the year 2000 is estimated at 78,000. See http://www.nass.usda.gov/wi/rlsetoc.htm. See also, “Recommendation of the Legislative Council Special Committee on Drainage District Laws,” Committee Report No.2 to the Legislative Council, February 11, 1993, p.5; see also, Prefatory Note to 1993 Wis. Act 456.

2 Id.

3 Id. Drainage districts are discussed at the end of the chapter.

4 Wis. Stat. § 60.77(4). A Town Sanitary district may plan, construct and maintain a system of water supply, solid waste collection and disposal of sewage including drainage improvements, sanitary sewers, storm sewers or other improvements.

5 Thomson v. Public Service Commission, 241 Wis. 243, 248, 5 N.W.2d 769 (1942). See Chapter 1 for additional discussion of this and related terms.


7 State v. Deetz, 66 Wis. 2d 1, 224 N.W.2d 407 (1974).

8 See, State v. Michels Pipeline Construction, Inc., 63 Wis. 2d 278, 217 N.W.2d 339 (1974) where the court applied the reasonable use test to the withdrawal of groundwater.

9 State v. Deetz, 66 Wis. 2d at 17.

10 Crest Chevrolet v. Willemsen, 129 Wis. 2d 129, 144-45, 384 N.W.2d 692 (1986). See also, Andersen v. Village of Little Chute, 201 Wis. 2d 675, 549 NW 2d 737 (Ct. App. 1996); and Hillcrest Golf v. Altoona, 135 Wis. 2d 431, 400 N.W.2d 493 (Ct. App. 1986).

11 Wis. Stat. § 88.94.

12 Wis. Stat. § 88.94(3).


14 Id.

15 Wis. Stat. § 88.92(1).

16 Agricultural uses of land are exempt from such requirements. Wis. Stat. § 30.19(1m)(b).

17 Wis. Stat. §§ 88.87(2), 88.87(4); In Novak v. Town of Agenda, 44 Wis. 2d 644, 172 N.W.2d 38 (1969) the court found that the town’s installation of a culvert and road improvement did not alter the surface water drainage patterns to warrant the award of damages. Similarly, in Henry v. C.B. & Q.R. Co., 204 Wis. 182, 235 N.W. 394 (1931) the court held that injuries to crops from floods were not the result of a railroad embankment. But see, Thurs Box Co. v. Marathon Co., 233 Wis. 387, 289 N.W. 691 (1940) in which the court upheld an award compensating an owner for damages resulting from flooding caused by a county highway embankment. 1993 Wis. Act 456 changed the time for filing claims under this section from 90 days to 3 years. See also, CNW v. Comm’r of Railroads, 204 Wis. 2d 1, 553 N.W. 2d 845 (Ct. App. 1996) in which the court held that the duty to not interfere with surface flows is a
continuing one and may require that action be taken to prevent damage that is certain to occur.

18Wis. Stat. § 88.87(3).

19Wis. Stat. § 88.90(1),(2). A person may also be able to commence common law action for damages resulting from an unlawful obstruction of a drainage ditch. *Dargert v. Dietrich*, 171 Wis. 584, 177 N.W. 861 (1920).

20Wis. Stat. § 88.90(3). The state may, of course, remove a beaver dam as a public nuisance and need not get the riparian’s permission provided it approaches the dam from the stream. *State v. Sensenbrenner*, 262 Wis. 118, 53 N.W.2d 773 (1952).


22In *Cranberry Creek Drainage Dist. v. Elm Lake Cranberry Co.*, 170 Wis. 362, 174 N.W. 554 (1919), the owners of a cranberry bog who were granted the right to build a canal between two creeks failed to complete the structure with the result that water was discharged into the cranberry creek drainage district ditches. The Court, while acknowledging the validity of the cranberry law as to private persons and interests, indicated that the law cannot be successfully invoked against public interests. *Id.* at 367.


24Telephone Interview with Mary Rose Teves, Supervisor of the Wisconsin Department of Agriculture and Consumer Protection drainage engineer position (Dec. 15,1999).

25Wis. Stat. § 88.17. The court shall appoint members recommended by the agricultural committee of the county board or a group of three or more landowners within a district supervised by the board.

26Wis. Stat. §§ 88.21, 88.23, 88.35, 88.54.


28Wis. Stat. § 88.09. This procedure is similar to review of decisions by the county board under Wis. Stat. § 59. 694(10).


30Wis. Stat. § 88.31(4).


32*Id.*
CHAPTER 8
Discharges of Pollutants to Surface Waters

This chapter addresses the rules and regulations that apply to the discharge of pollutants to surface waters, including the water discharge permit program mandated by the federal Clean Water Act and its state counterpart, Wis. Stat. ch. 283. This program regulates the discharge of pollutants to any waters of the state from a discernable point. These discharge sources, referred to as “point sources” include discharges from factories or municipal treatment plants, as well as the discharge of wastes through ditches or channels which connect to surface waters.

This chapter also addresses the regulation of stormwater runoff and the discharge of pollutants which do not enter waters at a discernible point — sometimes referred to as “nonpoint sources.”

Under Wisconsin law, discharges to groundwater are also subject to the discharge permit program and are discussed in the context of groundwater regulation in Chapter 9. In addition, the discharge of fill material into waters or wetlands is subject to a special set of requirements. The filling of surface waters is discussed in Chapter 5. The filling of wetlands is discussed in Chapter 10.

Agencies that Regulate Pollutant Discharges to Surface Waters

The discharge of pollutants to surface waters is governed by federal and state law. As noted above, the Clean Water Act prohibits the discharge of pollutants without a permit. Congress has charged the EPA with administering the Clean Water Act. However, like many other federal environmental programs, Congress has also authorized EPA to delegate implementation and enforcement to states, provided state programs are adequate to carry out the purposes of the Clean Water Act. Wisconsin was delegated authority to administer this program with enactment of Wis. Stat. ch. 283.

Nevertheless, EPA retains the authority to review and object to individual permits if it determines that the issuance of a permit would be outside the guidelines and requirements of the Clean Water Act. If EPA determines that the entire program is not being administered
in accordance with the Clean Water Act, EPA may suspend or revoke the delegation.7

Nonpoint programs involve other federal and state agencies including the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP), the Wisconsin Department of Commerce, and local agencies such as County Land and Conservation Departments.

In addition to federal and state programs, common law rights and remedies also restrict the ability of persons to pollute public waters.

**Regulation of Discharges to Surface Water**

**Persons Required to Obtain a Discharge Permit**

Discharge permits are required for the discharge of any pollutant from a point source to a water of the state. In Wisconsin these permits are called Wisconsin Pollutant Discharge Elimination System (WPDES) permits. The DNR has issued approximately 1,200 such permits in Wisconsin, approximately 517 to industrial sources and the balance to municipal sources.

The term “point source” is defined as a discernible, confined and discrete conveyance of water pollutants which includes among other things any ditch or channel, container, or vessel.8 Point sources are distinct from “nonpoint sources” which consist largely of diffused surface water runoff.

The term “pollutant” is broadly defined and not only includes sewage, chemical wastes and biological materials but also dirt, discarded equipment and heat among other items.9 Sometimes pollutants are characterized as “conventional pollutants” or “toxic pollutants.” Usually the term conventional pollutants includes suspended solids, biochemical oxygen demand or (BOD), and oil and grease. Toxic pollutants consist of chemicals that have toxic effects on human health, fish or aquatic life.

At the federal level, only discharges to “navigable waters” are covered.10 However, under the Clean Water Act, the term “navigable waters” is broadly defined to include all “waters of the United States.” This encompasses navigable waters, tributaries of navigable waters, interstate waters and certain intrastate lakes, rivers and streams.11 Wisconsin’s program extends to all “waters of the state” which are defined even more broadly than waters of the United States. Wisconsin includes natural and artificial surface water and groundwater.12 Discharges to public sewer systems are subject to “pretreatment” requirements discussed in the subsequent sections.
Discharge Permit Limits

The discharge permit program restricts the discharges of pollutants to waters of the state by placing two types of limits on the discharge: categorical limits and water quality based limits.

Categorical limits are established for various industrial categories such as pulp and paper manufacturing, metal finishing, plastics molding and many others. For each industrial category, limits are established based upon what technology can achieve in pollution control. Typically, categorical standards allow a discharge no more than a specified number of pounds of pollutant per ton of production. Wisconsin has chosen to adopt federal categorical limits. Except in a few specified areas, Wisconsin has chosen not to be more stringent than federal standards.

Water quality based limits depend on what the receiving water requires to support fish and aquatic life. Two different methods are utilized to assure that the discharge is not toxic to fish and aquatic life. First, chemical specific limits are established for individual chemical compounds. A permittee may seek a variance from a specific water quality standard after the permit is issued. Second, limits are established to assure that the effluent as a whole is not toxic. This type of limit is known as a whole effluent toxicity (WET) limit and is measured by biomonitoring techniques.

Additional restrictions may apply in two cases. First, additional restrictions apply to new or increased discharges. These restrictions were intended to prevent further degradation of waters and are frequently referred to as anti-degradation rules.

For purposes of anti-degradation analysis, the waters of the state are classified into five categories:

- Outstanding resource waters;
- Exceptional resource waters;
- Great Lakes waters;
- Fish and aquatic life waters;
- Variance waters (those not meeting current basic water quality standards).

Most waters in Wisconsin are classified as fish and aquatic life waters. However, several hundred waterbodies are specifically listed by rule as outstanding or exceptional resource waters. Under anti-degradation rules no degradation is allowed for outstanding or exceptional resource waters and only limited degradation is allowed for fish and aquatic waters.
Second, additional restrictions may also be applied when water quality is impaired by existing uses. Such restrictions may be imposed through the use of individual control strategies, restrictions on total maximum daily loads (discussed in the nonpoint section below) or state waste load allocation.

A typical WPDES permit contains the following provisions:

- Starting and expiration dates.
- Numerical effluent limitations. Limits on specific pollutants are applied to each “outfall” (point source). The numerical limits utilize either categorical or water quality based standards, whichever is the most stringent.
- Whole effluent toxicity provisions. These limits require biomonitoring and a toxicity reduction evaluation procedure in the event of test failures. These limits are also applied to each outfall.
- Schedule of compliance. This is a schedule of dates by which certain levels of pollution control must be achieved.
- Monitoring and reporting requirements. A permit establishes the responsibility of the discharger for monitoring and filing reports.
- General conditions under NR 205 applicable to all discharge permits such as requirements regarding bypasses, spills, modifications, renewals of the permit, reopener clauses, non-compliance notifications, power failures, record retention, reporting the results of more frequent than required monitoring.

One innovative way to help permittees comply with effluent limits is to allow trades between point sources or between point and nonpoint sources. For example, it may be more cost effective to purchase agricultural buffers to prevent nonpoint phosphorus runoff than for a point source to build more treatment capacity. These options are now being explored on a pilot basis.

**WPDES permit process**

A person who intends to discharge pollutants from a new facility must apply for a WPDES permit at least 180 days prior to the commencement of a discharge. A new or increased discharge from an existing facility also requires notice 180 days prior to the discharge. Because discharge permits cannot extend more than 5 years, persons seeking to renew a permit must reapply 180 days prior to expiration of the permit.

Before issuing a final permit, the DNR issues a public notice on a draft permit to enable public review and comment.
comments are usually received for 30 days. Any interested person can request a public hearing within 30 days of the public notice. A public hearing will be scheduled if requested by EPA, a state, a petition by five or more persons or if the DNR deems that there is a significant public interest. This hearing is informational in nature and does not involve formal trial-like procedures.

As noted earlier, EPA has authority to object to the terms of an individual permit if it believes that the permit does not comport with the Clean Water Act. If EPA objects, the DNR can revise the permit to meet EPA’s concerns and resubmit it for public comment. If the DNR refuses to meet EPA’s concerns, the authority to issue the permit passes to EPA.

For permit reissuance, the DNR will review the application to determine whether the permit holder is in substantial compliance with all terms, conditions and schedules of compliance contained in the existing permits. The DNR will also evaluate the permit holder’s production levels and waste treatment practices and the nature of the permit holder’s discharge. If the DNR does not find compliance with these conditions, it may deny reissuance of the permit. Usually, the permit is reissued to reflect any changed circumstances at the facility and new effluent standards.

If a person has made a timely application for a permit renewal, the old permit remains in effect until the new one is issued, even if the new permit is not issued before the expiration of the old one.

Once the permit is issued, the permittee, affected state or five or more persons can request a formal evidentiary hearing on the reasonableness or necessity of the permit conditions. Such a request must be made within 60 days of permit issuance. Filing such a petition stays the effectiveness of any permit condition challenged.

**Enforcement of Permit Limits**

The WPDES permit system relies heavily on self reporting. Each month every permittee must submit a discharge monitoring report (DMR) providing information on the discharge of each permitted pollutant. Failure to submit these reports or falsification of the reports can subject the responsible person to civil or criminal prosecution.

In addition, EPA and the DNR have broad authority to require the permit holder to furnish information and to allow on-site inspections, including access to and copying of records and conducting sampling. Non-compliance can result in permit suspension, revocation or modification as well as civil or criminal prosecution.
Regulation of Discharges to Public Sewers

The WPDES permit program requires permits for discharges to waters of the state. Many persons and industries however, discharge to public sewers which lead to a publicly owned treatment work (POTW). In such a case it is the POTW which holds the WPDES permit. Persons who want to make discharges to POTWs are subject to requirements imposed by the DNR and the POTW. POTWs may be operated by a municipality or by a sewerage commission.

Discharge Permit Limits

A person discharging pollutants to a POTW must comply with several requirements. First, a discharger must give notice to the DNR and to the POTW describing the types of pollutants to be discharged.41

Second, a discharge to a POTW is subject to pretreatment standards.42 “Pretreatment” means reducing the amount of pollutants, or altering the pollutants’ properties before discharge to a POTW. In general, pretreatment standards require industrial dischargers to do the following:43

- prevent the introduction of pollutants that will interfere with POTW operations or sludge disposal;
- prevent the introduction of pollutants that will pass through POTW treatment operation untreated.

Municipalities which have more than five million gallons per day in discharges and receive contributions from industrial users must develop a pre-treatment ordinance meeting DNR specifications. If a municipality fails to enact an ordinance that meets DNR’s approval, the DNR is authorized to enact an ordinance for the municipality.44

Operation and Financing of POTWs and Sewerage Systems

A POTW and associated sewerage system may be operated by a municipality or sewerage commission. Cities, villages, towns and counties can operate their own sewerage systems, or one or more local governments may create a metropolitan sewerage district.45 Metropolitan sewerage districts operate as local governments with the power to condemn land, levy taxes and assessments, borrow money and construct and operate sewerage systems.46

When the Clean Water Act was enacted in 1972, it not only sought to control pollutants through the use of regulatory permits, it also provided substantial federal funds for the construction of municipal wastewater treatment facilities. While the amount of federal funding
available today is limited, the state Clean Water Fund Program continues to provide low interest loan funds and hardship grants to eligible municipalities for qualifying projects.\textsuperscript{47}

A portion of sewer service costs also falls on the users of the system. Sewer service fees are comprised of a sewer use fee for operation and maintenance together with a charge for long term capital costs. Usually, these charges are based on the amount of use within designated classes although there are exceptions.\textsuperscript{48} Separate special assessments are usually charged when a capital improvement abuts or otherwise serves a property.\textsuperscript{49}

Often, large communities will adopt sewer use ordinances which not only prescribe how the sewer system is used, but also establish fee rates for various categories of users. In addition, some communities will utilize contracts, particularly where there are one or two large industrial dischargers into a small community system.

Although sewerage systems are typically operated as special use utilities, sewer utilities are not subject to general rate regulation by the Wisconsin Public Service Commission.\textsuperscript{50} There are two notable exceptions to this rule. First, if a municipality has established a combined sewer and water utility, the combined utility is subject to PSC review.\textsuperscript{51} Second, a sewer system may file a complaint with the Public Service Commission claiming that the “rates, rules and practices are unreasonable or unjustly discriminatory.”\textsuperscript{52} The Public Service Commission has discretion in determining whether it will accept such a complaint for review.

**Sewer Service Areas**

The extension of sewer service into new developments seems like a straightforward matter. However, because of planning requirements imposed at the federal and state level and because of the impacts that sewer service can have on land use planning and local jurisdiction, sewer service area planning is complex and at times, controversial.

Sewer service area planning can be thought of as involving two separate processes: the planning of the sewer service area and the planning for specific facilities or sewer extensions within the sewer service area.

The first component, sewer service area planning, arises in the context of federal Clean Water Act requirements. Section 208 of the Clean Water Act required the development of area wide water quality management plans. One component of those plans is the development of a sewer service area. Although the general process
for the development of area wide water quality management plans is set forth by DNR rule, there is significant variation on how such plans are developed depending upon the area of the state at issue.\textsuperscript{53} Certain “designated areas” are required to have sewer service area plans completed for every community that has a sanitary sewer system. Those areas currently include: southeast Wisconsin, portions of the Fox Valley area and Dane County. Non-designated areas of the state are required to identify sewer service areas for urban areas with populations exceeding 10,000.\textsuperscript{54} In some areas of the state, a regional planning agency will undertake the necessary planning, whereas in other parts of the state, it will be done by other local planning agencies. The goal is to develop a sewer service area that would meet the community’s needs for a twenty year planning period and at the same time identify environmentally sensitive areas where sewers should not be extended.\textsuperscript{55}

Once a sewer service area plan is developed at the local level, it must be approved by the DNR.\textsuperscript{56} Sewer service areas can only be changed through the submittal of a plan amendment. Plan amendments, like the original plans, are prepared locally by the local planning agency and then subsequently approved by the DNR. Sewer service area plan status review and possible plan updates are required every five years.\textsuperscript{57}

The second major area of planning is generally referred to as facilities planning. When a sewerage system wishes to extend sewer, construct new treatment plants or undertake improvements that may affect the quality of the effluent, it must undertake a facility planning process in accordance with DNR regulations.\textsuperscript{58} These requirements contain a number of technical and engineering reviews to ensure that the POTW will be able to stay within its permit limits, and that the proposal will be cost effective to implement. In addition, the designated planning agency must determine whether the facilities plan is in conformance with the area wide waste treatment management plans. As a practical matter, this means that the designated planning agency must determine that the proposed development for sewer service extension is within the sewer service area and not within an environmentally sensitive area. This review is sometimes referred to as a 208 conformance review and must be submitted with the facilities plan, or a sewer extension plan approval request.\textsuperscript{59}

**Wastewater Treatment Plant Approvals**

Aside from regulations limiting water discharges, separate regulations require DNR approval of the design, construction, material modification and operation of wastewater treatment plants. This requirement,
contained in Wis. Stat. § 281.41, applies to treatment plants operated by individual facilities as well as POTWs.60

Any person seeking to build or modify a wastewater treatment plant must submit preliminary and final specifications to the DNR for approval prior to operation.61

Regulation of Stormwater and Nonpoint Discharges

As noted above, the Clean Water Act originally targeted large discreet sources of pollutants known as point sources. Typically, these sources could be controlled through the use of pollution control technology before discharge, such as the use of wastewater treatment plants. Federal and state governments made funds available for municipal treatment plants and for the most part, industries were able to pass their costs onto the consumer. The relatively limited number of discrete discharges also lent itself to a system of individual permits and a command and control regulatory scheme.

Increased attention is now turning toward the so-called nonpoint sources of pollution. Nonpoint or diffuse sources of pollutants are usually associated with land use activities, such as run-off from farms, cities and construction sites. Nonpoint sources are estimated to cause water quality impacts on 40% of state streams and about 75% of state inland lakes.62

Regulating nonpoint sources presents new challenges. Nonpoint sources do not lend themselves to end-of-the-pipe pollution control technology. Rather, they require changes in practices and behavior—the implementation of best management practices (BMPs) or source reduction measures. Because these sources are not large, discrete sources, but thousands of small, diffuse sources, such as farms, residences and businesses, the ability of those entities to incur substantial costs is significantly limited. The number of such sources also means that regulatory programs cannot rely on the traditional individual permit command and control strategies that characterize the regulation of point sources.

It should not be surprising therefore, that the programs established to respond to nonpoint pollution have themselves been varied and diffuse. Some of these programs are regulatory in nature whereas others depend on planning and grant monies. Moreover, although the DNR remains the lead agency for addressing water quality issues, the Department of Agriculture, Trade and Consumer Protection (DATCP), the Department of Commerce and the Department of Transportation have programs to address nonpoint pollution.
It should be emphasized that this area of regulation is very dynamic. Wisconsin is undergoing a major redesign of its nonpoint programs as this volume goes to press and federal programs continue to evolve as well. Thus, this section first addresses the existing regulatory approaches and then discusses the proposed nonpoint redesign effort.

Nonpoint Planning Under the Clean Water Act

Although nonpoint sources were not subject to direct regulation under the Clean Water Act when it was enacted in 1972, the Clean Water Act did encourage nonpoint pollution control planning as part of the 208 planning process. That process, described above, was primarily intended to identify municipal and industrial wastewater needs, but there is statutory authority to identify procedures and methods to control nonpoint source pollution as well. In Wisconsin, this directive served as an impetus for the development of the priority watershed program discussed below.

More recently, two developments have promoted nonpoint planning at the state level. First, the 1987 amendments to the Clean Water Act included a new section, Clean Water Act 319, which mandated that the states prepare an assessment and management program for controlling pollution from nonpoint sources. A grant program was provided for those states that complied with this requirement.

Second, EPA has placed new emphasis on the provision in Section 303 of the Clean Water Act which requires states to identify total maximum daily loads (TMDLs) for waterbodies that are not meeting applicable water quality standards. The TMDL process requires states to determine the maximum loading of a given pollutant that a receiving water, watershed or basin can tolerate. Section 303(d) of the Clean Water Act requires that states identify and develop a list of those waters within state boundaries that are not meeting water quality standards; the so-called 303(d) list. For each of the listed waters, states are then required to develop TMDLs for the limiting pollutants. Once the TMDL “ceiling” has been developed, the state must apportion that total load among point sources, nonpoint sources, natural background and a margin of safety, including considerations for future growth and feasible reductions from current sources. Recent amendments to the TMDL process emphasize the need to establish implementation plans that control point and nonpoint sources of pollutants.
Priority Watershed Program

Wisconsin was one of the states that used the Section 208 planning authority to develop a nonpoint program. This program was commonly referred to as the Priority Watershed Program.69 The program was designed to encourage the use of nonpoint source controls to improve water quality in watersheds showing the greatest nonpoint source impairments.70 Since the program began in 1977, 86 watershed and lake projects have been selected from 330 large-scale watersheds identified in the State. As of the date of this volume, 24 of those 86 projects have been closed or completed. The program is now being phased out under the new nonpoint source redesign effort.71 Nevertheless, because of the continuation of existing projects and because of its innovative approach at the time, it is worth noting how the program functioned.

When the program began, DNR identified priority watersheds and lakes in most need of nonpoint pollution abatement through 208 plans. A plan was written for waters identified as high or medium priority to address nonpoint sources in the subject watershed and to prescribe best management practices (BMPs) designed to reduce pollution runoff. Plans were approved by the Land and Water Conservation Board (LWCB).72 The projects were designed to be implemented by the counties for a period of ten to 12 years, and were entirely voluntary except for discharges within areas defined as critical sites, in which case participation in the abatement program was compulsory.73 Landowners whose properties are identified as significant sources of pollution runoff were offered cost-share agreements to implement the prescribed BMPs. Through cost-sharing grants to governmental units or landowners, DNR reimburses up to 70 percent of the costs of each practice.74

When first started, the program focused on agricultural projects. In the mid-1980s, several watershed projects in the Milwaukee River basin were selected as part of an initiative to work with municipalities on matters such as stormwater management and construction site erosion control.75

Agricultural Nonpoint Programs

Federal and state programs have attempted to control two basic types of agricultural runoff: nutrients from livestock operations and soil loss from cropped fields. Historically, these programs have tended to emphasize planning and funding over regulation, but regulations in this area are likely to increase.

Livestock Operations. Runoff from livestock operations is controlled through several programs. First, large livestock operations are
considered point sources under federal and state law and are required to obtain water discharge permits. Although one could debate whether runoff is properly considered a point source, EPA and DNR regulate certain livestock operations as such. Currently, federal and state law regulate concentrated animal feeding operations (CAFOs) which are defined as facilities containing 1,000 or more animal units or more than 300 animal units causing a pollutant discharge into waters.76 Operations with less than 300 animal units which have a significant discharge may also be classified as a CAFO on a case by case basis.77 EPA is currently expanding its policy guidelines to clarify and expand oversight of CAFOs and to set performance standards for those operations.78 This strategy calls for all animal feeding operations to voluntarily develop comprehensive nutrient management plans. These plans would address techniques for feed management and manure handling and management.

Wisconsin has a similar animal waste program.79 Like the federal program, it applies to livestock operations over 1,000 animal units, but can apply to smaller units where there is a significant discharge of pollutants to the waters of the state.80

Second, it should be noted that local governments are authorized to enact local regulations governing livestock operations, provided that they are consistent with and do not exceed state performance standards.81 Local governments can adopt regulations more restrictive than the state performance standards and prohibitions, but must demonstrate that the regulations are necessary to achieve water quality standards and must receive the review and approval of DATCP or DNR.82 A separate provision allows local governments to enact manure storage facility ordinances.83 DATCP is charged with adopting rules setting standards and criteria for such facilities, but is not required to approve such ordinances.

**Soil Erosion Control.** Historically, the other major category of agricultural nonpoint source controls has been those programs directed at controlling soil erosion. The goals for soil erosion control is set by statute as limiting soil erosion to the tolerable (“T”) rate.84 This is a rate calculated using the universal soil loss equation for each soil type in the state. Depending upon the soil type, the T rate ranges from 1 to 5 tons of soil loss per acre per year. These goals are implemented by DATCP in conjunction with the land and water conservation board (LWCB) and counties.85

Counties are required to create a land conservation committee or department.86 These committees must undertake land and water resource management planning in accordance with state standards87 and must establish soil and water conservation standards subject to
The committees may adopt standards and specifications for management practices to control erosion and may distribute funds for soil and water conservation practices.89

The county soil and water conservation plans are also reinforced by other programs. For example, the farm preservation program provides state income tax credits to agricultural land owners who met specified criteria, including conducting activities in accordance with land and water conservation standards.90 Land conservation committees must ensure that a soil and water conservation plan is prepared for land covered by a farmland preservation agreement. There are also a variety of other federal and state conservation programs that provide other financial incentives for reducing erosion through conservation practices or buffer zones, such as the conservation reserve enhancement program (CREP).91

Finally, it should be noted that counties, cities, villages and towns have the ability to enact ordinances regulating “land use, land management and pollutant management practices” independent of the foregoing state programs.92 Ordinances under this section may prohibit land use and land management practices which cause excessive erosion, sedimentation or nonpoint pollution.

**Urban Nonpoint Regulations and Stormwater Management**

For urban areas, regulation of nonpoint sources has evolved out of the control of urban stormwater. Although one could also debate whether stormwater is a point source or a nonpoint source, the 1987 amendments of the Clean Water Act clearly define types of stormwater as point sources and regulate them as such.93 Like other portions of the Clean Water Act, these provisions have been adopted in Wisconsin and are administered by the DNR.94 The Clean Water Act requires regulation of two large categories of stormwater discharges: discharges associated with certain industrial activity and discharges from municipal storm sewers.

**Stormwater from Industrial Sites and Construction Sites.** The “industrial activity” covered by this act includes manufacturing facilities, landfills, recycling facilities such as metal scrap yards, steam generating facilities, and transportation facilities with vehicle maintenance areas.95 Under the implementing rules adopted by DNR, industrial facilities are classified into one of three separate tiers which determine the timing and scope of discharge restrictions.96

For affected industries, discharges subject to regulation include stormwater which has come into contact with outdoor storage areas,
shipping and receiving facilities, vehicle maintenance areas, refuse sites, access roads and rail lines.

Persons subject to these requirements must submit stormwater discharge permit applications to DNR.\textsuperscript{97} Due to the nature of stormwater discharges, discharge limits will be different than those in a standard WPDES permit.

Unlike other discharge permits, stormwater permits rely upon the implementation of a stormwater pollution prevention plan (SWPPP) and the use of best management practices (BMPs).\textsuperscript{98} These requirements are designed to prevent and contain rather than treat discharges. Permits also require inspection and monitoring.\textsuperscript{99}

Stormwater discharges from construction sites are considered a form of industrial activity, but a separate set of requirements applies to this type of discharge.\textsuperscript{100} For construction sites of five acres or more, a notice of intent to be covered under the state’s general stormwater permit must be submitted at least 14 days prior to construction and the owner must develop and implement an erosion control and stormwater management plan.\textsuperscript{101} In addition, the Department of Commerce regulates erosion control at building sites of one- and two-family dwellings\textsuperscript{102} and the Department of Transportation (DOT) regulates stormwater discharges associated with highway projects.\textsuperscript{103}

**Municipal Stormwater Management.** The management of stormwater for municipalities has been divided into two phases. Phase I of the federal program primarily regulates medium and large municipal storm sewer systems.\textsuperscript{104} Phase I automatically covered large municipalities (250,000 or more) and medium municipalities (100,000-250,000). In Wisconsin, Milwaukee and Madison were automatically designated under Phase I. In addition, Phase I also applied to designated communities which included 21 municipalities surrounding Milwaukee and 17 communities in the Madison area.\textsuperscript{105} Municipalities in Great Lakes areas of concern or in priority watersheds are also subject to Phase I requirements.\textsuperscript{106}

The Phase I municipal program focuses on the ability of municipalities to control pollutants contributed to their storm sewer systems through a storm management program. That program is designed to reduce pollutants to the maximum extent practicable using appropriate best management practices.\textsuperscript{107} This program typically includes the following elements:

- Source area controls and structural BMPs for commercial and residential areas;
- Removal of illicit discharges;
• Monitoring and control of pollutants in industrial and high risk run-off areas; and
• Source area controls and structural BMPs for construction sites.

Phase II of the federal stormwater program regulates small municipal storm sewer systems. A small municipal storm sewer system is one serving a population of less than 100,000 and may come under coverage in one of four ways. Areas automatically designated are those urbanized areas that have a population of 50,000 or more and include all areas with a population of 1,000 or more per square mile. In Wisconsin, about 140 political entities are subject to automatic designation. The DNR is also required to evaluate for potential designation all systems serving a population of 10,000 or more with a population density of 1,000 per square mile. The DNR may, but is not required, to evaluate any area of a population density of 1,000 or more per square mile and the public can also petition the state to designate a source as well.

Under Phase II, proposed minimum control measures include the following elements:

• Control of construction site stormwater runoff for sites with the land disturbance of one acre or more;
• Post-construction stormwater management in new development and redevelopment areas;
• Elimination of illicit discharges;
• Pollution prevention through maintenance activities such as leaf collection, street sweeping; and
• Public education and outreach.

EPA is proposing to use general permits for this program utilizing these minimal control measures, except where more stringent requirements are needed to comply with any TMDLs. As of the date of this publication, DNR has not yet amended NR 216 to implement these provisions.

Proposed Nonpoint Source Redesign

The 1997 Budget Bill required the DNR and the DATCP to develop or modify existing programs and administrative rules related to nonpoint sources of water pollution. This initiative, known as the nonpoint source redesign, included statutory directives to develop performance standards and implement technical standards for both agricultural and non-agricultural point sources. The early phases of the rule development process have proven to be controversial and have generated substantial public comments. Several basic components of the program are described below, but the final rules will not be in
effect until well after the date of this publication. Thus, the final rule may vary from the components described here.

**Agricultural Nonpoint Redesign.** For agricultural nonpoint sources, the DNR in consultation with DATCP is charged with promulgating rules prescribing performance standards and prohibitions for agricultural facilities and practices, designed to achieve water quality standards. DATCP must promulgate rules in consultation with the DNR describing conservation practices to implement the performance standards and prohibitions and specify a process for developing and disseminating those technical standards.

While the scope of most of these performance standards or prohibitions will be defined by rule, the 1997 budget bill mandated that four animal waste activities be prohibited regardless of the size of the livestock operations. These prohibitions are:

- No overflow of manure storage structures;
- No unconfined manure piles in water quality management areas;
- No direct runoff from a feedlot or stored manure into waters of the state; and
- No unlimited access by livestock to waters of the state where concentrations of animals prevent the maintenance of adequate sod cover.

Statutory directives also make it clear that the performance standards, prohibitions, conservation practices or technical standards required under this subsection cannot be enforced with respect to facilities or practices in existence before October 14, 1997 unless cost-sharing in the amount of at least 70% is available.

The redesigned program is likely to include the following key elements:

- Cropland soil erosion control measures for cropped farmland and concentrated flow channels;
- Additional requirements to control soil erosion on cropped fields in water quality management areas;
- The use of Natural Resource Conservation Service (NRCS) technical standards for manure storage facilities;
- The diversion of clean water from feedlots within water quality management areas;
- The adoption of the four animal waste prohibitions; and
- The adoption of nutrient management plans.

The DNR retains the right to develop targeted performance standards that go beyond the statewide performance standards if implementation
of the statewide performance standards does not result in the achievement of water quality standards. Under the proposed program, county soil and water conservation programs will be playing a large role in planning and implementation. The intent is to distribute funds to enable all counties to engage in soil and water conservation programming. Local livestock ordinances will continue to be subject to review and approval by the DNR or DATCP.

**Urban Nonpoint Redesign.** For urban nonpoint sources, the DNR is charged with establishing performance standards and developing and disseminating technical standards to implement those standards. These standards will in large part be driven by the Phase II federal stormwater program described above. As currently proposed however, the state program is likely to be broader than the federal program. It is anticipated that the state program for construction and post-construction stormwater management will be applied to all urban areas in the state regardless of size. In addition, there is likely to be a program designed to address stormwater runoff from existing development for urbanized areas that may include more areas than under Phase II.

Although the burden of implementing urban nonpoint controls is likely to fall on municipalities, recent amendments to the statutes do at least provide local units of government the statutory authority to undertake stormwater management planning and construction of stormwater facilities. In addition, both federal and state law have provisions which allow local units of government to work together on these issues. Municipalities have broad authority to enter into inter-governmental agreements which can be used to address joint stormwater management issues. In addition, the statutes have been amended to allow the development of stormwater utilities.

The development of the nonpoint source redesign effort and related federal developments is likely to continue to evolve over the next several years. In this area in particular, the reader should be cautioned to consult current statutes and rules for the latest developments in this area.

**Common Law Restrictions on Discharges to Surface Waters**

Under historic common law doctrines, riparian owners were entitled to the reasonable use of the waters on or bordering their lands. While reasonable use clearly encompassed concepts of access and use, it also involved considerations of water quality. Thus, under common law, a riparian could discharge waste materials into the water
provided that the discharge would not unreasonably interfere with downstream riparians.

Early Wisconsin cases held that downstream riparians who are deprived of the reasonable use of their water as a result of pollutants from upstream livestock yards, gristmills or other operations could seek to have those operations enjoined or could seek to be compensated for the damages inflicted.117

Generally, common law concepts of reasonable use are now less important given the extensive regulations in place. However, the common law doctrine of reasonable use is still important in two contexts.118 First, there may be discharges which do not require a permit or are exempt from permit requirements. Nevertheless, in some cases, such discharges could be considered an unreasonable use of the waters.

Second, even where a discharge is subject to regulation, the regulation or permit limits may not be stringent enough to fully protect the downstream owner’s use of that water. The fact that a person has a discharge permit does not mean he or she is immune from a common law action brought by a downstream riparian.
Chapter 8 Notes

1 33 U.S.C. § 1251, et seq. Wis. Stat. § 283.001(2) specifically provides that one of the purposes of Wis. Stat. ch. 283 is to implement the Federal Water Pollution Control Act of 1972, also known as the Clean Water Act.

2 Stormwater runoff is considered a point source where there is a “discernable, confined and discrete conveyance of stormwater for which a permit is required.” Wis. Stat. § 283.01(12).


5 Memorandum of Agreement between the U.S. Environmental Protection Agency and the Wisconsin Department of Natural Resources, dated February 4, 1974.


7 33 U.S.C. § 1342(c).

8 33 U.S.C. § 1362(14); Wis. Stat. § 283.01(12).

9 33 U.S.C. § 1362(6); Wis. Stat. § 283.01(13).

10 Thus, discharges to groundwater are outside of the scope of the Clean Water Act. Village of Oconomowoc Lake v. Dayton Hudson Corp., 24 F 3rd 962 (7th Cir 1994).

11 33 U.S.C. § 1362(7); 40 C.F.R. § 122.2.

12 Wis. Stat. § 283.01(20).


14 See Wis. Stat. § 283.11. Wisconsin has reserved the right to be more stringent in areas such as phosphorus where there are no federal categorical standards. See Wis. Stat. § 283.11 (3) and Wis. Admin. Code ch. NR 217.


16 See Wis. Stat. § 283.15.


18 Wis. Admin. Code ch. NR 207.

19 See, Wis. Admin. Code §§ NR 102.10-102.13, NR 207.03.


Wis. Adm. Code ch. NR 212. See also, Wis. Adm. Code § NR 106.11 which allows DNR to allocate allowable loads to meet water quality criteria.

See, Wis. Stat. § 283.84. See also, EPA Draft Framework for Watershed Based Trading, EPA 800-R-96-001, May 1996.

Wis. Stat. § 283.37(2).

Wis. Stat. § 283.59. The notice must be accompanied by a new permit application unless the new or increased discharge will not violate the terms of the existing permit. It is possible that the notice of a new or increased discharge could result in a permit modification. Wis. Stat. § 283.53(2).

Wis. Stat. § 283.53(3).

Wis. Stat. § 283.39.

Wis. Stat. § 283.49.

Wis. Stat. § 283.49(1)(b).


The procedure for this process is contained in 40 C.F.R. § 123.44.

Wis. Stat. § 283.53(3)(b).

Wis. Stat. § 283.53(3)(c).

Wis. Stat. § 227.51(2).

Wis. Stat. § 283.63.

Wis. Stat. § 283.63(1)(am).


Wis. Stat. § 283.53(2).

Wis. Stat. § 283.91.

Wis. Stats. §§ 283.37(4), 283.59(2).

33 U.S.C. § 1317(b); Wis. Stat. § 283.21.


Wis. Stat. §§ 62.16-62.185 allows cities to construct and finance sewer systems. These provisions are referenced for villages in Wis. Stat. § 61.39. The powers of counties are set forth in Wis. Stat. § 59.52(6). Wis. Stat. §§ 60.70-60.79 establishes the powers and duties of town sanitary districts. Metropolitan sewerage districts are generally governed by Wis. Stat. §§ 200.01-200.15. Cities of the first class may create
a metropolitan sewerage district under Wis. Stat. §§ 200.21-200.65; §§ 66.0133-66.1013. This provision provides for a different governance structure and financing powers than metropolitan sewerage districts under Wis. Stat. §§ 200.01-200.15. As of the date of this volume only the Milwaukee Metropolitan Sewerage District operates under these provisions.

40 Wis. Stat. § 200.11.

47 See, Wis. Admin. Code ch. 162 which establishes the general requirements for the Clean Water Fund program, the basis for scoring projects to establish a priority funding list and the basis for determining and implementing the hardship financial assistance grants. Recent revisions to that program now make funding available for certain urban nonpoint projects as well as traditional sanitary sewer projects.

48 The general provisions for sewer service charges are set forth in Wis. Stat. § 66.0821(4). However, Wis. Stat. § 281.57(8) provides that facilities receiving state financial assistance must have a user charge system for operation and maintenance costs that is proportionate to system use. The long-running battle between the Milwaukee Metropolitan Sewerage District (MMSD) and outlying suburban communities arose over the funding of over $2 billion in capital costs associated with deep tunnels to prevent overflow in storm events. MMSD allocated those capital costs to communities outside of Milwaukee County based upon property value rather than flow generated by those communities. See, e.g., City of Brookfield v. Public Service Commission, 186 Wis.2d 129, 519 N.W.2d 718 (Ct. App. 1994); City of Brookfield v. Milwaukee Metropolitan Sewerage District, 171 Wis. 2d 400, 491 N.W.2d 484 (1992), City of Brookfield v. Milwaukee Metropolitan Sewerage District, 144 Wis.2d 896, 426 N.W.2d 591 (1988).


50 See, Wis. Stat. § 196.01(5) which defines public utility.

51 However, there is an abbreviated proceeding for water and sewer rate increases without hearings under Wis. Stat. § 196.193.

52 Wis. Stat. § 66.0821 (5) (a).

53 Wis. Admin. Code ch. NR 121 establishes the general procedures for developing area wide water quality management plans.

54 See, Wis. Admin. Code § NR 121.05.

55 Wis. Admin. Code § NR 121.06.


57 Wis. Admin. Code §§ NR 121.07-08.


59 Wis. Admin. Code § NR 110.08(4).

60 Wis. Stat. § 281.41. This requirement originated with the Wisconsin Revised Statutes of 1898 which gave the State Board of Health the power to approve plans for sewage treatment plants.


33 U.S.C. § 1288(b) (2) (F)-(K). See also, Wis. Admin. Code ch. NR 121.


33 U.S.C. § 303(d) and (e). EPA originally issued regulations governing TMDLs at 40 C.F.R. § 130.7 in 1985 and revised them in 1992. Additional revisions adopted on July 13, 2000, 65 Fed. Reg 43586 were designed to further clarify and implement this program.

CWA § 303(d), 33 U.S.C. § 1313(d).


Fed. Reg. 43586 (July 13, 2000). These rules are not effective until October 2001. Although EPA has continued to defend its authority to regulate nonpoint sources through the TMDL process, agricultural groups are challenging that authority.


The program is authorized under Wis. Stat. § 281.65 and administered under Wis. Admin. Code ch. NR 120.

Wis. Stat. § 281.65(2)(a) and Wis. Admin. Code § NR 120.02(5).

Based on anticipated funding levels, the last of the remaining 62 projects are expected to be completed in 2009. Currently, 60 of those remaining projects are in the implementation phase.

See, Wis. Stat. §§ 15.135 and 92.04. The LWCB is charged with developing recommendations and advising the DATCP and DNR on matters concerning land and water conservation and nonpoint source water pollution abatement. In addition to approving plans, the LWCB identifies priority watershed and lake projects, oversees an evaluation of the program and assists in resolving program concerns.

The program was initially voluntary and then Wis. Stat.§ 281.65 was later revised by 1993 Act 166 to require that projects selected after mid-August 1993 identify critical sites. Critical sites are those sites within the watershed that are critical to achieving the plan’s water quality goals. Wis. Stat. § 281.65(4)(g) 8.am and Wis. Admin. Code § NR 120.02(11).

Funds from the Clean Water Act § 319 nonpoint source management program requirements support state agency program staff. The state finances 70 to 100% of the project planning and implementation administrative costs of the designated management agencies through local assistance grants. Draft, Nonpoint Redesign Report: Introduction (May 1999), p.2.

Selection of Milwaukee River Basin projects was required by 1983 Wis. Act. 416 and the basin was defined to include the Kinnickinnic River through 1989 Wis. Act 366.

33 U.S.C. 1362(14); 40 C.F.R. Part 122, Appendix B.

40 C.F.R. § 122.23(c).


This program sometimes referred to as the “notice of discharge program,” was primarily driven by complaints. Implementation will likely be impacted as part of the nonpoint redesign effort.

Wis. Stat. § 92.15(2).
Wis. Stat. § 92.15(3).
Wis. Stat. § 92.16.
Wis. Stat. § 92.025. Interim goals are also established.
Wis. Stat. ch. 92.
Wis. Stat. § 92.06.
Wis. Stat. §§ 92.10(5) and (6).
Wis. Stat. §§ 92.105, 92.04(2)(c).
Wis. Stat. § 92.07(2).
See, Wis. Stat. § 91.13(8)(dm).
7 C.F.R. § 1410.50.
See, Wis. Stat. § 92.11.
Wis. Admin. Code ch. NR 216, subch. II.
Persons proposing a discharge within six months of November 1, 1994 (the effective date of NR 216) must submit an application at least 30 days prior to discharge. For discharges commencing after May 1, 1995, applications must be submitted six months prior to the discharge. Wis. Admin. Code § NR 216.26.
Wis. Admin. Code § NR 216.27. The SWPPP requires, among other things, that a SWPPP coordinator be designated, major activities of the facility be identified, a drainage basin map be prepared, all potential sources of stormwater contamination be identified and stormwater data be summarized.
Wis. Admin Code § NR 216.28. These requirements are referenced in the SWPPP.
Wis. Admin. Code ch NR 216, subch. III. Exceptions to this requirement include stormwater from agricultural land, commercial building sites regulated by the Department of Commerce and Department of Transportation.
Notice of intent deadlines are contained in Wis Admin Code § NR 216.44, and erosion control plan requirements are contained in § 216.46.
Federal regulations implementing this program were promulgated in 55 Fed. Reg. 47990 (November 16, 1990) and were amended on March 21, 1991 in 56 Fed. Reg. 120,980. These regulations are codified as amended at 40 C.F.R. Part 122.

Municipalities in Great Lakes areas of concern under § NR 216.02(2) include Sheboygan, Superior, Marinette and Green Bay and surrounding areas. Municipalities within priority watersheds with populations over 50,000 under Wis. Admin. Code § NR 216.02(3) include portions of Eau Claire, Racine, West Allis and Waukesha.

Regulations implementing this program were adopted on December 8, 1999 at 64 Fed. Reg. 68722.

The four animal waste prohibitions for manure management are the minimum set of prohibitions. Wis. Stat. § 281.16(3)(a).

The authority of local units of government to enact stormwater management ordinances can be found as follows: cities (Wis. Stats. § 62.234); villages (Wis. Stat. § 61.354); towns (Wis. Stat. § 60.627); counties (Wis. Stat. § 59.693). In addition, local units of government generally have the authority to construct and maintain facilities to manage stormwater. See, cities (Wis. Stat. § 62.15); villages (Wis. Stat. §61.36); towns (Wis. Stat. § 60.50(2)); town sanitary districts (Wis. Stat. § 60.77(4)); metropolitan sewerage districts (Wis. Stat. § 200.11(7)).

Wis. Stats. § 66.0301 allows a broad range of inter-governmental agreements. Agreements in this context could range from covering the sharing of equipment or administrative services to creating a joint commission to comprehensively manage aspects of stormwater for the region.

See, Wis. Admin. Code § NR 216.04 that allows communities to file joint applications or to file as a regional authority. In addition, under Phase II, the federal stormwater regulations allows local communities to be designated as a qualified program for purposes of providing construction site erosion and sediment control.

State and federal programs also encourage local communities to work together in stormwater management planning.
In Hazeltine v. Case, 46 Wis. 391, 1 N.W. 66 (1879), the Court held that a downstream riparian was entitled to damages as a result of pollution caused by an upstream hog pen and hog yard. However, in so holding, the Court made it clear that both riparians had a right of reasonable use of the water and it was only when the discharge became unreasonable that a claim arose. In summarizing the trial court’s conclusion with approval, the Wisconsin Supreme Court stated:

"The Court, in effect, charged that each riparian proprietor was entitled to the use and enjoyment of the stream in its natural flow, subject to its reasonable use by other proprietors; that each proprietor had an equal right to the use of the stream for the ordinary purposes of his house and farm, and for the purpose of watering his stock, even though such use might, in some degree, lessen the volume of the stream or affect the purity of the water; that the lower proprietor had no superior right in this regard over a proprietor higher up on the stream, because each was entitled to make a beneficial and reasonable use of the stream in its natural state, that if, in its natural state, the stream was useful both for domestic or household purposes and for watering stock, but the use for ordinary stock purposes was more valuable or beneficial for all the owners along the stream than the use for domestic purposes, then the less valuable must yield to the more valuable use; but that its reasonable use for all purposes should be preserved, if possible."

In a subsequent case, Lepper v. Wisconsin Sugar Co., 146 Wis. 494, 128 N.W. 54 (1911), the Wisconsin Supreme Court upheld a contract in which the downstream owner was compensated for the loss of water quality resulting from the upstream owner’s operation of a beet sugar factory. The Court, however, narrowly construed the contract to allow the downstream owner to maintain a separate action when the volume of pollutants was sufficient to prevent the downstream owner from operating his gristmill.

For a general discussion of common law remedies for water pollution, see, P. Davis, “Theories of Water Pollution Litigation,” 1971 Wis. L. Rev. 738. While this article was written prior to developments under the 1972 Clean Water Act, it remains instructive on common law theories.
CHAPTER 9
Groundwater Law

This chapter addresses Wisconsin law governing the use of groundwater. Included is a discussion of the rights to extract groundwater, regulations on groundwater quality and remedies for groundwater contamination.

Agencies Regulating Groundwater

Groundwater withdrawal is governed by common law and statutory provisions. Under common law, groundwater withdrawal is subject to a doctrine of reasonable use. State regulations administered by the DNR establish standards for well construction and the use of high capacity wells.

In 1984, Wisconsin became one of the first states to adopt numerical standards to regulate groundwater quality. The DNR and the Department of Health and Family Services (DHFS) are involved in the standard setting process. There is no corresponding federal law regulating groundwater quality as such. However, Congress enacted the Safe Drinking Water Act of 1974 to establish standards for any water used as drinking water. EPA is charged with administering that act.

Groundwater Withdrawal

Common Law Restrictions

Historically, the common law right to use groundwater was extensive. A landowner could consume groundwater “with impunity.” A landowner even had the right to withdraw groundwater maliciously to deprive a neighbor of the groundwater.

This rule existed in Wisconsin until 1974 when State v. Michels Pipeline Const., Inc. was decided. In that case, Michels Pipeline had de-watered an aquifer to install a sewer line for the Milwaukee Metropolitan Sewerage Commission. The de-watering affected several neighboring wells. The court overturned earlier rulings and imposed a reasonable use standard on groundwater withdrawal. Under the new standard a person is permitted to withdraw groundwater in any amount, provided that it does not cause unreasonable harm to another. This standard applies to all wells and other groundwater de-watering activities where the water is removed from the land. If groundwater is withdrawn and applied to the land (e.g. for irrigation) a qualified privilege remains.
Groundwater Withdrawal Regulations

Today all wells must conform to DNR regulations and be installed by certified well drillers. The specific standards governing the well depend on the type of well.

The DNR requires a permit for high capacity wells. High capacity wells have the capacity to pump more than 100,000 gallons per day. In considering whether the 100,000 gallon per day threshold is reached, the capacities of all wells on the property are added together. To obtain a permit, the high capacity well must meet specified well construction criteria and not adversely impact or reduce the supply of water to any public utilities. No other criteria need to be addressed under the current permit review process.

Public water supply systems are subject to a detailed set of regulations governing design, construction and operation. Where the public water supply comes from groundwater, specific technical standards relating to well design and installation apply. Different technical standards apply to surface water sources of supply.

Public water supply systems are classified into community and non-community systems. For purposes of these regulations a public water supply system is one which has 15 service connections or regularly serves 25 or more individuals at least 60 days out of the year. A public water supply system is also considered a community water supply system if it has 15 service connections or regularly serves 25 or more individuals on a year-round basis. A water system serving 7 or more homes, or 10 or more mobile homes, apartment units, or condominium units is presumed to be a community water system unless proved otherwise by the owner.

Individual wells below the high capacity rating do not require permits but are subject to a variety of standards. These standards govern well construction, design, location, closure and use among other things.

Standards that Apply to Groundwater Quality

Drinking Water Standards

The federal Safe Drinking Water Act of 1974 charged EPA with promulgating drinking water standards to protect public health. These standards, known as “maximum contaminant levels” or MCLs, now cover approximately 75 substances. Primary MCL standards are designed to protect public health and include standards for organic and inorganic chemicals, microorganisms and bacteria, and turbidity.
Secondary MCL standards are designed to protect public welfare and include color, odor and taste. In response to recent outbreaks of waterborne diseases such as cryptosporidium and other microbial contaminants, recent amendments to the Safe Drinking Water Act eliminated a mandate requiring EPA to issue standards for 25 new contaminants every three years. EPA now has the discretion to focus effort and resources on contaminants it considers pose “the greatest public health concern.”

The Wisconsin DNR has promulgated state MCLs based on the federal MCLs whether its source is groundwater or surface water. These standards apply to any public water supply system. These standards technically do not apply to individual or non-public water supply systems, but serve as guidance in determining whether a well is contaminated.

**State Groundwater Standards**

Drinking water standards provide a means of protecting public water supplies, but do not cover individual wells. Moreover, such standards were not designed to protect the groundwater resource itself. For these and other reasons, Wisconsin created a comprehensive system to protect groundwater in 1984. Wis. Stat. ch. 160 requires that DNR establish groundwater standards in consultation with DHFS.

Currently DNR has established public health standards for 120 substances and public welfare standards for eight additional substances. These standards are also known as enforcement standards (ES). Substances of public health concern are those which have the potential to cause adverse short-term or long-term health impacts. Substances of public welfare concern are those which cause aesthetic problems such as objectionable taste or odor.

Whenever available, “federal numbers” such as drinking water standards must be used in the standard setting process. In the absence of a federal number, a numerical standard is created by utilizing a risk assessment methodology similar to that used by federal agencies.

In addition to the ES, the legislature authorized state regulatory agencies to take action when a groundwater problem became apparent, but before an enforcement standard had been exceeded. To provide an “early warning” of a groundwater problem, the DNR is charged with establishing preventive action limits (PALs) for each regulated substance.

A PAL is a percentage of the enforcement standards. For public welfare substances, the PAL is 50 percent of the concentration.
established as the ES. For substances of public health concern, the PAL is 10 or 20 percent of the ES depending on the potential health effects of the substance.

The ES and PAL values are set forth by rule in NR 140. NR 140 also provides for exemptions from the groundwater standards where background groundwater quality exceeds a PAL or an ES. Usually if an exemption is granted the DNR will specify an alternative concentration limit along with other conditions.

**Local Zoning, Wellhead Protection and Source Water Assessment**

Local governments have the authority to protect groundwater resources through planning and zoning activities. These activities can take the form of general zoning restrictions or restrictions to protect municipal wells (wellhead protection zones).

In Wisconsin, the wellhead protection program is a collection of voluntary and mandatory initiatives. DNR requires that the owner of any municipal well constructed after May 1, 1992 submit a wellhead protection plan for approval before the well is placed into service. Among other things, the owner must identify the exchange area and zones of influence of the well, groundwater flow direction, and potential contaminant sources and must establish a wellhead protection area. The DNR and other agencies also require that certain activities such as sewers, landfills, lagoons, waste disposal sites, pesticide mixing and loading and other activities maintain setbacks from public water supply wells.

In addition to these requirements DNR encourages local governments to establish wellhead protection zones for existing public water supplies. To facilitate this process, the DNR continues to assist with the following activities: delineating wellhead protection areas for all public water supply wells, investigating potential contaminant sources within such areas, providing educational and technical assistance to municipalities, and developing management approaches to protect designated areas.

Recent amendments to the Safe Drinking Water Act now require states to identify source water protection areas for public drinking water supplies. The Source Water Assessment Program (SWAP) requires the DNR to delineate source water assessment boundaries for groundwater and surface water systems, identify existing and potential sources of contamination within those boundaries, and determine the water system’s susceptibility to contamination. The results of this assessment are to be made available to the public.
Capacity Development Program

Wisconsin’s capacity development program is a new initiative designed to ensure that new and existing public water systems have the technical, financial and managerial resources necessary to maintain compliance with safe drinking water standards. The program will draw from the strengths of existing strategies such as the source water assessment and wellhead protection programs and create other programs that address system infrastructure, improved water resource evaluation, improved operator training and more effective communications with the public.

Regulation of Activities to Prevent Contamination

Each state agency is required to promulgate rules to ensure that activities it regulates meet groundwater standards. For activities regulated by DNR, implementing regulations are also contained in NR 140. Other agencies have separate regulatory responses for programs under their control.

Wis. Stat. ch. 160 did not create new regulatory authority but was designed to supplement existing regulatory authority. Generally, a facility, activity or practice must be subject to regulation by the DNR or another agency before the groundwater standards apply. The exception is where an accidental spill or release of a hazardous substance occurs subject to response under Wis. Stat. § 292.11, as described later in the chapter.

Among the routine activities regulated by the DNR which have the greatest potential impact on groundwater are liquid or solid waste disposal facilities. Detailed technical design and operation standards are prescribed by rule for these activities to protect groundwater. For each regulated facility, groundwater must be monitored to ensure that NR 140 standards are not exceeded.

Under the federal Safe Drinking Water Act, the EPA also regulates underground injection control programs; Wisconsin’s policy is one in which most injection practices are prohibited. However, recently issued federal regulations relating to injection wells have broadened the scope of the program to include septic systems with the capacity to serve more than 20 individuals, storm water infiltration systems as well as industrial water drainfields.

Compliance with NR 140 standards is measured at the “point of standards application.” The point of standards application for an ES includes the following locations: any point of present groundwater...
use, any point beyond the property boundary or any point within the property boundary in an area known as the design management zone or DMZ. The DMZ is defined by regulation as a set number of feet away from a contaminant source. The point of standards application for a PAL is any point at which groundwater is monitored. For most regulated activities there are multiple points at which groundwater is monitored to determine if groundwater contamination is occurring.

Remedies for Contaminated Groundwater

Regulatory Responses to Contaminated Groundwater

Two regulatory programs are designed to provide responses to groundwater contamination. First, where groundwater contamination is discovered as a result of a regulated activity, the range of regulatory responses for PAL exceedances includes:

- Sampling wells or require sampling of wells;
- Requiring an investigation of the extent of groundwater contamination;
- Requiring a change in the design, construction or operation of the facility, practice or activity;
- Requiring prohibition or closure and abandonment of a facility, practice or activity;
- Requiring remedial action to renovate or restore groundwater quality;
- No action.

Responses required by the DNR must be designed to minimize the concentration of the substance in groundwater at the point of standards application “where technically and economically feasible.” Responses must also be designed to regain and maintain compliance with the PAL unless it is not technically and economically feasible to do so. If the PAL cannot be regained, the owner or operator must achieve compliance with the lowest possible concentration which is technically and economically feasible and must insure that the ES is not attained or exceeded at the point of standards application.

A similar notice and evaluation process applies when monitoring data exceed an ES. The DNR will propose “responses as necessary to achieve compliance with the enforcement standard at the point of standards application.” A narrower range of remedial alternatives is applicable when enforcement standards are exceeded and there is no “technical or economic feasibility” exception for meeting an ES.
A second program is designed to provide a response to spills and unpermitted releases of hazardous substances. Examples include releases of petroleum from leaking underground storage tanks and accidental spills. In *State v. Mauthe*, the Wisconsin Supreme Court held that mere seepage of contaminants through soil and into groundwater was a discharge subject to the spill statute,\(^5\) Wis. Stat. § 292.11.

The spill statute requires that a person who possesses or controls the hazardous substance discharged or who has caused its discharge must immediately notify DNR and take “actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge…”\(^5\) Thus as soon as groundwater contamination is discovered it must be reported. If there is no known source of the contaminants the DNR will require the owner of the property to investigate, determine the extent of contamination and develop a plan to clean up the contamination. A property owner may be exempt from these requirements if it can be shown that he or she had no control over the source of the discharge or the property from which the discharge originated. The property owner must also be willing to cooperate with the DNR’s efforts to respond to the discharge.\(^5\)

If another party has caused the contamination and can be located, the DNR will seek to have that person undertake the response. The procedures for site investigation and response have been codified by the DNR.\(^5\) In general, a site must be cleaned up to meet groundwater standards under NR 140.

**Well Compensation Program**

If a public or private water supply becomes contaminated, there may be common law rights to compensation from persons causing the contamination. These actions are described in Chapter 11. However, many times the source of contamination may not be known, or it may be caused by unintentional onsite conditions. As a result, the state has created programs to provide funds for well compensation and replacement.

For private water supplies that are contaminated, the well compensation program provides funds to help replace that water supply. The awards under this program can cover up to 75 percent of eligible costs up to $12,000.\(^5\) Eligible costs include:\(^5\)

- Obtaining an alternate water supply;
- Equipment used for treating water, constructing or reconstructing a private water supply, or providing connections to an existing private or public water supply;
- Abandoning a contaminated private water supply;
• Obtaining two tests to determine contamination;
• Purchasing and installing a new pump;
• Relocating pipes as necessary.

Any landowner or lessee of a property on which a contaminated private water supply is located may submit a claim if the applicant’s annual family income does not exceed $65,000.56 Governmental units may not submit a claim under this section.57 Claims must be submitted on forms provided by the DNR and contain information which shows that the private water supply is contaminated.58

A person seeking reimbursement must receive an award letter or notice to proceed from DNR prior to constructing a replacement water supply. The DNR will issue awards to eligible applicants without regard to fault, but will deny a claim if:59

• The claim is not within the scope of the section.
• The claimant submits a fraudulent claim.
• The claim is for reimbursement of costs incurred before the claim was deemed complete.
• One or more contaminants was introduced through plumbing connected to the well.
• One or more contaminants was introduced into the well intentionally by the claimant.
• The contaminants are naturally occurring substances and the concentration does not significantly exceed the background concentrations.
• An award has been made within the previous 10 years for the parcel of land where the private water supply is located.
• A residential water supply is contaminated by bacteria or nitrates and is not contaminated by any other substance.
• A livestock water supply is contaminated by bacteria and is not contaminated by any other substance.

In administering this program, the DNR has established rules which further define eligible and ineligible costs and the information needed to process a claim.60
Chapter 9 Notes


2 Wis. Stat. ch. 160 created by 1983 Wis. Laws Act 410. Implementing regulations are contained in NR 140.


4 *Huber v. Merkel*, 117 Wis. 355, 94 N.W.2d 354 (1903). In that case Merkel, an owner of an artesian well, allowed his well to flow continuously, thus lowering the artesian pressure of other neighboring wells. The court held that the neighboring property owners had no legal right to stop Merkel’s wasteful and injurious use of the groundwater. See also, *City of Fond du Lac v. Empire*, 273 Wis.333, 77 N.W.2d 699 (1950) where the court held that the Town of Empire could not enact an ordinance prohibiting high capacity wells proposed by the City of Fond du Lac, in part because to do so would be contrary to the general law of the state set forth in *Huber v. Merkel*.

5 *Huber v. Merkel*, 117 Wis. at 363.


7 This standard was based on *RESTATEMENT (SECOND) OF TORTS*, §§ 858-63.

8 *State. v. Michels Pipeline*, 63 Wis.2d at 302-03.


10 1945 Wis. Laws ch. 303. See, Wis. Stat. § 281.17(1); Wis. Admin. Code § NR 812.07(53). Of course, as the court noted in *State v. Michels Pipeline*, 63 Wis. 2d at 297, obtaining a state permit does not insulate a person from nuisance liability.

11 Wis. Stat. § 281.17(1) ; Wis. Admin. Code § NR 812.07(53).

12 Wis. Stat. § 281.17(1). Wis. Admin. Code § NR 812.09(4). Compare these permitting criteria with those applied to proposals for surface water withdrawal, described in Chapter 5.

13 As proposals for large-scale groundwater withdrawals increase, some have questioned the adequacy of Wisconsin’s regulatory framework for the protection of surface waters and wetlands. Minnesota requires that permits be obtained for withdrawals exceeding 10,000 gallons per day or 1 million gallons per year. Minn. Stat. § 103G.271. The Minnesota DNR may deny the permit based on a number of factors, including degree of consistency with state, regional and local land and water use plans as well as potential adverse impacts on surface flows. Minn. R. 6115. 0670. The state of Washington administers a program in which most groundwater withdrawal permits are subject to a review which assesses degree of interference with minimum flows in streams, lakes and other surface waters (Wash Rev.Code § 90.22.030). Permit applications are also examined in the context of how withdrawals will affect new and existing uses within the watershed. For additional discussion on how Wisconsin’s


15 Wis. Admin. Code ch. NR 811, Subch. III.

16 Wis. Admin. Code ch. NR 811, Subch. IV.

17 Wis. Admin. Code § NR 811.02(21).

18 Id.

19 Wis. Admin. Code § NR 811.02(7).


23 42 U.S.C. § 300g-1. In addition, the 1996 Amendments to the Safe Drinking Water Act mandated the promulgation of drinking water standards and the study of health effects associated with sulfate, radium, radon, and low levels of arsenic. For a history of the Act and a discussion of the principal amendments, see 1996 U.S. Code Cong. and Adm. News at 1336.


27 Wis. Admin. Code § NR 140.10, Table 1 and Table 2.


30 Wis. Admin. Code § NR 140.28(2)-(4).

31 This includes cities, Wis. Stat. § 62.23(7) (c), towns, Wis. Stat. § 60.61 (2) (g), and counties, Wis. Stat. § 59.69(1). The Dane County Lakes and Watershed Commission also has express authority to include protection of groundwater recharge areas in its implementation plan, Wis. Stat. § 33.457(3)(cm).

32 Wellhead protection zoning is encouraged under the federal Safe Drinking Water Act, 42 U.S.C. § 300h-7.

34Wis. Admin. Code § NR 811.16(5).

35For a complete listing of these regulations, see, Wellhead Protection Program Plan, App. 6.

36Wellhead Protection Program Plan at 3.

37Wis. Stat. § 281.17(8),(9). See also, Wis. Admin. Code NR 809, Subch.VIII, which mandates "capacity evaluations" for new community water systems.

38The 1996 amendments to the Federal Safe Drinking Water Act also established the Drinking Water State Revolving Fund, the primary purpose of which is to provide financial assistance to communities upgrading drinking water system infrastructure. The terms of Wisconsin’s "Safe Drinking Water Loan Program", including project eligibility, ranking criteria and implementation requirements are set forth in Wis. Admin. Code ch. NR 166. See also, Wis. Admin. Code Ch. NR 114, Subch. III for new requirements relative to water system operator certification and Wis. Admin. Code Ch. NR 108 for water system monitoring and reporting requirements.


40For example, responses to groundwater contamination from agricultural practices regulated by the Department of Agriculture Trade and Consumer Protection (DATCP) are contained in Wis. Admin. Code ATCP 31. Regulations to control contamination from private septic systems are included in the revised private sewage system code, Wis. Admin. Code ch. COM 83.

41For example, wastewater and wastewater sludges can in some circumstances be disposed of by land application. Such discharges are considered discharges to groundwater subject to the water discharge permit program discussed in Chapter 8. See Wis. Admin. Code ch. NR 204. Among the most common liquid wastes applied to land are industrial sludges, food processing sludges and certain dairy product wastes such as whey which can serve as soil conditioners. Wis. Admin. Code §§ NR 214.02(1), NR 214.10. Other farm originated wastes including liquid manure are exempt. Wis. Admin. Code § NR 214.02(3).

Various restrictions apply to such discharges. The discharge of toxic or hazardous pollutants, or cleaning wastewaters is generally prohibited. Wis. Admin. Code § NR 214.04. The application of liquid wastes must conform to specified methods and avoid private or public wells and floodplains. Wis. Admin. Code § NR 214.05. Monitoring of the discharge and groundwater is also required. Wis. Admin. Code § NR 214.21. The groundwater standards Wis. Admin. Code § under NR 140 form the basis of permit limits rather than the categorical or water quality based limits.

Where liquid wastes are stored in lagoons, the lagoons must be designed to meet certain standards to assure groundwater protection. Wis. Admin. Code ch. NR 213. For example, under Wis. Admin. Code ch. NR 243, certain lagoons containing agricultural wastes are subject to regulation.

In addition to liquid wastes, other solid and hazardous wastes have the potential to contaminate groundwater. Wisconsin has a very detailed set of regulations which govern solid waste storage and disposal facilities. See, Wis. Stat. § 289.01, et seq., and Wis. Admin. Code chs. NR 500, et seq. and 600, et seq. A discussion of these provisions is beyond the scope of this volume. However, such facilities must be designed with sufficient liners and groundwater protection measures.
42 Underground injection usually entails the use of a well, drillhole or water system for the subsurface placement of water, waste or any other substance. See, Wis Admin. Code §§ NR 812.05, NR 214.04(3) and § NR 206.07(2)(d).


44 A design management zone is a three-dimensional zone extending from 0-300 feet from the edge of a waste source to a point within a property boundary. These distances are set in Wis. Admin. Code § NR 140.22 (3).

45 Wis. Admin. Code § NR 140.22(2).

46 Wis. Admin. Code § NR 140.22(1).

47 Wis. Admin. Code § NR 140.24(2).

48 Id.

49 Wis. Admin. Code § NR 140.26(2).

50 State v. Mauthe, 123 Wis. 2d 288, 366 N.W.2d 871 (1985).

51 Wis. Stat. § 292.11(3).

52 Wis. Stat. § 292.13(1).


54 Wis. Stat. § 281.75(7)(a). If the annual family income exceeds $45,000, the amount of the award is decreased by 30% of the amount which the claimants’ income exceeds $45,000. Wis. Stat. § 281.75(7)(b).

55 Wis. Stat. § 281.75(7)(c).

56 Wis. Stat. § 281.75(4m)(a). See also, note 50.

57 Wis. Stat. § 281.75(4).

58 Wis. Stat. § 281.75(5).

59 Wis. Stat. § 281.75(11).

60 Wis. Admin. Code ch. NR 123.
CHAPTER 10
Wetland Regulations

This chapter addresses the regulation of wetlands. Historically, wetlands were viewed as undesirable waste lands with an excess of water. As a result, many wetland areas were drained for agriculture or other purposes. By one account, over 40 percent of the original wetland acres in Wisconsin have been drained or filled.1

Today, however, wetlands are increasingly viewed as a valuable resource and subject to protection. Wetlands serve many functions including stormwater retention, pollutant filtration, shoreland protection, fish and wildlife habitat areas, and recreational areas. This chapter will briefly review the regulations designed to protect this resource.

Because the scope of these regulations affect the use of private property, not just the use of public water, wetland regulations have been challenged as a taking. For the most part, wetland regulations in Wisconsin have been upheld.2

Agencies Regulating Wetlands

Wetlands are subject to independent and intertwined regulations from federal, state and local governments. Federal permits are required from the U.S. Army COE for the filling of wetlands. Unlike other federal permit programs, states have generally not been delegated authority to administer the federal wetland program. Thus, COE, not the DNR, issues federal permits for filling wetlands. The use of agricultural wetlands may also affect the eligibility of farms to participate in certain federal programs, including commodity price supports, crop insurance, loan and grant programs.

Local regulation of wetlands primarily occurs through shoreland-wetland zoning provisions required by state law. Some local governments have enacted additional regulations under their general zoning authority.

State regulation of wetlands by the DNR occurs in two forms. First, the state has certain review authority over federal and local permits. Second, the state has established standards for wetland protection which apply to any state permit or approval where wetlands might be affected.
Wetland Definitions

Each regulatory program uses its own definition of wetlands. The federal definition of wetlands includes three elements – water, saturated soil and wetland vegetation:3

The term “wetlands” means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Specific techniques for identifying wetlands are set forth in the COE Wetlands Delineation Manual (1987).4

COE has jurisdiction to regulate wetlands which are considered “waters of the United States” under § 404 of the Clean Water Act. The definition of waters of the United States includes wetlands “adjacent” to navigable waters5 and artificially created wetlands.6 COE also asserted jurisdiction over isolated wetlands that could be used by migratory birds,7 but that rule was overturned by the U.S. Supreme Court.8

Wisconsin’s definition of wetlands is as follows:9

“Wetland” means an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions.

The DNR utilizes the “Basic Guide to Wisconsin’s Wetlands and Their Boundaries” for the delineation of wetlands, which is based on the 1987 COE manual.10 Nevertheless, the Wisconsin definition and Guide tend to be broader than the federal definition and manual.

Wisconsin has also initiated a wetland mapping program known as the Wisconsin Wetland Inventory. This program identifies wetlands from aerial photos and delineates the types of wetland found at each wetland site. These maps attempt to provide a comprehensive description of wetlands and serve as the delineation for wetlands subject to shoreland/wetland zoning.

However, the use of these maps for other purposes is subject to two limitations. First, they were originally designed to identify wetlands of five acres or more. Although DNR is now mapping wetlands of 2 acres or more, wetlands are subject to some form of state and federal regulation regardless of their size. Thus, wetlands are regulated even if they do not appear on the Wetland Inventory. Second, because the maps are made from aerial photos and are updated only periodically, the accuracy of the area delineated is limited.
Federal Regulation Under Section 404

Wetlands Regulated Under Section 404

Section 404 of the Clean Water Act requires a permit from COE for the discharge of dredge and fill materials into the waters of the United States. Discharges include any addition or redeposition of fill materials or dredge materials from mechanized land clearing, ditching, channelization and other excavation. Federal courts have expressly excluded the redeposit of material associated with certain dredging activities and described as “incidental fallback”.

A number of activities are exempt from permitting requirements under Section 404(f). These activities include certain farming activities, maintenance of dams and ponds, and similar functions. Application of these requirements to farming activities is discussed below.

Section 404 permits are issued by COE and are subject to EPA review. COE issues two basic types of permits – individual permits and general permits.

Individual Permits

For an individual permit, a person must submit a permit application which includes information required by COE. Upon receipt, COE reviews the application for completeness, issues a public notice and establishes a public comment period. During this time, a copy is sent to the DNR for water quality certification review. That process is described in the following section.

The District Engineer determines whether there should be a public hearing. After considering public comments and undertaking review of the application, the District Engineer issues a decision.

While permits are issued by COE, standards for granting an individual permit have been established by the EPA as well as COE. COE utilizes a public interest review which weighs the relative costs and benefits of a project. These criteria include concerns related to aesthetics, wetlands, historic values, fish and wildlife, flood hazards, navigation, shore erosion, recreation, water supply, water quality and other factors.

EPA criteria are also incorporated into COE regulations. First, the practicable alternatives criteria provides:

\[ N \text{ of discharge of dredged or fill material shall be permitted if there is a practical alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.} \]
For non-water-dependent projects, the regulations presume that practical non-water or non-wetland alternatives exist. Non-water-dependent projects are those which do not require a water or wetland site to fulfill their basic purpose.

Second, EPA prohibits any discharge which contributes to a “significant degradation of the waters of the United States.” In determining whether degradation occurs, EPA evaluates whether there are significant adverse impacts on aquatic life and wildlife, ecosystem stability and diversity, and recreation, aesthetic and economic values.

In some cases, COE will consider granting a permit if there is a mitigation plan which minimizes wetland losses and replaces wetlands that are taken by a project. Under a memorandum of agreement between EPA and COE, mitigation is only appropriate as part of a three step approach to development in wetlands: (1) potential impacts must be avoided to the maximum extent possible, (2) remaining unavoidable impacts must be reduced to the extent appropriate and practicable, and (3) compensatory mitigation (replacement) will be required for impacts that cannot be minimized.

**General Permits**

COE can also authorize certain discharges to wetlands under its general permit authority. General permits apply to specified activities which individually and cumulatively have insignificant impacts. There are two categories of general permits; general permits issued by a district or division engineer on a regional basis and nationwide permits (NWPs) issued by the Chief of Engineers through publication in the federal register applicable on a national basis.

For these activities, an abbreviated application and review process is provided. Instead of using the various criteria for individual permits, general permits are preapproved if the activity is one eligible for a general permit. However, for many activities, the applicant must still notify COE before initiating construction.

**Nationwide Permits**

As of 2000, COE recognizes 43 categories of activities eligible for coverage under the nationwide permit program. Twenty two of these activities require preconstruction notification to COE. For the 21 activities for which no notice is required, it may still be prudent to do so to assure that the proposed site and activity qualify for such authorization. Where notification is required, COE has 45 days to
evaluate the notification and determine whether an individual permit should be obtained.

Each of the nationwide permits has a limited scope. In addition there are 26 general conditions that apply to the use of these permits. Each of the nationwide permits has a limited scope. In addition there are 26 general conditions that apply to the use of these permits. Aside from these federal conditions, the project must also comply with state water quality certification conditions, discussed below.

**General Regional Permits**

General permits can also be issued by the COE district engineer on a regional basis. For the state of Wisconsin, permitting under § 404 of the Clean Water Act is handled through the St. Paul District COE office. Effective April 17, 2000, the St. Paul District office suspended all nationwide permits in Wisconsin and issued a general permit/letter of permission (GP/LOP) covering many of the same kinds of activities otherwise eligible for a nationwide permit. In many respects, the GP/LOP is a simplified version of the nationwide permits and as a practical matter will be the vehicle by which minor discharge activities will be permitted in the State of Wisconsin. The GP/LOP does not affect permits issued under Section 10 of the Rivers and Harbors Act or other regional general permits in Wisconsin.

The GP/LOP contains four categories of permitted activities. The first category, the “Non-Reporting GP,” allows individuals to undertake certain specified minor activities without notification to COE subject only to applicable state permit requirements, such as those under Wis. Stat. chs. 30 and 31. Activities eligible for authorization by the Non-Reporting GP include many of the nationwide permit categories that do not require a preconstruction notification.

The second category, known as the “Provisional GP,” covers certain specified activities and other discharges that impact not more than one-tenth of an acre. Activities covered under this provision include many of the activities authorized by nationwide permits for which a preconstruction notification is required. Thus, the activities are generally subject to approval upon application to COE and upon obtaining water quality certification from the DNR. COE review is limited to determining eligibility under the GP and conducting endangered species, cultural resources and trust responsibilities review.

The third category is the Provisional Letter of Permission or LOP. This applies to activities not otherwise authorized under GP/LOP up to two acres of total water and wetland impact and up to five acres for Wisconsin Department of Transportation projects. Application must be made to COE and must receive a water quality certification from the DNR. The COE review criteria under this category is more
comprehensive and includes interagency coordination, and review under the COE public interest guidelines. In addition, compensatory mitigation for impacts exceeding 10,000 square feet is required.

Finally, a Programmatic GP is available for activities that are otherwise regulated by the DNR under Wis. Stats. ch. 30 and 31. The COE conducts its review and confirms the availability of the GP to the applicant and DNR. The authorization is valid when DNR issues its permit.

**State Water Quality Certification of Section 404 Permits**

Although section 404 of the Clean Water Act authorizes COE to issue permits, state review is required before any 404 permit can be issued. Section 401 of the Clean Water Act requires that an applicant for a 404 permit obtain a certification from the state or a waiver of certification that the discharge will not violate state water quality standards. This requirement gives DNR a form of veto over federal 404 permits.

DNR has promulgated a series of water quality certification procedures in NR 299. NR 299 requires that the applicant submit an application for certification to DNR. The DNR has 120 days to make its certification determination. The DNR may deny, grant or conditionally grant certification, or it may waive certification. Any person affected by the decision may request a contested case hearing or judicial review. However, a request for a contested case hearing may be denied if an issue relating to water quality certification could have been addressed at an earlier proceeding to which the petitioner was a party.

The DNR determination to grant water quality certification depends on whether the discharge complies with water quality standards promulgated under Wis. Stat. chs. 281 and ch. 283 as well as public interest standards under ch. 30, 31, 88 and 281. For wetland areas, the applicant must meet the water quality standards in NR 103 discussed below.

Water quality certification applies to general permits as well as individual permits. Historically, the DNR operated under a Memorandum of Agreement with COE which established standard “regional conditions” for the NWPs. To the extent that NWPs are utilized in the future in Wisconsin, regional conditions would continue to attach.
Federal Regulation of Agricultural Practices in Wetlands

Special provisions apply to the regulation of wetlands affected by agricultural activities. Section 404 specifically exempts certain agricultural practices and provides nationwide permits for others. In addition, however, a separate law, the National Food Security Act contains wetland conservation provisions sometimes known as the “Swampbuster Act” which also impact agricultural activities in wetland areas. The interaction of these various provisions are noted below.

Section 404 Provisions

Section 404(f) of the Clean Water Act exempts discharges of dredge or fill material associated with certain agricultural activities including normal farming, ranching, and silvicultural activities. Normal farming activities include cultivating, harvesting, minor drainage, plowing and seeding but not land clearing activities.

In addition, to be eligible for the exemption, the activity must be part of an established on-going operation and must not convert the wetland area to dry land. At any point where these conditions are not satisfied, the wetland can be “recaptured” for purposes of COE jurisdiction under section 404. For example, if a farmer was using a field which contained a wetland area for normal farming activity, that activity would not require a section 404 permit provided that the wetland was not converted to dry land. However, if the farmer were to sell the property to a developer who fills the wetland area, the wetland would be recaptured and any fill activities would require a 404 permit.

In addition to the exemption provided under Section 404(f), there are several nationwide permits which allow the filling of wetland areas for activities relating to farming such as the erection of farm buildings, cranberry production, and certain road crossings.

Swampbuster Provisions

Swampbuster provides that federal price supports, crop insurance, loans and other federal payments will not be provided for any commodity produced on a “converted wetland” and that any person who converts a wetland after November 28, 1990, will be ineligible for such assistance for that and all subsequent crop years.

For purposes of this provision, a converted wetland means a wetland that has been drained, dredged, filled, leveled or otherwise...
manipulated to make the production of an agricultural commodity possible. Wetlands converted prior to December 23, 1985, are exempt from this provision.

To provide consistency between this program and section 404, COE has now excluded prior converted crop land from the definition of waters of the United States subject to COE jurisdiction. To maintain prior converted crop land status, however, the area must be inundated by water for no more than 14 consecutive days during the growing season and must not include a pothole or playa wetlands.

The Swampbuster provisions restrict agricultural activities beyond the requirements of section 404 in several significant respects. First, while section 404 is limited to discharges of dredge or fill materials, the Swampbuster provisions apply to any activity that can convert a wetland, including draining or other manipulation which impairs or reduces the flow, circulation or reach of water to the wetland. Second, while section 404 allows the permanent conversion of wetland if a permit is obtained, under Swampbuster, penalties may apply even if a permit is obtained. However, recent amendments to the Swampbuster provisions allow penalties to be waived when a landowner can demonstrate efforts to mitigate for lost wetland values and functions.

Swampbuster does, however, allow farming in a wetland area if the wetland area became available as the result of a natural condition such as drought or if it could be farmed without action by the producer that destroyed a natural wetland characteristic.

The 1996 Farm Bill provided farmers with some additional flexibility in terms of meeting the requirements of the Swampbuster provisions. For example, the amendments give a landowner the option of restoring, enhancing or creating a new wetland in exchange for the use of an existing or converted wetland for agricultural purposes. This option is available provided that mitigation is done in accordance with a conservation plan and wetland functions and values are maintained in the restored, created or enhanced wetland.

Local Regulation – Shoreland/Wetland Zoning

Scope of Shoreland/Wetland Zoning

Shoreland/wetland zoning is a state mandated requirement for local zoning according to standards promulgated by DNR. These requirements apply to counties, villages, and cities, but may also be adopted by towns. It is important to note that this program is wholly independent of and in addition to the federal 404 program.
Not all wetlands are regulated. To be regulated under the program wetlands must meet the following criteria:

- The wetland must be shown on the Wisconsin Wetland Inventory map (usually limited to wetlands of five acres or more).48
- The wetland must be located within shorelands. Shorelands are defined as lands within 1,000 feet of a navigable lake, pond, or flowage; or lands within 300 feet of a navigable river or stream or to the landward side of the floodplain (i.e., lands within the floodplain), whichever distance is greater. These distances are measured from the OHWM of the waterbody.49

### Implementation of Shoreland/Wetland Zoning Ordinances

The local unit of government has six months to zone all shoreland/wetland areas designated on the Wisconsin wetland inventory maps after the map has been approved by DNR and issued to the local unit. Adoption of these zoning maps and ordinances requires a public hearing in accordance with the normal local zoning procedures.

The shoreland/wetland district is usually an overlay onto existing zoning classifications and supersedes any other less restrictive zoning requirement. In some cases the shoreland/wetland district is zoned as wetland conservancy. Permitted uses in such zones are limited to the following 12 categories:

- Hiking, fishing, trapping, hunting, swimming, and boating;
- Harvesting of wild crops;
- Silviculture;
- Pasturing of livestock;
- Cultivation of agricultural crops;
- Construction and maintenance of duck blinds;
- Construction and maintenance of certain non-residential buildings;
- Construction and maintenance of piers, docks, walkways provided that no filling, flooding, dredging, draining, ditching or excavating is done;
- Establishment and development of public and private parks, recreational areas and boat access sites;
- Construction of electric, gas or other utility lines;
- Construction and maintenance of railroad lines;
- Maintenance and repair of existing town and county highways and bridges.50
All uses not permitted are prohibited. Similar limitations apply to shoreland wetlands in cities and villages, although they are somewhat less stringent.51

Local governments must follow these minimum standards but may enact more stringent standards.52 Therefore, whenever a shoreland/wetland zoning question is presented the specific local zoning ordinance should be reviewed.

Shoreland/wetland areas can be rezoned to allow otherwise prohibited uses by amendment of the shoreland/wetland map. Rezoning is prohibited if it results in a significant adverse impact on:

- Storm and flood water storage capacity;
- Maintenance and dry season stream flow, discharge of groundwater to wetland;
- Filtering or storage of sediments, nutrients or contaminants;
- Shoreline protection against soil erosion;
- Fish spawning, breeding, nursery or feeding grounds;
- Wildlife habitat;
- Areas of special recreational, scenic or scientific interest.

Local governments may also reject a request for rezoning on public interest grounds.53

Any amendment must go through a zoning amendment procedure including notice, public hearing and development of written findings in support of the need for a zoning change in accordance with the rezoning criteria noted above. During this process, any such zoning proposal must be reviewed by the DNR for consistency with the standards of NR 115 or NR 117.

**DNR Review and Approval**

If a local government does not have an ordinance that complies with the DNR regulations, the DNR may adopt such an ordinance for the local government to administer. All counties and many cities and villages have shoreland/wetland zoning ordinances in place. Where the DNR has adopted an ordinance for a local unit of government, it may initiate enforcement proceedings for ordinance violations.54

The DNR retains jurisdiction to review any amendment to the zoning ordinance and commence action to remedy any non-complying amendments. In addition, the DNR has the authority to review decisions granting special exceptions, conditional uses and variances to the ordinance and may appeal local zoning decisions.
State Wetland Regulations

DNR General Wetlands Policy

DNR policy on wetlands set forth in NR 1.95 was originally adopted in 1978. While it has been largely superseded by NR 103 discussed below, it still reflects DNR policy.55

The stated wetland policy is that “wetlands shall be preserved, protected and managed to maintain, enhance or restore their values in the human environment.”56 This policy is based on Natural Resource Board findings which identify wetland values and tie wetland preservation to the trust doctrine. NR 1.95(3)(a) provides in part:

The state’s policy as articulated in its trusteeship of navigable waters and the statutes enacted to further the protection and enhancement of the quality of its waters, creates a presumption against activities which adversely affect those wetlands under department jurisdiction or control.

To implement this policy, the DNR is directed to give primary consideration to reasonable alternatives that avoid adverse wetland impacts. When all alternatives affect wetlands, the project shall be conducted in a manner which minimizes the loss of wetlands and results in the least overall adverse environmental effects. When wetlands are affected, the applicant must demonstrate that the project needs to be in a wetland and is technically, economically and environmentally feasible.57

In applying this policy to regulatory programs, the DNR must consider potential irreversible wetland impacts, impacts on scarce natural resources, other uses of wetlands in this area, cumulative impacts of piecemeal alterations and other factors.58

NR 1.95 is a policy statement and does not confer independent regulatory authority. Until NR 103 was promulgated, it served as guidance for implementing existing regulatory programs such as the public interest test under Wis. Stat. ch. 30. Prior to NR 103, regulatory standards for wetlands existed only for programs such as mining.59

NR 103 – Water Quality Standards for Wetlands

In 1991, DNR promulgated NR 103 which established water quality standards for wetlands. Amendments followed in 1998. NR 103 is applicable to all DNR regulatory, planning, management, liaison and financial aid determinations which affect wetlands. This includes permits under Wis. Stat. chs. 30, 31, 281, 283, and water quality certification of federal permits such as § 404 permits. Absent some
existing DNR regulatory, planning, management or financial activity
NR 103 does not apply.

While NR 103 is applied to water quality certification of § 404 permits,
state regulation under NR 103 is independent of and in addition to
the § 404 program. For example, there may be situations where a DNR
regulatory approval is not required, but a federal § 404 permit is
required. In such a case the water quality certification process is
sufficient to subject the project to NR 103 standards. Conversely, there
may be situations where a COE permit is not required but a state permit
such as a Chapter 30 permit is required. Again NR 103 review can be
triggered if a wetland is impacted by the activity.

Projects that affect certain artificial wetlands such as stormwater
detention basins, sewage lagoons and fish rearing ponds are generally
exempt from the provisions of this rule unless the DNR notifies the
applicant that significant wetland values are likely to be affected
under the proposal.

The NR 103 decision process involves several key steps. The first
step in the decision process is to determine whether the project is
“water dependent.” Like the federal definition, a water dependent
project is one where the “activity is of a nature that requires location
in or adjacent to surface waters or wetlands to fulfill its basic purpose.”
A marina is water dependent. A shopping center or landfill is not.

If a project is considered water dependent, then the impacts of the
project on the wetlands must be assessed. If it is not considered water
dependent, then the applicant must first consider whether there are
practicable alternatives to the project before assessing impacts.

The practicable alternatives analysis requires the applicant to
demonstrate that there are no practicable alternatives to the project.
A practicable alternative means, “available and capable of being
implemented after taking into consideration cost, available technology
and logistics in light of overall project purposes.” This is a very
difficult and subjective process. If there is a practicable alternative,
NR 103 standards are not met.

The final test is to assess whether there are significant adverse impacts
from the project on wetland functional values. This test applies to a
water dependent project or a non-water dependent project for which
there are no practicable alternatives.

Wetland functional values are broadly defined and include: stormwater
storage, pollutant filtration, shoreline protection, habitat for aquatic
organisms, habitat for wildlife and recreational, cultural, scientific
and aesthetic values. To determine what these values are, a wetland
assessment is required. It is important to note that these functional values can be impacted by a variety of activities, not just fill. For example, de-watering an aquifer which dries up a wetland could have an impact on the wetland functional values.

If the DNR finds that the proposed activity is not wetland dependent, the surface area affected will exceed 0.10 acres, and that a practicable alternative exists which will not result in significant adverse environmental impacts, the standards of NR 103 will not be met. For projects less than 0.10 acres, the DNR will make a finding that the standards are not met only if a significant adverse impact will occur.\textsuperscript{65} Special provisions apply to cranberry operations.\textsuperscript{66}

**Wetlands Mitigation**

The purpose of a wetland mitigation project is to compensate for lost or adversely affected wetlands through the restoration, creation or enhancement of wetlands in other areas. The 1999 legislative session passed a wetlands mitigation package that permits the department to consider mitigation projects as part of an application to meet state wetland water quality standards.\textsuperscript{67} The applicant is still required to satisfy the criteria of NR 103 in terms of demonstrating effort to avoid and reduce impacts on the wetland. An expedited process is required for activities affecting wetlands less than one acre in size with negligible functional values.\textsuperscript{68} Mitigation projects may not be considered for proposals that would negatively impact wetlands in areas of special natural resource interest.
Chapter 10 Notes


2 See discussion in Chapter 3 at notes 4 and 5.

3 33 C.F.R. § 328.3(b). An identical definition is used by EPA at 40 C.F.R. § 230.3(5).

4 The federal wetland delineation manual has been the subject of considerable controversy. The 1987 manual was replaced by a joint publication of COE, EPA, the U.S. Fish and Wildlife Service, and the Soil Conservation Service known as the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989). In 1991, a proposed revision to that manual was prepared. It received over 60,000 comments and was ultimately withdrawn. In the controversy which ensued, Congress directed that COE not use the 1989 manual in the Energy and Water Development Appropriations Act of 1992, Pub. L. 102-580. As a result, COE and EPA returned to using the 1987 manual. See, 58 Fed. Reg. 45032.


6 *Swanson v. United States*, 789 F.2d 1368 (9th Cir. 1986).

7 *Hoffman Homes, Inc. v. Administrator, USEPA*, 999 F.2d 256 (7th Cir. 1993); *State of Utah v. Marsh*, 740 F.2d 799 (10th Cir. 1984); 33 C.F.R. § 328.3; 51 Fed. Reg. 41217 (Nov. 13, 1986), the so-called migratory bird rule.

8 *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, Case No. 99-1178, (Jan. 9, 2001). As of the date of publication, COE has not reacted to this ruling but further COE definition of the terms “isolated” and “adjacent” is anticipated since the Supreme Court reaffirmed that adjacent wetlands are still within COE jurisdiction.

9 Wis. Stat. § 23.32(1). Similar definitions are found in Wis. Admin. Code §§ NR 1.95(4)(c), NR 115.05(13), NR 117.05(12) and NR 103.03.

10 Wisconsin Dept. of Administration PUBL-WZ-029-94. This manual is specifically required for use in Wis. Adm. Code § NR 103.08(1m).


12 33 C.F.R. § 323.2(d) as amended at 64 Fed. Reg. 25,117 (1999). See also, *National Mining Ass’n v. Corps of Engineers*, 145 F.3d 1399 (D.C. Cir. 1998) which effectively invalidated the “Tulloch Rule”. The court acknowledged the validity of continuing to regulate some redeposit of dredged material, but declined to grant the Corps indiscriminate jurisdiction over “any redeposit.” Thus, generally, the dredging of material from a wetland does not require a permit if the dredged material is deposited in an upland area.

13 33 U.S.C. § 1344(f)(1); 33 C.F.R. § 323.4.

14 The COE issues approximately 5,000 individual permits per year and authorizes approximately 80,000 activities under its general permit authority. Of the general permit authorizations, approximately 40,000 are under the regional general permit
program and 40,000 under the nationwide permit program.

1533 C.F.R. § 325.1(c) and (d).
1633 C.F.R. § 325.2(a)(1)-(2).
1733 C.F.R. § 325.2(a)(3)-(6).
1840 C.F.R. § 230.10 and 33 C.F.R. § 320.4.
1933 C.F.R. § 320.4(a).
2040 C.F.R. § 230.10(a).
2140 C.F.R. § 230.10(c).
2233 C.F.R. § 320.4(r).
2433 C.F.R. § 320.1(c).
25Id.
26These activities include:

1 Aids to Navigation
2 Structures in Artificial Canals
3 Maintenance
4 Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities
5 Scientific Measurement Devices
6 Survey Activities
7 Outfall Structures and Maintenance
8 Oil and Gas Structures
9 Structures in Fleeting and Anchorage Areas
10 Mooring Buoys
11 Temporary Recreational Structures
12 Utility Line Activities
13 Bank Stabilization
14 Linear Transportation Crossings
15 U.S. Coast Guard Approved Bridges
16 Return Water From Upland Contained Disposal Areas
17 Hydropower Projects
18 Minor Discharges
19 Minor Dredging
20 Oil Spill Cleanup
21 Surface Mining Activities
22 Removal of Vessels
23 Approved Categorical Exclusions
24 State Administered Section 404 Programs
Structural Discharge
Stream and Wetland Restoration Activities
Modifications of Existing Marinas
Single-Family Housing
Moist Soil Management for Wildlife
Maintenance of Existing Flood control Projects
Completed Enforcement Actions
Temporary Construction and Access
Cranberry Production Activities
Maintenance Dredging of Existing Basins
Boat Ramps
Emergency Watershed Protection
Cleanup of Hazardous and Toxic Waste
Residential, Commercial and Institutional Developments
Agricultural Activities
Reshaping Existing Draining Ditches
Recreational Facilities
Storm Water Management Facilities
Mining Activities


NWP 26 which had been controversial because of its broad scope and application was eliminated and replaced by the addition of the more activity specific NWP 39 and 41-44.

These conditions as amended are printed in full at 65 Fed. Reg. 12886.

See, St. Paul District U.S. Army Corps of Engineers Permit No. GP/LOP-98-WI. A similar permit was issued for activities within Minnesota and within Indian reservations within the states of Wisconsin and Minnesota.

The activities covered include the following:
1. Maintenance Activities;
2. Fish and wildlife harvesting enhancement and attraction devices and activities;
3. Scientific measurement devices;
4. Survey activities;
5. Outfall structures;
6. Oil/hazardous substances containment/Clean-up;
7. Removal of vessels;
8. Stream and wetland restoration activities;
9. Moist soil management for wildlife;
10. Emergency watershed protection/rehabilitation;
11. Bank stabilization; and

Activities eligible for authorization by the provisional GP include many of the following actions:
1 Activities excluded from authorization by the non-reporting GP because they are in a coastal wetland area;
2 U.S. Coast Guard approved state or federally funded bridges;
3 Return water from upland contained disposal areas;
4 Hydro-power projects;
5 Clean-up of hazardous and toxic waste;
6 Completed enforcement actions;
7 Temporary construction, access and de-watering;
8 Structural discharges;
9 Utility line discharges;
10 Commercial, residential, industrial and agricultural and public development, including roads; and
11 Less than one-tenth of an acre.

31 Wis. Admin. Code § NR 299.03.
32 Wis. Admin. Code § NR 299.05.
33 Wis. Admin. Code § NR 299.05(6), (7).
34 Wis. Admin. Code § NR 299.05(6).
36 See, “Interagency Coordination Procedures, Corps. of Engineers and Wisconsin Department of Natural Resources,” effective February 13, 1992.
38 33 C.F.R. § 323.4.
39 Id.
43 33 C.F.R. § 328.3.
44 Id.
47 See, Wis. Stat. § 59.692 (counties), Wis. Stat. § 61.351 (villages), and Wis. Stat. § 62.231 (cities). Wis. Stat. § 60.627, authorizes but does not require towns to enact such ordinances, if they have ordinance authority.
48 The mandate to cities and villages is expressly limited to wetlands of five acres or more. Wis. Stat. §§ 61. 351(3), 62.231(3). The mandate to counties is not specified by statute, but is tied to the Wetland Inventory by rule, Wis. Admin. Code § NR 115.05(2). Thus, if the Wetland Inventory shows wetlands less than five acres,
arguably, the county’s obligation extends to those wetland areas.

49 Wis. Stats. §§ 281.31(2)(f) and 59.692(1).

50 Wis. Admin. Code § NR 115.05(2)(c).

51 See, Wis. Admin. Code § NR 117.05(2).

52 The exception is that counties cannot refuse to allow the list of uses permitted in Wis. Admin. Code NR 115.

53 See, Wis. Admin. Code § NR 115.05(2)(e); Wis. Admin. Code § NR 117.05(4).

54 Wis. Stat. § 87.30.

55 See, Wis. Admin. Code § NR 103.05(2).

56 Wis. Admin. Code § NR 1.95(4).

57 Wis. Admin. Code § NR 1.95(5).

58 Wis. Admin. Code § NR 1.95(6).


60 Wis. Admin. Code § NR 103.06(4).

61 Wis. Admin. Code § NR 103.08. Because the requirements under NR 103 parallel many of the requirements for granting a § 404 permit, case law interpreting § 404 can be instructive even though it is not binding in resolving NR 103 issues.

62 Wis. Admin. Code § NR 103.07 (3).

63 However, the availability of alternatives has been considered by DNR in the impact assessment process for water dependent projects as well.

64 Wis. Admin. Code § NR 103.07 (2).

65 Wis. Adm. Code § NR 103.08(4).

66 Wis. Admin. Code § NR 103.08(4). Recent amendments to ch. NR 103 have created a separate process for cranberry projects. A finding of significant adverse impact precedes a determination of practicable alternatives that may minimize system impacts. For existing cranberry operations, the analysis of alternatives must be confined to areas within the boundaries of the property or adjacent to the property.

67 Wis. Stat. § 23.321, as created by 1999 Wis. Act 147. The DNR will promulgate rules that will set forth the conditions for the use of wetland mitigation bank credits, requirements for baseline studies, project design standards and enforcement criteria, as Wis. Admin. Code ch. NR 350.
CHAPTER 11

Remedies

This chapter addresses the various rights and remedies that individuals have to enforce or utilize their water rights. In particular, this chapter discusses three types of proceedings: lawsuits by one individual against another to enforce common law rights, participation in administrative proceedings to obtain or object to agency permits, and actions designed to precipitate enforcement proceedings by the state against individuals.

These remedies seek to enforce rights under existing rules. An individual always retains the right to seek a lawful change of the rules or to legally challenge the existing rules. Statutes can be changed by legislative action and agency rules can be changed by petitioning the agency for a rule change. Statutes can be challenged in court through declaratory judgment actions if they violate constitutional provisions such as the public trust doctrine. Rules can also be challenged if they violate the Constitution, exceed the agency’s authority or violate procedural requirements.

Remedies Available Through Private Lawsuits

Where the actions of another damage or interfere with a person’s water rights, private lawsuits can provide a remedy. Remedies include monetary compensation or court orders to prevent or enjoin harmful conduct. All lawsuits must be brought within a certain time from the alleged wrong. These time periods, known as statutes of limitations, are established by state statute.

Property Right Actions

Earlier sections of this volume have enumerated various individual rights with respect to water use. In some cases those rights may be reflected in a deed. In other cases the extent of title depends on common law doctrines such as accretion and reliction, discussed in Chapter 2, or prescriptive easements discussed in Chapter 6. Disputes over the extent of property rights can be resolved by a quiet title action, also known as a declaration of title action.

When there is a contractual document governing water rights, an action can be brought to enforce those rights. Contract actions must establish the existence of a valid contract, a breach of the terms of that contract and damages. A party may affirm the contract and seek damages, rescind the contract and seek restitution, or seek to reform
the contract or deed to reflect the intent of the parties.\textsuperscript{7}

An action can also be brought to have the DNR issue a determination of whether certain structures interfere with riparian rights.\textsuperscript{8}

Property right actions can also be brought against state or local governments subject to applicable notice of claim statutes.\textsuperscript{9} If government action has resulted in a physical taking of property, an inverse condemnation action can be filed.\textsuperscript{10} Regulatory actions that restrict property can be brought as takings cases, although with less success.\textsuperscript{11}

### Common Law Tort Actions

In many cases, water rights have not been reduced to contract. In those cases, basic common law principles governing water usage would apply. Where a person is being deprived of a reasonable use of the water or where another person’s use is causing unreasonable impacts, a lawsuit can be initiated on various tort theories of law.\textsuperscript{12}

A tort action is a lawsuit brought by a private party who has been injured (the plaintiff) against the person causing the injury (the defendant). The action can seek to recover money for the damages inflicted or it can seek to have wrongful conduct stopped or enjoined.

There are several types of tort actions. Each type of action requires the proof of different factual elements. The most common tort theories applicable in water law cases are: nuisance, trespass and misrepresentation.

A nuisance action arises when there is an unreasonable interference with another person’s use or enjoyment of his property.\textsuperscript{13} Nuisances can be considered public or private. A defendant is liable in a nuisance action only if the conduct is considered unreasonable. The concept of reasonableness involves balancing the utility of the defendant’s conduct against the harm to the plaintiff.\textsuperscript{14} Nuisance actions have been brought to remedy surface water and groundwater pollution,\textsuperscript{15} obstructions to navigation,\textsuperscript{16} surface water runoff\textsuperscript{17} and other nuisance activities. An activity may create a private nuisance even though it is not illegal.\textsuperscript{18} However, many violations of the law, including violations of Wis. Stat. ch. 30 are declared nuisances.\textsuperscript{19}

A trespass action is an intentional or negligent entry upon another person’s land without permission.\textsuperscript{20} While one normally thinks of trespass in the context of a person physically entering onto another’s property, such as walking on riparian land, it can also be a trespass to cause or allow surface water to cross the boundary of the premises.\textsuperscript{21} Similarly, the movement of contaminated groundwater onto a neighboring property may constitute a trespass.\textsuperscript{22}
A misrepresentation action arises when a person misrepresents a fact upon which another reasonably relies to his or her detriment. This situation can arise where a party failed to adequately disclose the presence of contamination at the time the property was purchased, or the status of riparian rights, or the existence of a floodplain.[23] Current residential offer-to-purchase forms require that a list of representations be made including representations concerning the presence of floodplains, the existence of on-site contamination and the adequacy of wells.[24]

There are three classes of misrepresentation in Wisconsin — intentional, strict, and negligent misrepresentation.[25] Common elements in all three classes are: the representation must be of a fact and made by the defendant, the representation must be untrue, and the plaintiff must believe such representation to be true and rely on it to his damage.

When tort actions are brought against the state or local governments, plaintiffs must comply with applicable notice of claim statutes, and government immunity issues.[26]

**Tort Law Remedies**

Persons bringing a tort action can seek to recover money for damages caused or may seek to enjoin offending conduct. Two types of monetary awards may be obtained; compensatory damages and punitive damages. Compensatory damages are monetary compensation for the harm suffered.[27] Damages for injury to property may include the cost to repair or replace the property or the diminished value of the property.[28]

Punitive damages can be awarded where the conduct of the defendant is intentional, malicious or otherwise outrageous.[29] Punitive damages are intended to punish the wrongdoer for his conduct and to deter others from similar conduct.[30]

Injunctive relief is a court order directing the defendant to stop or “abate” the offending conduct. An injunction is a means of preventing continued or repeated harmful conduct.[31] An injunction may be an appropriate remedy in the case of a continuing nuisance or where the harm caused by a nuisance cannot be adequately compensated by damages.[32]
Remedies Available Through Participation in Permit Proceedings

Many water related activities require the issuance of permits from the Wisconsin DNR or other agencies. The issuance of permits from state agencies is subject to statutory procedures which provide due process to the permit applicant as well as an opportunity for the public to comment on the proposed permit.

The exact procedures may vary depending on the type of permit issued. However, unless the permit is for a minor activity, a permit is not usually issued until there has been a public notice of the permit. There are three ways in which members of the public may participate in the permit process: a public hearing, a contested case hearing, and judicial review.

The issuance of permits from local governments is subject to similar opportunities for participation. These procedures are discussed at the end of this section.

Public Hearings

In some cases, the DNR automatically holds a public hearing before issuing a permit. More commonly however a public hearing must be requested within a certain time period following the public notice, usually 30 days.

A public hearing is a forum where interested members of the public can state their views with respect to the proposed permit. The DNR usually appoints a hearing officer to conduct the hearing but the hearing is not a formal legal proceeding. At a public hearing there is no cross examination, the rules of evidence do not apply, there is no formal record and there are no pre-hearing procedures.

Contested Case Hearing

A contested case hearing is a formal legal proceeding. It involves a full evidentiary hearing much like a trial. Although the procedures for conducting contested case hearings in Wisconsin are generally set forth by statute, some agencies have created additional procedures by rule.

Contested case hearings on DNR permits are conducted by an administrative law judge (ALJ) from the Division of Hearings and Appeals at the Department of Administration. The decision is based on the testimony and exhibits that comprise the formal hearing record.
Like a trial judge, an ALJ may issue subpoenas and hold pre-hearing conferences, and the parties are entitled to pre-hearing discovery. While an ALJ is not strictly bound by the rules of evidence, general evidentiary rules are commonly applied. The agency can direct that the hearing examiner’s decision be the final decision of the agency or that the record be certified back to the agency for the final decision.

In Wisconsin, the availability of a contested case hearing may be defined or restricted by statute. For example, a right to a contested case hearing is provided to applicants and the public for water discharge permits. In addition, the holder of a license has a right to a contested case hearing where an agency action concerns the grant, denial or renewal of the license.

Where a statute does not specifically provide a right to a contested case, a person may petition the agency to have a matter heard as a contested case under the general contested case hearing provision of Wis. Stat. § 227.42. A person can obtain such a hearing if he or she can meet the following basic requirements sometimes referred to as standing requirements:

- A substantial interest of the person is injured in fact or threatened with injury by agency action or inaction;
- There is no evidence of legislative intent that the interest is not to be protected;
- The injury to the person requesting a hearing is different in kind or degree from the injury to the general public caused by the agency action or inaction; and
- There is a dispute of material fact.

Judicial Review

All final agency decisions are subject to judicial review under the procedures in Wis. Stat. ch. 227. Judicial review of agency decisions can be commenced by filing a petition within 30 days after the issuance of a decision (unless a party has requested a rehearing).

To be entitled to petition for judicial review, a person must meet a two-part standing test: the decision must cause the petitioner an injury; and the interest alleged must be protected by law. Although standing has been liberally construed in Wisconsin, petitioners must show that the injury be direct and substantial, and that the interest being asserted was intended to be protected by the law.

While the procedures in civil actions are generally applicable in ch. 227 reviews, judicial review is a review of the existing administrative
hearing record. Except in unusual circumstances, the court does not take any new or additional evidence.47

The burden of proof in a judicial review proceeding is on the party challenging the agency action. By statutory directive, courts are to defer to the agency decision in several respects. First, a court must defer to an agency’s findings of fact if supported by substantial evidence in the record.48 Substantial evidence is not a preponderance of evidence, but only enough evidence so that a reasonable person could have reached the conclusion the agency reached.49 Second, while not strictly bound to an agency’s interpretations of law, a court will give an agency interpretation “great weight,” particularly if it has been longstanding and without challenge, or where the agency has specialized knowledge and expertise.50

The deference given to an agency decision means that every effort should be made to make your points known at the agency level. If you are unsuccessful in convincing the agency, you must at least develop your argument before the agency so it becomes part of the agency record on review.

The decision of the court is appealable as a matter of right to the Wisconsin Court of Appeals,51 and is appealable to the Wisconsin Supreme Court at the discretion of the Court.

Local Proceedings

For some activities such as development in shorelands, floodplains and wetlands, local zoning approvals must be obtained. In other cases, there may be local zoning restrictions which regulate activities in public waters such as local boating restrictions or local pierhead lines. While the specific procedures related to local zoning matters may vary from one community to another, most local governments use similar procedures set forth by statute.52

To understand the type of rights individuals have to participate in local zoning procedures it is important to understand both the type of local approval required and the body responsible for granting that approval. Basically, there are two levels of local zoning authority and a right of judicial review.

The first level of local zoning authority is the planning and zoning committee or planning commission.53 The planning and zoning authority has primary authority for adopting zoning ordinances and in the case of cities, adopting official city maps. Typically, the procedure for adopting a zoning ordinance begins with a recommendation from
the planning and zoning authority followed by a public hearing. Ultimately, because zoning ordinances are legislative acts, the official governing body such as the county board or city council must approve of a zoning ordinance.54

Aside from playing a key role in the adoption of ordinances, the planning and zoning authority grants routine zoning approvals as well as conditional use permits sometimes referred to as special exceptions. In addition, a zoning administrator or building inspector may report to the planning and zoning authority for purposes of the administration and enforcement of zoning ordinances.

The second level of local zoning authority is known either as a Board of Adjustment on the county level or a Board of Appeals on the city and village level.55 Boards of Adjustment or Appeals have three primary roles. First, like planning and zoning authorities, they may be granted the authority to issue conditional use permits. Second, Boards of Adjustment or Appeals can grant variances. Finally, Boards of Adjustment or Appeals can hear appeals of decisions, orders or requirements of the zoning administrator, building inspector or planning and zoning authority.

In the case of appeals to a Board of Adjustment or Appeals, persons may be represented by counsel and review is on the record and subject to basic due process requirements. However, as a practical matter, these hearings tend to be somewhat less formal than contested case hearings conducted by the state.

Appeals to the Board of Adjustment or Appeals may be taken by any person that is considered “aggrieved” by a determination of a building inspector or administrative officer. This standing requirement has been broadly construed to afford anyone that is potentially affected by a decision the right to appeal.56

Final decisions of the Board of Adjustment or Appeals may be appealed by a common law procedure known as a writ of certiorari to the circuit court.57 Certiorari is a form of judicial review of the agency’s determination and functions much like judicial review under Wis. Stat. ch. 227.58 Any person that is aggrieved by a decision of the Board of Adjustment or Appeals may seek remedy by certiorari.

Until a person has availed themselves of review by the Board of Adjustment or Appeals, most courts will not permit judicial review by writ of certiorari on the theory that the aggrieved person has not “exhausted their administrative remedies.”59 Nevertheless, there are cases where courts have held that the Board of Adjustment or Appeals does not have jurisdiction to review a determination of the
Plan Commission and in such cases a writ of certiorari may be filed without going to the Board of Adjustment or Appeals.\(^{60}\)

In addition to specific rights to a hearing provided elsewhere, Wis. Stat. ch. 68 also provides for a right to a full adjudicatory case hearing for certain designated types of decisions. Although subject to numerous limitations,\(^{51}\) such a hearing may be granted for a denial, suspension or revocation of a permit or license, the denial of grants of money and the imposition of penalties.\(^{62}\) Final decisions are also subject to judicial review.\(^{63}\)

**Enforcement Proceedings**

Where there is a violation of federal law, the federal Clean Water Act provides the right to file a citizen suit.\(^{54}\) A citizen suit is available where there is an ongoing federal law violation, no enforcement action has been commenced by the state or EPA and the citizen has provided a notice 60 days prior to filing suit.\(^{65}\) A court can impose penalties for any violation and can award attorneys’ fees to a citizen who prevails in the action.

Where an individual is in violation of a state law, permit or order of the DNR, the State of Wisconsin may initiate an enforcement proceeding. There are two ways in which private individuals may help initiate such proceedings.

First, an individual who observes a violation or has knowledge that it may occur may report the violation to the DNR. The DNR maintains district and area offices throughout the state which serve as the first line for enforcement activities. Any reports of violations should be made to the district office in which the activity is occurring. A listing of DNR district service centers and phone numbers is contained in Appendix A.

The second way that private citizens may be involved in enforcement proceedings is through the filing of a six-citizen complaint. Six or more citizens may file a verified complaint with the DNR relating to alleged or potential “environmental pollution.”\(^{66}\) Once the DNR receives such a complaint, it must serve a copy on the alleged violator who then has an opportunity to file an answer with the DNR. A contested case hearing is then held on the complaint.

After the contested case hearing, the DNR files findings of fact, conclusions of law and an order directing that action be taken to correct the violation or dismissing the complaint. If the DNR finds the complaint was filed maliciously or in bad faith the alleged violator is entitled to recover the expenses of the hearing in a civil action.
If the DNR begins an enforcement process either on its own motion or as a result of a request by others it can follow one of two procedures. For certain water related violations, the DNR has the authority to issue citations. This authority applies to violations of Wis. Stat. chs. 26-31. These citations are issued by DNR wardens in accordance with abbreviated procedures which include the imposition of minor forfeitures, orders for restoration of environmental damage, arrest without warrant, searches and questioning without warrants and expedited court proceedings. In addition, Wis. Stat. § 29.601 makes any discharges of pollutants or other material into waters of the state subject to this process.

The more common procedure is followed by what is known as a stepped enforcement process. That process involves a sequence of escalating steps to obtain compliance. Typically it begins with a letter notice stating the nature of the violation and the need for compliance. The DNR may then proceed to issue an administrative order and if necessary may refer the matter for judicial action.

If the matter is referred to for judicial action, the judicial proceedings become the responsibility of the Wisconsin Department of Justice (DOJ) which can initiate either civil or criminal proceedings for violations of environmental laws.

In both civil and criminal judicial proceedings, the State may seek injunctive relief to stop the conduct causing the violation and or to remediate the damage that has been caused. In addition, the State may seek civil or criminal fines or forfeitures. The range of forfeitures is established by statute and the court has discretion to set a forfeiture that is proportionate to the offense within that range.

Civil forfeitures for violations of either water discharge permits under Chapter 281 or water permits under Chapter 30 may not be less than $10 nor more than $10,000 for each violation. Each day of a continued violation is considered a separate offense.

Criminal fines and forfeitures are also available for wilful or negligent violations of water discharge permits. A first time violator may be convicted of a misdemeanor involving a fine up to $25,000 and six months in jail. A repeat violator may be subject to a $50,000 fine and up to one year in jail. Criminal forfeitures are also available for other selected permit violations. For example the violation of Wis. Stat. § 30.12 provides for a misdemeanor conviction up to six months in jail and a $1000 fine.

Finally, the DNR may recover costs for water pollution including the costs of replacing fish or other wildlife destroyed by the discharge.
Chapter 11 Notes

1 Wis. Stat. § 227.12.

2 See, Wis. Stat. § 806.04.


4 Wis. Stat. ch. 893.

5 Wis. Stat. ch. 841. See e.g., W. H. Pugh Coal Co. v. State, 105 Wis. 2d 123, 312 N.W.2d 856 (Ct. App. 1981); Jansky v. City of Two Rivers, 227 Wis. 228, 278 N.W. 527 (1938) in which declaration of title actions were brought to resolve issues concerning accretions to the riparian property. See also, Millen v. Thomas, 201 Wis. 2d 675, 550 N.W.2d 134 (Ct. App. 1996) in which an action to quiet title was brought to determine the validity of a riparian easement providing lake access.


8 Wis. Stat. § 30.14(2); Wis. Admin. Code § NR 326.06(2).

9 See, Wis. Stat. § 893.80 for claims against local governments, § 893.82 for claims against state employees, and § 16.007 for claims against the state.


11 See discussion in Chapter 3, notes 4 and 5. Notice of claim procedures do not have to be followed for takings claims. See, Wisconsin Retired Teachers Ass’n v. Employee Trust Funds Bd., 195 Wis. 2d 1001, S37 NW2d 400 (Ct. App. 1995).

12 A general description of such actions, focusing on nuisance actions, is found in P. Davis, “Theories of Water Pollution Litigation,” 1971 Wis. L. Rev. 738.

13 Nosek v. Stryker, 103 Wis. 2d 633, 643, 309 N.W. 2d 868 (Ct. App. 1981); Abdella v. Smith, 34 Wis. 2d 393, 149 N.W.2d 537 (1967).

14 This standard is based on RESTATEMENT (SECOND) OF TORTS § 822 and has been applied in claims involving groundwater withdrawal, State v. Michels Pipeline Construction, Inc., 63 Wis. 2d 278, 217 N.W. 2d 339, 219 N.W.2d 308 (1974) and surface water runoff, State v. Deetz, 66 Wis. 2d 1, 224 N.W. 2d 407 (1974). Groundwater contamination can also constitute a private nuisance under Wisconsin law. Fortier v. Flambeau Plastics Co., 164 Wis. 2d 639, 676, 476 N.W.2d 593 (Ct. App. 1991).

15 For a discussion of surface water cases, see, 61 OAG, 102 (1972), Middlestadt v. Wausau Starch and Potato Co., 93 Wis. 1, 66 N.W. 713 (1896); Hazeltine Administrator v. Case, 46, Wis. 391, 1 N.W. 66 (1879). For a discussion of groundwater cases see, Fortier v. Flambeau Plastics Co., supra.

16 Nosek v. Stryker, supra; Lopardo v. Fleming Companies, Inc., 97 F.3d 921 (7th Cir. 1996).

17 State v. Deetz, supra; Anderson v. Village of Little Chute, 201 Wis. 2d 675, 549 N.W.2d 737 (Ct. App. 1996).
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19. Wis. Stat. § 30.294. In Gillen v. City of Neenah, 219 Wis. 2d 806, 580 N.W.2d 628 (1998), the court held that a private citizen may bring an action against a party to abate a public nuisance irrespective of the DNR’s particular enforcement decision.


21. In Steiger v. Nowakowski, 67 Wis. 2d 355, 359, 227 N.W.2d 104 (1975), the court concluded that the defendants’ actions in digging a ditch near a retaining wall, filling it with water in order to undermine the wall’s foundation and causing it to collapse, constituted a trespass. However, in Hillcrest Golf v. Altoona, 135 Wis. 2d 431, 442, 400 N.W.2d 493 (Ct. App. 1986), the court found that a trespass claim for collecting and directing water was subsumed in the allegation of nuisance.

22. Fortier v. Flambeau Plastics Co., 164 Wis. 2d at 676.

23. A recent Wisconsin Court of Appeals case held that a misrepresentation claim can be brought against a seller even where the purchasing agreement contains a clause stating that the buyer is purchasing the property “as is.” Grube v. Daun, 173 Wis. 2d 30, 496 N.W.2d 106 (Ct. App. 1992). Grube involved a leaking underground fuel tank. The Court held that the plaintiff owners of the property could maintain actions for intentional, strict and negligent misrepresentation against both the previous owner and his real estate broker. A key factor in Grube was that the previous owner, through his real estate broker, had made affirmative misrepresentations regarding the condition of the property. See also, Ramsden v. Farm Credit Serv., North Central, 223 Wis. 2d 704, 590 N.W.2d 1 (Ct. App. 1998) in which the Court ruled that an agent that makes factual statements regarding ground water contamination assumes a duty to speak truthfully.


28. See, e.g., Priewe v. Wisconsin State Land and Improvement Co., 93 Wis. 534, 67 N.W. 618 (1896) damages for diminution of riparian rights by lowering water levels; Mitchell Realty Co. v. City of West Allis, 184 Wis. 352, 199 N.W. 390 (1924) damages for water pollution; Mueller Real Estate & Investment Co. v. Cohen, 158 Wis. 461, 149 N.W. 154 (1914), SooLine R. Co. v. Office of Comm. of Transp., 170 Wis. 2d 543, 489 N.W.2d 672 (Ct. App. 1992) and Anderson v. Village of Little Chute, supra, damages for flooding.

29. Brown v. Maxy, 124 Wis. 2d 426, 369 N.W.2d 677, reh’g denied, 126 Wis. 2d 40, 373 N.W.2d 672 (1985); Gianoli v. Pfleiderer, 209 Wis.2d 509, 563 N.W.2d 562 (Ct. App. 1997).


31. Abatement is generally an appropriate remedy for a nuisance. See, Nosek v. Stryker, 103 Wis. 2d at 643, obstruction to water; Costas v. City of Fond du Lac, 24 Wis. 2d 409, 129 N.W.2d 217 (1964), odors from wastewater treatment plant.

32. Costas, 24 Wis. 2d at 415. Injunctive relief has also been awarded to remedy water pollution, Middelstadt v. Wausau Starch and Potato Co., supra; to prevent water diversion, Kimberly & Clark Co. v. Hewitt, 75 Wis. 371, 44 N.W. 303 (1890); and to prevent discharges of surface water or flooding Sheldon v. Rockwell, 9 Wis. 166 (1859); Nicolai v. Wilkins, 104 Wis. 580, 80 N.W. 939 (1899).
33Wis. Stat. §§ 227.44-227.46.

34See, e.g., Wis. Admin. Code ch. NR 2 for DNR proceedings.


36Wis. Stat. § 227.45.

37Wis. Stat. § 227.46. See also, Sea View Estates Beach Club v. DNR, 223 Wis.2d 138, 588 N.W.2d 667 (Ct. App. 1998).

38Wis. Stat. § 283.63.

39Wis. Stat. § 227.45.

40Wis. Stat. § 227.51(1). See, Metropolitan Greyhound Management Corp. v. Wisconsin Racing Bd., 157 Wis. 2d 678, 460 N.W.2d 802 (Ct. App. 1990); Waste Management v. DNR, 128 Wis. 2d 59, 381 N.W.2d 318 (1986)

41Wis. Stat. § 227.52.

42Wis. Stat. § 227.53(1), provides that where a rehearing has been requested under Wis. Stat. § 227.49, the time for judicial review is stayed pending the decision on rehearing.


44For example, in Fox v. DHSS, 112 Wis. 2d 514, 527, 334 N.W.2d 532 (1983), the court held that the presumed psychological effects on inmates if a prison were built outside of Milwaukee County were “too remote” to confer standing on the Milwaukee County district attorney. Similarly, Town of Delavan v. City of Delavan, 160 Wis. 2d 403, 466 N.W.2d 227 (Ct. App. 1991) the court rejected the town’s standing because its injuries were hypothetical and speculative.

45For instance, the Wisconsin Supreme Court held that one landfill operator could not challenge a DNR decision to grant a solid waste approval to a competitor because the purpose of the solid waste statutes was to protect the environment, not economic interests. Waste Management of Wisconsin, Inc. v. DNR, 144 Wis. 2d 499, 424 N.W.2d 685 (1988); see also, Fox, 112 Wis. 2d at 527.

46State ex rel Town of Delavan v. Circuit Court for Walworth County, 167 Wis. 2d 719, 482 N.W. 899 (1992).

47Wis. Stat. § 227.57. Because of the limited record, some parties may find it beneficial to request a contested case hearing first. By obtaining a contested case hearing, the person can create a more extensive record for judicial review. However, requesting a contested case hearing is not generally considered to be a prerequisite to judicial review. Indeed, filing a petition for a contested case hearing does not suspend the 30-day period under which judicial review must be filed.

48Wis. Stat. § 227.57(6); Omernick v. DNR, 100 Wis. 2d 234, 301 N.W.2d 437 (1981).

49Wisconsin’s Environmental Decade, Inc. v. DNR, 85 Wis. 2d 518, 271 N.W.2d 69 (1978); SeaView Estates Beach Club, Inc., 223 Wis.2d at 150.
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50 Wis. Stat. § 227.57(10); *Jicha v. DILHR*, 169 Wis 2d 284, 292-93, 485 N.W. 2d 256 (1992); *West Bend Educ. Ass’n v. WERC*, 121 Wis 2d 1, 357 N.W. 2d 534 (1984); *Sterlingworth Condominium Assoc. v. DNR*, 205 Wis.2d 710, 556 N.W.2d 791 (Ct. App. 1996).

51 Wis. Stat. § 227.58.

52 County planning and zoning authority is set forth in Wis. Stat. §§ 59.69, 59.692 and 59.694. A city planning and zoning authority is set forth in Wis. Stat. § 62.23. The provision for cities also applies to villages under Wis. Stat. § 61.35.

The procedures for towns is somewhat more complex. Generally, procedures are limited and must be coordinated with the county. Wis. Stat. §§ 60.61, 60.62. A town can obtain greater zoning authority by adopting village powers. Wis. Stat. §§ 60.10(2)(c), 60.22(3). Even so, there may still be the need for approval of zoning by the county if the county has a zoning ordinance. Wis. Stat. § 60.62.

53 For counties, this authority is set forth in Wis. Stat. § 59.69(2); for cities, Wis. Stat. § 62.23(1).

54 For counties, this procedure is set forth in Wis. Stat. § 59.69(5); for cities, Wis. Stat. § 62.23(7). Official city maps are adopted under the procedures of Wis. Stat. § 62.23(6).

55 The authority for county Boards of Adjustment are set forth in Wis. Stat. § 59.694(7). The authority for Boards of Appeals are set forth in Wis. Stat. § 62.23(7)(e)7.


57 For counties, this authority is found in Wis. Stat. § 59.694(10); for cities and villages, Wis. Stat. § 62.23(7)(e)10.

58 *Klinger v. Oneida County*, 149 Wis. 2d 838, 440 N.W.2d 348 (1989); *Snyder v. Waukesha County Zoning Bd. of Adjustment*, 74 Wis. 2d 468, 247 N.W.2d 98 (1976); *Miswald v. Waukesha County Bd. Of Adjustment*, 202 Wis.2d 401, 550 N.W.2d 434 (Ct. App. 1996).

59 *Nodell Inv. Corp. v. City of Glendale*, 78 Wis. 2d 416, 254 N.W.2d 310 (1977).

60 *Town of Hudson v. Hudson Town Board of Adjustment*, 158 Wis. 2d 263, 461 N.W.2d 827 (Ct. App. 1990).

61 Wis. Stat. § 68.05

62 Wis. Stat. § 68.02

63 Wis. Stat. § 68.13

64 33 USC § 1365.


66 Wis. Stat. § 299.91.

67 Wis. Stat. § 23.50.

68 Wis. Stat. §§ 23.50-23.85.

69 Wis. Stat. § 29.601.

70 Wis. Stat. § 283.87.
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Agency Contacts

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

Wisconsin Department of Agriculture,
Trade and Consumer Protection
PO Box 8911
Madison, WI  53708-8911
Public Information (608) 224-5001
WI Farm Center: (800) 942-2472
http://datcp.state.wi.us/static/

WISCONSIN DEPARTMENT OF COMMERCE

Wisconsin Department of Commerce
201 West Washington Ave.
Madison, WI
(608) 266-1018
http://www.commerce.state.wi.us

WISCONSIN DEPARTMENT OF HEALTH AND FAMILY SERVICES

Wisconsin Department of Health and Family Services
1 West Wilson
Madison, WI
(608) 266-1865
http://www.dhfs.state.wi.us/

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Wisconsin Department of Natural Resources
101 South Webster Street
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Madison, WI  53707
(608) 266-2621
http://www.dnr.state.wi.us/
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3911 Fish Hatchery Rd
Fitchburg, WI 53711
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Southeast Region Headquarters
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PO Box 12436
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DNR Basins (GMUs)
U.S. ARMY CORPS OF ENGINEERS
Offices for Wisconsin  http://www.usace.army.mil/

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St. Paul, MN 55101-1479
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Green Bay Field Office
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Green Bay, WI 54303-7001
(920) 448-2824

Lake Superior Area Office
Canal Park
Duluth, MN 55802
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Kewaunee Area Office
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Kewaunee Wi 54216
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Fox River Project Office
1008 Augustine St.
Kaukauna, WI 54130
(920) 766-3531

Waukesha Field Office
P.O. Box 946
Waukesha, WI 53187-0947
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77 W. Jackson Blvd.
Chicago, IL 60604-3507
312/353-2000
http://epa.gov/region5/

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Mayville, WI 53050
920/387-2658
http://www.fws.gov/r3pao/horicon/

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Necedah, WI 54646
608/565-2551
http://www.fws.gov/r3pao/necedah/

Trempealeau National Wildlife Refuge
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Trempealeau, WI 54661
608/539-2311
http://www.fws.gov/r3pao/tremp/

Necedah National Wildlife Refuge
W7996 20th St. West
Necedah, WI 54646
608/565-2551
http://www.fws.gov/r3pao/necedah/

Upper Mississippi National Wildlife and Fish Refuge
555 Lester Ave.
Onalaska, WI 54650
608/783-8405
http://midwest.fws.gov/uppmiss/lacross.html
U.S. FISH AND WILDLIFE SERVICE
Offices for Wisconsin  http://www.fws.gov/

Genoa National Fish Hatchery
Route #1
Box 186
Genoa, WI 54632-9776
608/689-2605
http://www.fws.gov/r3pao/genoa/

Iron River National Fish Hatchery Complex
HCR, Box 44
Iron River, WI 54847
715/372-8510
http://www.fws.gov/r3pao/iron_rvr/

Ashland Fishery Resources Office
2800 Lake Shore Drive East, Ste.B
Ashland, WI 54806
715/682-6185
http://www.fws.gov/r3pao/ashland/

LaCrosse Fish Health Center
555 Lester Ave. Ste. 100
Onalaska, WI 54650
608/783-8450
http://www.fws.gov/r3pao/lacrosse/

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1015 Challenger Court
Green Bay, WI 54311-8331
920/465-7440
http://www.fws.gov/r3pao/grn_bay/fro/index.html

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1451 Green Road
Ann Arbor, MI 48105
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LaCrosse, WI 54603
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Madison, WI 53711
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Madison, WI 53718
608/221-1206

Wisconsin Cooperative Wildlife Research Unit
Rm 204 Russell Labs
1630 Linden Drive
Madison, WI 53706
608/263-6882
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Selected DNR and Extension Publications on Water Rights and Regulations

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Aquatic plant management
Dams
Floodplain zoning
Lake protection and management
Lake classification
Piers and boating
Public and private rights
Shoreland and wetland zoning
Shoreland management
Groundwater, wells and water supply

Aquatic Plant Management

Wisconsin’s Aquatic Plant Management and Protection Program – WDNR WR-448-96

Your Aquatic Plant Harvesting Program – WDNR-FH-205-97

Through the Looking Glass…A Field Guide to Aquatic Plants – FH-207-97

Management of Aquatic Plants and Algae in Ponds – WDNR-FH-228-99

Purple Loosestrife – WDNR-PUBL-PM-005 90

Guide to Wisconsin Aquatic Plants – WDNR-PUBL-WR-173 92

Non-Mechanical Methods of Aquatic Plant Harvesting – WDNR WR-204 88

Machine Harvesting of Aquatic Plants – WDNR WR-201 88

What to do with Harvested Aquatic Plants – WDNR WR-203 88

Controlling Waterweeds – UWEX Environmental Resources Unit, 1812 University Ave., Madison, WI 53706

Aquatic Plant Screens – WDNR WR-202 88
Dams

*Dam Safety: Know the Potential Hazard* – Federal Emergency Management Agency, L152

*Buying or Selling Property with a Dam* – WDNR WZ010 89

Floodplain Zoning

*Floods Affect Your Property* – WDRN 14-3500(84)


Lake Protection and Management

*A Model Lake Plan for a Local Community* – UWEX G3606

*The Lake in Your Community* – UWEX G3216

*Wisconsin Lakes* – WDNR PUBL-FM-800 91

*Get in Tune... To Your Lake!* – WDNR PUBL-WR-261 90

*Can Acid Rain Damage Lakes in Wisconsin?* – UWEX G3305-6

*Understanding Lake Data* – UWEX G3582


*Country Acres - A Guide to Buying and Managing Rural Property* – UWEX G3309

Lake Classification

A Guide to County Lake Classification – College of Natural Resources, University of Wisconsin-Stevens Point, WI (1999)

The Wisconsin Lake Partnership Shoreland Management and Lake Classification Fact Sheet Series – College of Natural Resources, University of Wisconsin-Stevens Point, WI (1999)

Lake Classification for Shoreland Development Impacts – WDNR (1998)

A Guide for Developing and Managing Shoreland in Burnett County (1999)

Vilas County Lake Protection Grant: Lake Classification – Final Report (2000)

Waupaca County Shoreland Protection Manual (1997)

Piers and Boating

Pier Planner – WDNR WZ-017 93

Pier Law in Wisconsin – Wisconsin Association of Lakes (1996)

A Model Local Ordinance to Regulate Piers, Wharves and Berths in Wisconsin – Wisconsin Association of Lakes (1996)

Guidelines for Marinas and Similar Mooring Facilities – WDNR 4/93

Guidelines: Ordinance Writing and Buoy Placement for Wisconsin Waters – WDNR LE-317-94

Wisconsin Boating Regulations – WDNR LE-301 99

Boating in the 1990s and Beyond: Charting a New Course – WDNR LE-303


Local Boating Regulation in Wisconsin – Wisconsin Association of Lakes (1998)

Public and Private Rights

Trespass Law in Wisconsin: An Overview – UWEX G3409

Wisconsin’s Recreational Use Statute – UWEX G3326


Public or Private? I-Navigability – WDNR WZ-003 91

Public or Private? II-The Ordinary High Water Mark – WDNR WZ-004 91
Shoreland and Wetland Zoning

Zoning Case Law in Wisconsin (Cases Relevant to Shoreland and Floodplain Zoning in Wisconsin) – WDNR WT-540-00

Wetland Restoration Handbook for Wisconsin Landowners – WDNR SS-944-00

Shoreland Zoning… What the Landowner Needs to Know – WDNR WZ-009 (88)

Protecting Wetlands Through Local Zoning – WDNR WZ-001(89)

Model Shoreland-Wetland Zoning Ordinance for Cities and Villages – WDNR 97.


A Guide to Protecting Wisconsin Wetlands – UWEX G3059

Wisconsin Wetland Inventory Classification Guide – WDNR WZ-WZ023

A User’s Guide to the Wisconsin Wetland Inventory – WDNR JG-WZ71 91

Wetland Functional Values – WDNR WZ-026 93

Water Quality Standards for Wisconsin’s Wetlands – WDNR WZ-025 92


Shoreland Management

The Water’s Edge: Helping Fish and Wildlife on your Waterfront Property – WDNR PUBL-FH-42800

Lakescaping for Wildlife and Water Quality – Minnesota DNR (1999)

Saving Your Shoreline – WDNR PUBL-WZ005 86

Protecting Shoreland/Wetlands in Urban Areas – WDNR PUBL-WZ001 85

Sand Blanket Information Requirements – WDNR 3491H

Shoreline Landscape Plants – UWEX-UWSP 90

A Fresh Look at Shoreland Restoration – WDNR-FH-430-00

What is a Shoreland Buffer? – WDNR-FH-233-99
Groundwater, Wells and Water Supply

Maintaining Your Home Well Water System – UWEX G3399
Your Personal Water Supply – DNR WS-021
Groundwater-Protecting Wisconsin’s Buried Treasure – DNR DG-055-99
Better Homes and Groundwater – DNR WR 386-95
Do Deeper Wells Mean Better Water? – UWEX G3652
Improving Your Drinking Water Quality – UWEX G3378
You and Your Well – DNR DG-009
Bacteriological Contamination of Drinking Water – DNR WS-003 92REV
Lead in Drinking Water – DNR WS-015 92REV
Choosing a Water Treatment Device – UWEX G3558-5
Drinking Water Contamination: Understanding the Risks – UWEX G3339
Evaluating the Condition of Your Private Water Supply – UWEX G3558-2
Interpreting Drinking Water Test Results – UWEX G3558-4
Keeping Your Home Water Supply Safe – UWEX G3558-1
How Drinking Water Standards are Established – UWEX G3338
A Guide to Groundwater Quality Planning and Management for Local Governments – WGNHS Special Report 9
Groundwater Protection through Local Land Use Controls – WGNHS Special Report 11
Wellhead Protection Program Place for Public Water Supplies – DNR August 1993
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