Chapter 7: Wetlands Conservation Laws

State wetlands conservation laws

Of the 17 states surveyed, 10 have laws specifically treating the conservation of wetlands. These State legislatures enacted the wetlands conservation laws with the primary state policy of preserving and protecting the wetlands and preventing their despoliation and destruction. To effectuate this policy, these state laws offer certain mechanisms to protect wetlands. Delaware, Maryland, and Mississippi protect their wetlands through a permit system. The laws require that before engaging in any activity involving wetlands, each person must obtain a permit from their authoritative agencies. States allow some exemptions from the permit requirement.

Georgia authorizes its Department of Natural Resources to develop minimum standards and procedures to protect wetlands. The minimum standards and procedures must include, but are not limited to, land use activities, land development densities, and activities that involve alteration of wetlands. However, the department can adopt different minimum standards and procedures for wetlands protection based on the size or type of wetlands, the need to protect endangered or protected species or other unusual resources, and the need for particular land use activities that will affect a wetland.

Wisconsin requires its Department of Natural Resources to prepare maps identifying individual wetlands that have an area of 5 acres or more. Moreover, each city must zone by ordinance all unfilled wetlands of 5 acres or more that are shown on the final wetland inventory maps prepared by the department.

Iowa requires its Department of Natural Resources to develop and implement a program for the acquisition of wetlands and conservation easements on and around wetlands that result from the closure or change in use of agricultural drainage wells. It must inventory the wetland and marshes of each county and make a preliminary designation as to which constitute protected wetlands. In addition, each person must obtain a permit before draining a protected wetland.

Texas requires its authoritative agency to develop and adopt a State wetlands conservation plan for State-owned coastal wetlands.

Oregon's Division of State Lands is required to compile and maintain a comprehensive Statewide wetlands inventory. In compiling and updating the inventory, the division must identify opportunities for wetland creation, restoration, and enhancement when the information is available. Furthermore, any city or county is allowed to develop and submit to the division a wetland conservation plan for review. This Oregon law requires permits for removal or fill in areas subject to an approved wetland conservation plan.

California allows its authoritative agencies to acquire interests in real property to protect, preserve, and restore wetlands. These agencies must conduct studies to identify those wetlands that are subject to irreversible modification and that should be acquired, protected, and preserved in perpetuity. Such studies must set forth a plan for the acquisition, protection, preservation, restoration, and enhancement of wetlands.

Delaware (region 1).—The Delaware Legislature enacted the Wetlands Act¹¹⁹⁷ that has the primary public policy of preserving and protecting "the productive public and private wetlands" and preventing "their despoliation and destruction consistent with the historic right of private ownership of lands."¹¹⁹⁸

Before engaging in any activity in the wetlands, a person must obtain a permit from the Department of Natural Resources and Environmental Control. However, there are a number of exemptions from the permit requirement, including—

mosquito control activities authorized by the department;

construction of directional aids to navigation;

duck blinds;

footbridges;

the placing of boundary stakes;

wildlife nesting structures;

grazing of domestic animals;

haying;

hunting; and

fishing and trapping. 1200

However, before granting any permit, the secretary of the Delaware Department of Natural Resources and Environmental Control must consider these factors—

the environmental impact;

the aesthetic effect:

the number and type of public and private supporting facilities required and the impact of such facilities;

the effect on neighboring land uses;

the state, county, and municipal comprehensive plans for the development or conservation, or both, of the areas; and

the economic effect. 1201

In addition to these factors, the secretary can also require a bond in an amount and with conditions sufficient to secure compliance with the conditions and limitations set forth in the permit. 1202

The act provides that any expansion or extension of a pre-existing use must secure a permit and such permit may be granted only when the county or municipality having jurisdiction has already approved the use in question by zoning procedures provided by law. ¹²⁰³

¹¹⁹⁷The Wetlands Act, DEL. CODE ANN. tit. 7 § 6601 et seq. (1991).

¹¹⁹⁸Id. § 6602.

¹¹⁹⁹Id. § 6604(a). For process of permit applications Id. § 6608.

¹²⁰⁰Id. § 6606.

¹²⁰¹Id. § 6604(b).

¹²⁰²Id. § 6604(c).

¹²⁰³Id. § 6605.

Under the Delaware Wetlands Act, the secretary has the following mandatory duties: 1204

- To administer this act.
- To inventory all wetlands within Delaware and prepare suitable maps.
- To adopt a wetlands designation or any other regulation after holding a public hearing.
- To adopt regulations
 - setting forth procedures governing the processing of permit applications and the conduct of hearings;
 - elaborating standards by which each permit application will be reviewed and acted upon;
 - controlling or prohibiting activities on lands designated or proposed for designation as wetlands; and
 - reporting through the annual budget process, the receipt, proposed use and disbursement of the funds appropriated to the department.

Moreover, the secretary is authorized to issue a cease and desist order to any person violating any rule, regulation, order, permit condition, or any provision of this act. The secretary may bring an action for injunctive relief to prevent violation of this act or a permit condition. Furthermore, the secretary may enter upon any private or public property for the purpose of determining whether a violation of a statute or regulation exists. 1207

The act allows any person whose interest is substantially affected by any action of the secretary to appeal to the Environmental Appeals Board within 20 days of the secretary's decision. Any person who is affected by any decision or nondecision by the board can appeal to the superior court in and for the county in which the use in question is wholly or principally located. It the superior court determines that the appealed action constitutes a taking without just compensation, it must invalidate the order and grant appropriate relief. It is substantially affected by any action of the secretary to appeal any appeal and superior court determines that the appeal of the superior court determines that it is appealed action constitutes a taking without just compensation, it must invalidate the order and grant appropriate relief.

The act provides that any person who violates any rule, regulation, order, permit condition, or provision of the act may be fined not less than \$50 nor more than \$500 for each violation. However, if he or she does so intentionally or knowingly, the fine is increased to not less than \$500 or more than \$10,000 for each offense. 1212

Maryland (region 1).—Finding that the despoliation and destruction of wetlands by unregulated activities had adversely affected important ecological, economic, recreational, and aesthetic interests, the Maryland legislature enacted the Wetlands

¹²⁰⁴DEL. CODE ANN. § 6607.

¹²⁰⁵Id. § 6614.

¹²⁰⁶Id. § 6615.

¹²⁰⁷Id. § 6616.

¹²⁰⁸Id. § 6610.

¹²⁰⁹Id. § 6612.

¹²¹⁰Id. § 6613.

¹²¹¹Id. § 6617(b).

¹²¹²Id. § 6617(a).

and Riparian Rights Law¹²¹³ to preserve the wetlands and to prevent their despoliation and destruction.¹²¹⁴ The law recognizes the distinction between *state wetlands* and *private wetlands*. Each shall be discussed in turn.

State wetlands.— State wetlands include "any land under the navigable water of the State below the mean high tide, affected by the regular rise and fall of the tide." ¹²¹⁵

The law provides that the owner of land bounding on navigable water is entitled to any natural accretion to the person's land, to reclaim fast land lost by erosion or avulsion during the person's ownership of the land to the extent of provable existing boundaries (the right to reclaim lost fast land relates only to fast land lost after January 1, 1972). The landowner is also allowed to make improvements into the water in front of the land to preserve the access to the navigable water or protect the shore against erosion. ¹²¹⁶

Under this law, a person cannot dredge or fill in State wetlands without a valid license. Such license may include provision for periodic maintenance dredging if the secretary recommends. This licensing requirement does not apply to —

dredging and filling being conducted as of July 1, 1970, as authorized under the terms of an appropriate permit or license granted under the provisions of existing State or Federal law;

dredging of seafood products by a licensed operator, harvesting of seaweed, or mosquito control and abatement as approved by the Department of Agriculture;

improvement of wildlife habitat or agricultural drainage ditches as approved by an appropriate unit; and

routine maintenance or repair of existing bulkheads, provided that there is no addition or channelward encroachment.

Violation of the license requirement constitutes a misdemeanor, and upon conviction, is subject to a fine not exceeding \$1,000. Moreover, the secretary must assist the board in determining whether to issue a license to dredge or fill State wetlands. ¹²¹⁷

The board is authorized to require, as a condition to issuance of a wetlands license, the license applicant to pay a certain amount of money deemed appropriate by the board. Such moneys will be deposited to the Wetlands Compensation Funds, which can be used only for the acquisition of wetland areas by the State. 1218

Moreover, it should be noted that a landowner is exempt from all local permit requirements in performing routine maintenance and repair of a bulkhead. Any person who is aggrieved by the board's decision can appeal to the circuit court of competent jurisdiction. Description 220

¹²¹³MD. CODE ANN., NAT. RES. § 9-101 et seq. (1990 & Supp. 1994).

¹²¹⁴Id. § 9-102 (1990).

¹²¹⁵Id. § 9-101(n).

¹²¹⁶Id. § 9-201 (1990 & Supp. 1994).

¹²¹⁷Id. § 9-202.

¹²¹⁸Id. § 9-204.

¹²¹⁹Id. § 9-202.1 (1990).

¹²²⁰Id. § 9-203.

Private Wetlands.— Private wetlands include "wetlands transferred by the State by a valid grant, lease, patent, or grant confirmed by Article 5 of the Maryland Declaration of Rights, to the extent of the interest transferred." ¹²²¹

The Maryland Wetlands law requires the secretary to inventory all private wetlands in the state. The landward boundaries of the wetlands will be shown on suitable maps or aerial photographs. The secretary must hold a public hearing in the county of the affected wetlands on the completion of the boundary map. After the hearing, the secretary must establish by order the landward bounds of each wetland and the regulations applicable to the wetland. Moreover, the secretary must file maps and orders among land records to the clerk of the circuit court. A prospective purchaser can be aware that the real estate is subject to the private wetlands regulations, giving the purchaser the opportunity to consider whether to acquire the affected property under these conditions or not. However, the secretary can modify wetlands boundary maps.

The secretary is authorized, with mandatory advice and consent of the Maryland Agricultural Commission and in consultation with any appropriate unit in the affected political subdivision, to adopt regulations governing dredging, filling, removing or otherwise altering or polluting private wetlands, to promote the public safety, health, welfare, wildlife, and marine fisheries. The regulations can vary as to specific tracts of wetlands because of the character of the wetlands. 1225

However, the following are lawful uses on private lands: 1226

- Conservation of soil, vegetation, water, fish, shellfish, and wildlife.
- Trapping, hunting, fishing, or catching shellfish, if otherwise legally permitted.
- Exercise of riparian rights to improve land bounding on navigable water, to preserve access to the navigable water, or to protect the shore against erosion.
- Reclamation of fast land owned by a natural person and lost during the person's ownership of the land by erosion or avulsion to the extent of provable preexisting boundaries (the right to reclaim lost fast land relates only to fast land lost after January 1, 1972).
- Routine maintenance and repair of existing bulkheads, provided that there is no addition or channelward encroachment. Individuals who propose to conduct on any wetland activities that are not authorized by regulations must apply for a permit to the secretary.¹²²⁷

Moreover, a landowner is exempt from all local permit requirements of performing routine maintenance and repair of a bulkhead.¹²²⁸ Any person who is aggrieved by the board's decision can appeal to the circuit court of competent jurisdiction.¹²²⁹

The law prohibits the Board of Public Works from issuing a license for any project involving the construction of a dwelling unit or other nonwater-dependent structure

¹²²¹Md. Code Ann., Nat. Res. § 9 101(j) (1990).

¹²²²Id. §-9-301.

¹²²³Hirsch v. Maryland Dep't of Natural Resources, 288 Md. 95, 416 A.2d 10 (1980)

¹²²⁴MD. CODE ANN., NAT. RES. § 9-302.1 (1990).

¹²²⁵Id. § 9-302.

¹²²⁶Id. § 9-303 (1990).

¹²²⁷Id. § 9-306 (Supp. 1994).

¹²²⁸Id. § 9-303.1 (1990).

¹²²⁹Id. § 9-305 (Supp. 1994).

on a pier located on State or private wetlands. However, this prohibition does not apply if—

the project is constructed on a pier in existence as of December 1, 1985, which can be verified by the Department of Natural Resources;

the project does not require an expansion of the pier greater than 25 percent of the area of piers or dry docks removed on the same property;

the project is approved by local planning and zoning authorities;

the project is located in an intensely developed area, as designated in programs adopted or approved by the Chesapeake Bay Critical Area Commission; and

the project allows public access to tidal water, if appropriate. 1230

Furthermore, the authority cannot issue permits to projects involving the construction of a dwelling unit or other nonwater-dependent facility on a pier located on State or private wetlands within the Chesapeake Bay Critical Area. However, the applicant is required to improve the water quality of existing stormwater runoff from the project site into adjoining water and the applicant can demonstrate that neither the project's construction and operation nor any sewer (or other utility) lines have any long-term adverse effect on the water quality of the adjoining body of water. 1231

Georgia (**region 2**).—The Department of Natural Resources is authorized to develop minimum standards and procedures for the protection of the natural resources and environmental, and vital areas of the State, which includes the protection of wetlands. The local governments must use these minimum standards and procedures in developing, preparing, and implementing their comprehensive plans. 1232

The minimum standards and procedures for wetlands protection must include, but are not limited to, land use activities, land development densities, and activities that involve alteration of wetlands. However, the department can adopt differing minimum standards and procedures for wetlands protection based on the size or type of wetlands, the need to protect endangered or protected species or other unusual resources, and the need for a particular land use activity that will affect a wetland. ¹²³³

Mississippi (**region 3**).—The Mississippi Coastal Wetlands Protection Act¹²³⁴ was enacted with the policy of "preserv[ing] the natural state of the coastal wetlands and their ecosystems and prevent[ing] [their] despoliation and destruction "¹²³⁵ The act requires the Mississippi Marine Resources Council to adopt, promulgate, and enforce public rules and regulations for the implementation of the act. ¹²³⁶ Moreover, from time to time, the Council and the Marine Conservation Commission must inspect the coastal wetlands to determine compliance. ¹²³⁷

¹²³⁰MD. CODE ANN., NAT. RES. § 9-104(c) (Supp. 1994).

¹²³¹Id. §-9-104(b).

¹²³²GA. CODE ANN. § 12-2-8(b) (Supp. 1993).

¹²³³**T**d

 $^{^{1234}}$ Mississippi Coastal Wetlands Protection Act, Miss. Code Ann. \S 49-27-1 et seq. (1990 & Supp. 1993). 1235 Id. \S 49-27-3 (1990).

¹²³⁶Id. § 49-27-59.

¹²³⁷Id. § 49-27-63.

The act requires permits for all regulated activities affecting coastal wetlands. 1238 The regulated activities include—

dredging, excavating or removing soil, mud, sand, gravel, flora, or fauna;

dumping, filling or deposing any soil, stones, sand, gravel, mud, aggregate of any kind, or garbage;

killing or materially damaging any flora or fauna;

erecting on coastal wetlands structures that materially affect the ebb and flow of the tide; and

erecting any structure(s) on suitable sites for water dependent industry. 1239

The council may impose conditions or limitations on the proposed activity in granting any permit. 1240

An applicant, person, corporation, municipal corporation, county, or interest community group who has been aggrieved by the council's order, denial, revocation, or revocation of a permit, or issuance of a permit or conditional permit, can appeal to chancery court. Such court must affirm the council's order if it finds that the order appealed is supported by substantial evidence, consistent with the public policy, is not arbitrary or capricious, and does not violate constitutional rights. ¹²⁴¹ Furthermore, such person can take appeals from the chancery court to the supreme court. ¹²⁴²

The act makes public all information related to the permit application and related documents, and documentary evidence offered at hearings. 1243

The Coastal Wetlands Protection Act does not apply to the following: 1244

- The accomplishment of emergency decrees of any duly appointed health officer of a county or municipality, acting to protect the public health.
- The conservation, repletion, and research activities of the Mississippi Marine Conservation Commissioner, the Mississippi Marine Resources Council, the Mississippi Gulf Coast Research Laboratory, the Mississippi Game and Fish Commissioner, and the Mississippi Alabama Sea Grant Consortium when acting through Mississippi Universities Marine Center.
- Hunting, erecting duck blinds, fishing, shell-fishing, and trapping when and where otherwise permitted by law.
- Swimming, hiking, boating, or other recreation that causes no material harm to the flora and fauna of the wetlands.
- The exercise of riparian rights by the owner of the riparian rights.
- The normal maintenance and repair of bulkheads, piers, roads, and highways.
- Wetlands development in the future by Federal, State, or county governments for the establishment of a superport or a pipeline buoy terminal for deep-draft, ocean-going vessels.

¹²³⁸Mississippi Coastal Wetlands Protection Act, Miss. Code Ann. § 49-27-9. For more detail on application process, Id. 49-27-11.

¹²³⁹Id. § 49-27-5(c).

¹²⁴⁰Id. § 49-27-29.

¹²⁴¹Id. § 49-27-39.

¹²⁴²Id. § 49-27-49.

¹²⁴³Id. § 49-27-21.

¹²⁴⁴Id. § 49-27-7.

- The Biloxi Bridge and Park Commissioner, Biloxi Port Commissioner, Long Beach Port Commission, Pass Christian Port Commission, Pascagoula Port Commission, and any municipal or local port authorities.
- Wetlands used under the terms for the use permit granted by appropriate law.
- Any activity affecting wetlands that is associated with or is necessary for the
 exploration, production or transportation of oil or gas when such activity is
 conducted under a current and valid permit granted by a duly constituted
 agency of Mississippi.
- Activities of any mosquito control commission that is a political subdivision or agency of Mississippi.
- The Fisherman's Wharf to be constructed in Biloxi and the Buccaneer State Park to be constructed in Hancock County.
- Wetlands conveyed by the State for industrial development.
- Coastal wetlands within 5 feet of private property.
- The activities of the Hancock County Port and Harbor Commission, Harrison County Development Authority, and Mississippi State Port at Gulfport affecting wetlands within their respective jurisdictions.
- Activities that have no harmful impact on the environment and make no substantial change in the wetlands by the judgment of the director.

Wisconsin (region 4).—For the purpose of advancing the conservation of wetland resources, the Department of Natural Resources is required to prepare or cause to be prepared maps that, at a minimum, identify as accurately as practicable all individual wetlands in Wisconsin that have an area of 5 acres or more. 1245

To effectuate the purpose of protecting shoreland and protecting and promoting public health, safety, and welfare, each city must zone by ordinance all unfilled wetlands of 5 acres or more that are shown on the final wetland inventory maps prepared by the Department of Natural Resources. ¹²⁴⁶ However, the following are exempted from city ordinance:

- Any wetlands that are filled prior to the date a city receives a final wetlands map from the Department of Natural Resources. 1247
- Any wetlands on the landward side of a bulkhead line, established by the city prior to May 7, 1982, and between that bulkhead line and the ordinary highwater mark.

If the city fails to adopt an ordinance within 6 months after receiving the final wetland inventory maps, or if the department determines that the city's adopted ordinance fails to meet the reasonable minimum standards in accomplishing shoreland protection objectives, the Department of Natural Resources must adopt an ordinance for that city. 1248

¹²⁴⁵WIS. STAT. ANN. § 23.32 (West 1989 & Supp. 1993).

¹²⁴⁶Id. § 62.231(3) (West 1988).

¹²⁴⁷Id. § 62.231(2).

¹²⁴⁸Id. § 62.231(6).

The same requirement of zoning of wetlands in shorelands imposed on cities applies to villages. 1249

Iowa (region 5).—According to Iowa's Protected Wetlands law, ¹²⁵⁰ the department of Natural Resources is required to develop and implement a program for the acquisition of wetlands and conservation easements on and around wetlands that result from the closure or change in use of agricultural drainage wells. ¹²⁵¹ It must inventory the wetland and marshes of each county and make a preliminary designation as to which constitute protected wetlands. ¹²⁵²

In making the preliminary designations, the department must consult with the county conservation board. Upon completion of the preliminary wetlands designation, it must use an existing map or prepare a map and a list of the wetlands and marshes which are designated as protected wetlands in each county. 1254

The department must file a copy of the map and the list with the county conservation board and the county recorder and notify the landowners affected by the preliminary wetlands designation. ¹²⁵⁵

Moreover, landowners are allowed to challenge the designation of the protected wetlands or request the designation of additional marshes or wetlands as protected wetlands. 1256

The law prohibits individuals from draining a protected wetland without first obtaining a permit from the department. Violators of the permit requirement are subject to a civil penalty of not more than \$500 for each day of violation. The department can issue such permit only if—

the protected wetland is placed by the applicant who has a wetland of equal or greater value; or

the protected wetland does not meet the criteria for continued designation as a protected wetland. 1259

However, the Iowa protected wetlands law does not prevent a landowner from using the bed of a protected wetland for pasture or cropland if there is no construction of dikes, ditches, tile lines, or buildings and the agricultural use does not result in drainage. 1260

Texas (**regions 6 & 7**).—In Texas, the Parks and Wildlife Department, in conjunction with the General Land Office, must develop and adopt a State Wetlands Conservation Plan for State-owned coastal wetlands. The Texas Water Commission and other State agencies and local governments must assist in developing and implementing

¹²⁴⁹WIS. STAT. ANN. § 62.351 (West 1988).

¹²⁵⁰Protected Wetlands Law, IOWA CODE ANN. § 456B.1 et seq. (West Supp. 1993).-For an excellent article on Iowa Federal and state regulations concerning wetlands, *see Federal and State Regulation of Wetlands in Iowa*, 41 DRAKE L. REV. 139 (1992).

¹²⁵¹Id. § 456B.11.

¹²⁵²Id. § 456B.12.

¹²⁵³Id.

¹²⁵⁴Id.

¹²⁵⁵Id.

¹²⁵⁶Id.

¹²⁵⁷Id. § 456B.13.

¹²⁵⁸Id. § 456B.14.

¹²⁵⁹Iowa Code Ann. § 456B.13.

¹²⁶⁰Id.

the plan. Moreover, the Department and Land Office must consult with Federal agencies in developing and adopting the plan. ¹²⁶¹

Under the Wetlands Act, ¹²⁶² the term *wetlands* does not include—irrigated acreage used as farmland;

constructed wetlands of less than 1 acre; or constructed wetlands not constructed with wetland creation as a stated objective. 1263

The Wetlands Conservation Plan must include the following factors: 1264

- A definition of the term *wetlands*.
- A policy framework for achieving a goal of no overall net loss of State-owned coastal wetlands.
- Provisions for an inventory of State-owned coastal wetlands.
- Provisions for an inventory of sites for compensatory mitigation, enhancement, restoration, and acquisition priorities.
- Clarification and unification of wetland mitigation policies.
- Development of guidelines and regulations for mitigation done in advance for losses.
- Evaluation of requirements of freshwater inflow to estuaries that affect Stateowned coastal wetlands.
- Preparations for a long-range navigational dredging and disposal plan.
- Provisions for scientific studies examining the effects of boat traffic in sensitive coastal wetland areas and for education of the public to the effects of boating in wetlands.
- Provisions to encourage the reduction of nonpoint source pollution of coastal wetlands, bays and estuaries.
- Development of a networking strategy to improve coordination among existing Federal and state agencies with respect to coastal wetland.
- A public education program on wetlands with the responsibility for the production of such material.
- Participation in the establishment of a National Wetlands Information Center by the Federal Government.
- Evaluation of the feasibility and effect of sediment bypassing from reservoirs to bays, and estuaries.
- Consideration of sea level rise as it relates to coastal wetlands.
- Provisions consistent with the department's Texas Wetlands Plan.
- A plan to acquire coastal wetlands.
- Any other matter affecting State-owned coastal wetlands.

¹²⁶¹TEXAS PARKS & WILD. CODE ANN. § 14.002(a) (West Supp. 1995).

¹²⁶²Wetlands Act, TEXAS WATER CODE ANN. § 11.501 et seq.-(West Supp. 1995).

¹²⁶³Id. § 11.502(4) (West Supp. 1995).

¹²⁶⁴Id. § 14.002(b) (West Supp. 1995).

The Coastal Wetland Acquisition Act¹²⁶⁵ was enacted with the following policies: ¹²⁶⁶

- To protect the property rights of those who sell interests in land to the State by fairly compensating the sellers.
- To protect that coastal wetland that is most essential to the public interest by acquiring fees for the coastal wetland and managing it in a manner that will preserve and protect the productivity and integrity of the land as coastal wetland.
- To assure that the state does not expend funds to acquire any coastal wetland to which it already holds a valid title at the time of the expenditure.

Coastal wetland is wetland underlying or adjacent to tidal water in the coastal area. The condemnation exercised pursuant to the Coastal Wetland Acquisition Act does not apply to coastal wetland that is used only for farming or ranching activities, including maintenance and repair of buildings, earthworks, and other structures. 1268

Under the Coastal Wetland Acquisition Act, the land office has the mandatory duties to certify coastal wetland that is most essential to the public interest, assign priority for acquisition, or revoke such certification. Moreover, in selecting and certifying coastal wetland most essential to the public interest, and in assigning priorities of acquisition to coastal wetland, the land office and the acquiring agency must consider a number of criteria, including—

whether the land is a wetland within the definition, intent, and purpose of the Coastal Wetland Acquisition Act;

whether the State owns the coastal wetland or claims title to it;

the biological, geological, or physical characteristics of the coastal wetland;

the degree to which the coastal wetland is in danger of being altered, damaged, or destroyed, and the imminence of that danger; and the cost of acquiring the coastal wetland. 1270

Under this act, the acquiring agency can compensate the seller of land with funds obtained through—

a gift, grant, or devise;

legislative appropriation; or

a gift or grant from the United States. 1271

Oregon (region 9).—In 1989, the Oregon Wetland Inventory and Wetland Conservation Plans law became effective; its primary purpose is to protect and manage wetland resources. ¹²⁷² Under this law, the Division of State Lands has the mandatory obligation to compile and maintain a comprehensive Statewide Wetlands

¹²⁶⁵Coastal Wetland Acquisition Act, TEXAS NAT. RES. CODE ANN. § 33.231 et seq. (West Supp. 1995).

¹²⁶⁶Id. § 33.232.

¹²⁶⁷Id. § 33.233(3).

¹²⁶⁸ Id. § 33.235.

¹²⁶⁹Id. § 33.236.

¹²⁷⁰Id. § 33.237(a).

¹²⁷¹Id. § 33.238.

¹²⁷²Wetland Inventory and Wetland Conservation Plans, OR. REV. STAT. § 196.668 et seq. (1989).

Inventory. ¹²⁷³ In compiling and updating the inventory, the division must identify opportunities for wetland creation, restoration, and enhancement when the information is available. ¹²⁷⁴ It must provide each city and county planning office with copies of the inventory covering the local jurisdiction. ¹²⁷⁵ Moreover, copies of the inventory must be made available to the general public. ¹²⁷⁶

Any city or county is allowed to develop and submit to the division a wetland conservation plan for review, ¹²⁷⁷ subject to the approval (with or without conditions) or denial of the director of the division. ¹²⁷⁸ However, the conservation plan must provide the following information: ¹²⁷⁹

- A description and maps of the area to be covered by the plan.
- A detailed inventory of the wetlands, identifying the location, quality, and quantity of the wetland resource and the source of the water for the wetlands within the area covered by the plan.
- An assessment of wetland functions and values, including a historical analysis
 of wetland degradation, alterations, and losses.
- Designation of wetland areas for protection, conservation or development (wetlands within areas designated for development must be delineated to determine regulatory boundaries).
- A mitigation plan, including a program for replacement of planned wetland losses and restoration of lost functions and values through creation of new wetlands or enhancement of existing wetland areas, which designates specific sites within the plan area and actions for restoration and enhancement.
- Policies and implementing measures establishing protection, conservation, and best use of the wetlands in the plan area.
- Specification of sites for fill or removal, or both, and the conditions and procedures under which fill or removal, or both, may occur.
- Monitoring provisions that insure the wetland mitigation measures are implemented and mitigation goals are achieved.
- Identification of public uses of the wetlands and water and conflicting planned uses.
- Specification of buffer areas and uses permitted on lands that are adjacent to
 wetlands and that are essential to maintain, protect, or restore wetland functions
 and values.

In addition, the conservation plan must comply with the following standards: 1280

 Uses and activities allowed in the plan, including fill or removal, or both, conform to sound policies of conservation and will not interfere with public health and safety.

¹²⁷³OR. REV. STAT. § 196.674(1).

¹²⁷⁴Id. § 196.674(9).

¹²⁷⁵Id. § 196.674(4).

¹²⁷⁶Id. § 196.674(6).

¹²⁷⁷Id. § 196.678(1).

¹²⁷⁸Id. § 196.681(6).

¹²⁷⁹Id. § 196.678(2).

¹²⁸⁰Id. § 196.681(3).

- Uses and activities allowed in the plan, including fill or removal, or both, are
 consistent with the protection, conservation, and best use of the water resources
 of Oregon and the use of State bodies of water for navigation, fishing, and
 public recreation.
- Designation of wetlands for protection, conservation, and development is
 consistent with the resource functions and values of the area and the capability
 of the wetland area to withstand alterations and maintain important functions
 and values.

The Oregon law requires permits for removal or fill in areas subject to an approved wetland conservation plan. ¹²⁸¹ The director, however, may authorize site-specific fill or removal without an individual permit. ¹²⁸² The division must issue a permit if the removal or fill, or both, is consistent with the wetland conservation plan or can be conditioned to be consistent with the plan. ¹²⁸³

Local governments are required under the Oregon Wetland Conservation law to notify the division of any proposed amendments to the land use plan and ordinances affecting lands subject to an approved wetland conservation plan. Amendments to plan policies, maps, and implementing ordinances by the local government will be subject to review by the division against the requirements of the Oregon Wetland law. Moreover, the director is required to review each approved wetland conservation plan every 5 years. 1286

In addition, any city or county may also submit an acknowledged estuary management plan as a wetland conservation plan for review and approval by the division. ¹²⁸⁷ An acknowledged estuary management plan follows the comprehensive plan and land use regulations adopted by cities and counties to satisfy the requirement of Statewide planning goals regarding estuarine resources, including shoreland portions of estuarine sites designated for development. ¹²⁸⁸

In addition to its Wetland Inventory and Wetland Conservation Plans law, Oregon Legislature also enacted the Oregon Wetlands Mitigation Bank Act of 1987, 1289 becoming effective on September 1989, with the following policies: 1290

- To promote, in concert with other Federal and state programs as well as interested parties, the maintenance, and conservation of wetlands.
- To improve cooperative efforts among private, nonprofit, and public entities for the management and protection of wetlands.
- To offset losses of wetland values caused by activities which otherwise comply with State and Federal laws to create, restore, or enhance wetland values and functions.
- To maintain and encourage a predictable, efficient regulatory framework for environmentally acceptable development.

¹²⁸¹OR. REV. STAT. § 196.682(1).

¹²⁸²Id. § 196.681(7).

¹²⁸³Id. § 196.682(1).

¹²⁸⁴Id. § 196.684(1).

¹²⁸⁵Id. § 196.684(2).

¹²⁸⁶Id. § 196.684(6).

¹²⁸⁷Id. § 196.686(2).

¹²⁸⁸Id. § 196.686(1).

 $^{^{1289}}$ Oregon Wetlands Mitigation Bank Act of 1987, Or. Rev. Stat. § 196.600 to § 196.665 (effective 1989). 1290 Id. § 196.605.

• To provide an option for achieving offsite mitigation when such mitigation is required under a removal or fill permit.

Under this act, the Oregon Wetlands Mitigation Bank Revolving Fund Account is created, separate, and distinct from the General Fund. ¹²⁹¹ The account includes moneys—

appropriated for that purpose by the legislative assembly;

awarded for such purposes as specifically stipulated under grants through the Federal Emergency Wetlands Resources Act of 1986, or the Federal Coastal Zone Management Act of 1972;

obtained by gift, bequest, donation, or grant from any other public or private source;

repaid from the account, including interest on such moneys; and

obtained from interest or other earnings from investments of moneys in the account. All moneys received into the account must be paid into the State treasury and credited to the account. 1292

The account can be used for a number of purposes, including—

the voluntary acquisition of land suitable for use in mitigation banks;

payment for costs incurred for alterations necessary to create, restore, or enhance wetland areas;

payment of administrative, research, or scientific monitoring expenses of the division;

dispersal of funds received under the Federal Coastal Zone Management Act of 1972 for such purposes as specifically stipulated in a grant award; and

for the dispersal of funds received under the Federal Emergency Wetlands Resources Act of 1986 for the voluntary acquisition of wetlands and interests therein as identified in the wetlands provisions of the Statewide Comprehensive Outdoor Recreation Plan. 1293

Under the Wetlands Mitigation Bank Act, the director must do the following:

- Initiate and implement a program for wetlands mitigation banks, upon approval of the State Land Board. 1294
- Adopt, by rule, standards, and criteria for the site selection process, operation, and evaluation of mitigation banks, upon the approval of the State Land Board. 1295
- Evaluate the wetlands functions and values created within each wetland mitigation bank site annually. 1296
- Compare the current functions and values with the functions and values that the director anticipated the site would provide annually. 1297

¹²⁹¹OR. REV. STAT. § 196.640(1).

¹²⁹²Id. § 196.640(2).

¹²⁹³Id. § 196.650.

¹²⁹⁴Id. § 196.615(1).

¹²⁹⁵Id. § 196.615(2).

¹²⁹⁶Id. § 196.620(10)(a).

¹²⁹⁷Id. § 196.620(10)(b).

- Maintain a record of fill and removal activities and actions for each mitigation bank and pilot program implemented and conduct monitoring of banks with moneys from the Oregon Wetland Mitigation Bank Revolving Fund Account.¹²⁹⁸
- Provide quarterly reports to the State Land Board on moneys spent and received for each wetland mitigation bank.¹²⁹⁹
- Consult and cooperate with other agencies and interested parties. ¹³⁰⁰

Moreover, the division must establish—

a well-defined plan, including preliminary objectives, inventory of resource values, and an evaluation and monitoring program for each mitigation bank; ¹³⁰¹ and

a system of resource values and credits. 1302

California (region 10).—Recognizing that "the remaining wetlands . . . are of increasingly critical economic, aesthetic, and scientific value to the people of California, and . . . there is a need for an affirmative and sustained public policy program directed at their preservation, restoration, and enhancement, in order [for] such wetlands [to] continue in perpetuity . . . ," the California Legislature enacted the Keene-Nejedly California Wetlands Preservation Act. 1303

This act allows both the Department of Parks and Recreation and the Department of Fish and Game to acquire interests (less than a simple absolute fee) in real property to protect, preserve, and restore wetlands. ¹³⁰⁴ In consulting and cooperating with applicable cities and counties, both departments must cooperatively conduct a joint study to identify those wetlands that are subject to irreversible modification and that should be acquired, protected, and preserved in perpetuity. The study must set forth a plan for the acquiring, protecting, preserving, restoring, and enhancing wetlands, including funding requirements and the priority status of specific proposed wetlands projects. ¹³⁰⁵ In preparing the wetlands priority plan and program, the departments must recognize conservation, recreation, and open-space plans and programs of local agencies, and, if feasible, must identify and devise cooperative means for planning and for the protecting and preserving of wetlands by local agencies. ¹³⁰⁶

Furthermore, both departments can enter into operating agreements with cities, counties, and districts for the management and control of wetlands. 1307

¹²⁹⁸OR. REV. STAT. § 196.625(1).

¹²⁹⁹Id. § 196.625(2).

¹³⁰⁰Id. § 196.635.

¹³⁰¹Id. § 196.615(3).

¹³⁰²Id. § 196.620(1).

¹³⁰³CAL. PARKS CODE § 5801 through 5818 (West 1984). For expenditures of funds for wetlands acquisition, preservation, restoration and enhancement, California Wildlife, Coastal, and Park Land Conservation Act, CAL. PUB. RES. CODE § 5907 (West Supp. 1995).

¹³⁰⁴CAL. PARKS CODE § 5813.

¹³⁰⁵Id. § 5814.

¹³⁰⁶Id. § 5815.

¹³⁰⁷Id. § 5817.

Tennessee (regions 11 & 12).—The U.A. Moore Wetlands Acquisition Act¹³⁰⁸ of Tennessee was enacted with the following purposes: 1309

- To preserve certain wetlands and bottomland hardwood forests of the State.
- To authorize the director of the Wildlife Resources Agency to acquire wetlands and forests to preserve such lands and forests.
- To authorize the director to make expenditures from the 1986 wetland acquisition fund for the purpose of acquiring certain upland hardwood forests that are located within Scott and Campbell Counties.

The act defines *wetlands* as lands that have hydric soils and a dominance (50 percent or more of stem count based on communities) of obligate hydrophyes; wetlands include the following generic types: fresh water meadows, shallow fresh water marshes, shrub swamps with semipermanent water regimes most of the year, wooded swamps or forested wetlands, open fresh water except farm ponds, and bogs. ¹³¹⁰

The act provides that the priorities for wetlands and bottomland hardwood forest acquisition will be controlled jointly by the director and the commissioner of agriculture. To encourage preservation, it further provides that wetlands and bottomland hardwood forests acquired by Tennessee are exempt from all State and local property taxes. The creates a special agency account, known as the Compensation Fund, to reimburse each affected city and county by the amount so determined. In addition, it specifically prohibits acquisition of wetlands and forests through condemnation or the use of eminent domain. This prohibition does not apply to certain property in Scott and Campbell Counties known as the Koppers Properties. Properties.

The director is authorized to do the following:

- Maintain an inventory of rare and significant biological and geological wetlands and bottomland hardwood forests worthy of protection.
- Enter into agreements with private corporations to identify and acquire wetland and forests. ¹³¹⁶

Wetlands conservation laws in selected counties

Clark and Adams Counties, Wisconsin, have similar Shoreland/Wetland Zoning Ordinances regarding shoreland protection. The regulated areas include all shorelands that are—

within 1,000 feet of the ordinary high water mark (OHWM) of navigable lakes, ponds, or flowages; and

within 300 feet of OHWM of navigable rivers or streams, or to the landward site of the flood plain, whichever distance is greater.

¹³⁰⁸A.U. Moore Wetlands Acquisition Act, TENN. CODE ANN. § 11-14-401 et seq. (1992).

¹³⁰⁹Id. § 11-14-401.

¹³¹⁰Id. § 11-14-401(b)(B).

¹³¹¹Id. § 11-14-402.

¹³¹²Id. § 11-14-405.

¹³¹³Id. § 11-14-406.

¹³¹⁴Id. § 11-14-407.

¹³¹⁵Id. § 11-14-404.

¹³¹⁶Id. § 11-14-403.

All cities, villages, towns, and counties must comply with these ordinances and secure the necessary permits. Permits are specifically required before any new development, or any change in the use of an existing building or structure is initiated or before any land use is substantially altered. To protect shoreland/wetland, these ordinances contain a number of provisions concerning the dimensions of building sites, setbacks, removal of shore cover, and filling, grading, lagooning, dredging, ditching, and excavating. In addition, the counties' shorelands are divided into three particular districts: shoreland-wetland districts, recreational-residential districts, and general-purpose districts.

Clark County, Wisconsin (region 4).—The Clark County Board adopted the

Shoreland/Wetland Zoning Ordinance with a number of purposes, including—furthering the maintenance of safe and healthful conditions and preventing and controlling water pollution;¹³¹⁷

protecting spawning grounds, fish, and aquatic life; 1318

controlling building sites, placement of structures, and land uses; ¹³¹⁹ and preserving shore cover and its natural beauty. ¹³²⁰

The areas that are regulated include all the shorelands that are—

within 1,000 feet of the ordinary high water mark (OHWM) of navigable lakes, ponds or flowages; ¹³²¹ and

within 300 feet of the OHWM of navigable rivers or streams, or to the land-ward side of the flood plain, whichever distance is greater. ¹³²²

The ordinance designates the zoning administrator to be responsible for determinations of navigability or the OHWM. However, when a question arises, the zoning administrator must contact the appropriate district office of the Wisconsin Department of Natural Resources for a final determination of navigability or OHWM.¹³²³

Unless specifically exempted by law, all cities, villages, towns, and counties must comply with the Shoreland/Wetland Protection Ordinance and secure necessary permits. Permits are specifically required before any new development, or any change in the use of an existing building or structure is initiated, or before any land

¹³¹⁷Clark Shoreland Protection Ordinance, WI § 17.08.030.A. This purpose can be established through a number of ways, including

⁻ limiting structures to those areas where soil and geological conditions will provide a safe foundation;

⁻ establishing minimum lot sizes to provide adequate area for private sewage disposal facilities; and

[–] controlling, filling, and grading to prevent serious soil erosion problems.

¹³¹⁹Id. § 17.08.030.C. This purpose can be achieved through

⁻ separating conflicting land uses,

⁻ prohibiting certain uses detrimental to the shoreland area,

⁻ setting minimum lot sizes and widths, and

⁻ regulating side yards and building setbacks from roadways and waterways. Id.

¹³²⁰Clark Shoreland Protection Ordinance, WI § 17.08.030.D. This purpose can be achieved through

⁻ restricting the removal of natural shoreland cover,

⁻ preventing shoreland encroachment by structures,

⁻ controlling shoreland excavation and other earth-moving activities,

⁻ regulating the use and placement of boathouses and other structures, and

⁻ controlling the use and placement of signs. Id.

¹³²¹Id. § 17.08.070.A (1985).

¹³²²Clark Shoreland Protection Ordinance, WI § 17.08.070.B.

¹³²³Id. § 17.08.070.C.

¹³²⁴Id. § 17.08.080.A.

use is substantially altered. This ordinance does not require approval or is subject to disapproval by any town or town board. 1326

The planning and zoning committee is authorized with a number of powers and duties, including—

hearing and recommending a decision to the county board on proposed map and text amendments to this ordinance;

hearing and deciding applications for special exception permits;

authorizing upon appeal, in specific cases, such variance from the dimensional standards of the ordinance; and

reviewing, accepting/objecting, and assisting the county board in deciding on applications for shoreland area subdivisions. 1327

The county board must appoint a board of adjustment,¹³²⁸ with the main power and duty of hearing and deciding appeals where it is alleged there is error in any order, requirements, decision or determination made by an administrative official in the enforcement of this ordinance.¹³²⁹ Furthermore, as a method of enforcement, the ordinance imposes a fine of not less than \$10 and no more than \$200 (plus taxable costs of the action) for any violation of any provision of the ordinance. Each day of continued violation constitutes a separate offense.¹³³⁰

To protect the shoreland/wetland, the Clark County Ordinance contains a number of provisions concerning the dimensions of building sites; ¹³³¹ setbacks; ¹³³² removal of shore cover; ¹³³³ and filling, grading, lagooning, dredging, ditching, and excavating. ¹³³⁴ Moreover, the ordinance allows nonconforming uses to continue if a number of conditions are met. ¹³³⁵ Some of these conditions include—

future conforming with the ordinance when the nonconforming use is discontinued for twelve months; 1336

the nonconforming use of the structure may not be intensified;¹³³⁷ and conformity with the ordinance is required for a rebuilding of a nonconforming structure if such nonconforming structure is destroyed by fire, wind, or other disasters.¹³³⁸

¹³²⁵Clark Shoreland Protection Ordinance, WI § 17.08.750 For the permit application process. § 17.08.760; for expiration period. § 17.08.770; for issuance of certificate of compliance. § 17.08.780; for contents of certificate of compliance. § 17.08.800.

¹³²⁶Id. § 17.08.100.A.

¹³²⁷Id. § 17.08.830.

¹³²⁸Id. § 17.08.900.

¹³²⁹Id. § 17.08.910.B.

¹³³⁰Id. § 17.08.990.

¹³³¹Id. § 17.08.120 to 17.08.150.

¹³³²Id. § 17.08.160 to 17.08.180.

¹³³³Id. § 17.08.190 to 17.08.230.

¹³³⁴Id. § 17.08.240 to 17.08.280.

¹³³⁵Id. § 17.08.290.

¹³³⁶Id. § 17.08.290.A.

¹³³⁷Id. § 17.08.290.E.

¹³³⁸Id. § 17.08.290.F.

Clark County shorelands are divided into three particular districts: shoreland-wetland district, recreational-residential district, and general purpose district. ¹³³⁹ Each of these districts shall be discussed in turn.

Shoreland-wetland district.—This district includes all shorelands that are designated as wetlands based on the Wisconsin Wetland Inventory Maps. ¹³⁴⁰ Zoning permit is generally required; however, the ordinance provides a number of exemptions. The activities and uses that do not require zoning permits, but must be carried out without filling, flooding draining, dredging, ditching, tiling, or excavating, ¹³⁴¹ are as follows:

- Recreational activities, such as hiking, horseback riding, fishing, trapping, hunting, swimming, and boating.
- The harvesting of wild crops, such as marsh hay, ferns, moss, wild rice, berries, tree fruits, and tree seeds, in a manner that is not injurious to the natural reproduction of such crops.
- The pasturing of livestock.
- The cultivation of agricultural crops.
- The practice of silviculture, including the planting, thinning, and harvesting of timber.
- The construction and maintenance of duck blinds.

The following uses do not require zoning permits, but may include filling, flood draining, dredging, ditching, tiling, or excavating: 1342

- Temporary water levels stabilization measures that are necessary to alleviate abnormally wet or dry conditions that would have an adverse impact on silvicultural activities if not corrected.
- Flooding, dike, and dam construction, and ditching for the purpose of growing and harvesting cranberries.
- Ditching, tiling, dredging, excavating, or filling done to maintain or repair
 existing agricultural drainage systems only to the extent essential to maintain
 the level of drainage required to continue the existing agricultural use and
 permissible under the law.
- Construction and maintenance of fences for the pasturing of livestock, including limited excavating and filling necessary for such construction and maintenance.
- Construction and maintenance of piers, docks, and walkways built on pilings, including limited excavating and filling necessary for such construction and maintenance.
- Limited excavating and filling necessary for the maintenance, repair, replacement, and reconstruction of existing town and county highways and bridges.

¹³³⁹Clark Shoreland Protection Ordinance, WI § 17.08.300.

¹³⁴⁰Id. § 17.08.320.

¹³⁴¹Id. § 17.08.350.A.

¹³⁴²Id. § 17.08.350.B.

Recreational-residential district.—This district includes all shorelands that are based on the shoreland zoning maps. 1343 In this district, residential, recreational, and conservancy uses are allowed. Moreover, a limited number of commercial uses serving recreational needs are permitted as special exceptions. 1344 The ordinance provides that the permitted uses in this district are the following: 1345

- The uses permitted in the Shoreland-Wetland District.
- Year-round and seasonal single-family dwellings for owner occupancy, rent, or lease.
- Accessory uses.
- Signs of a specific type, size, and location.

Uses that are allowed under the issuance of a special exception permit are as follows:1346

- Hotels, resorts (including two or more single-family dwellings for rent or lease), motels, restaurants, dinner clubs, taverns, and other private clubs.
- Institutions of a philanthropic or educational nature.
- Recreational camps and campgrounds.
- Gift and specialty shops customarily found in recreational areas.
- Marinas, boat liveries, sale of bait, fishing equipment, boats and motors, fish farms, or forest industries.
- Mobile home parks. 1347
- Travel trailer parks. 1348
- Signs that are larger or in greater number than are permitted if such signs are determined to be necessary to adequately inform the public.
- Boathouses, provided that they meet the prescribed color standards so that the color does not detract from the natural beauty of the shoreline.

General purpose district.—This district includes all shorelands that are not in the shoreland-wetland district or recreational-residential district. 1349 This district is established with the purpose that, since areas other than those mentioned are

¹³⁴³Clark Shoreland Protection Ordinance, WI § 17.08.380.

¹³⁴⁴Id. § 17.08.390.

¹³⁴⁵Id. § 17.08.400.

¹³⁴⁶Id. § 17.08.410. This section provides that, unless otherwise specified, any structure must be at least 100 feet from a residence other than that of the owner of the establishment, his or her agent or employee, 75 feet from a residential property line, or 25 feet from any lot line. ¹³⁴⁷A number of conditions are applicable to mobile home parks. These conditions include:

[•] The minimum size of mobile home parks is 10 acres.

The maximum number of mobile homes is ten per acre.

The minimum dimensions of a mobile home site is 50 feet wide by 100 feet long.

All drives, parking areas and walkways must be hard-surfaced or graveled, maintained in good conditions, have natural drainage and the driveways must be lighted at night. Id. § 17.08.410.F. For the complete list of these conditions, Clark Shoreland Protection Ordinance, WI.

¹³⁴⁸A number of conditions are also applicable. Some of these conditions include:

[•] Minimum size of a traveler trailer park site is 5 acres.

Maximum number of travel trailers is 15 per acre.

[•] Minimum dimensions of a travel trailer site is 25 feet wide by 40 feet long, Id. § 17.08.410.G. For the complete list of these conditions, Id.

¹³⁴⁹Id. § 17.08.430.

potentially suited to a wide range of uses, ¹³⁵⁰ a detailed county-wide comprehensive planning is necessary to select appropriate prospective locations for these uses and designate specific zones for each of them along navigable water. 1351

The ordinance prescribes the following permitted uses:

- Commercial, agricultural, residential, forestry, and recreational uses are allowed if they comply with the general provisions of the ordinance, and nonresidential structure must be located at least 50 feet from a property line.
- Farm animals must be housed at least 1,000 feet from any residential dwelling on a nonfarm lot.
- All new construction of farm buildings housing animals, and all new barnyards or feedlots, must be located at least 300 feet from any navigable water, and must be located so that manure will not drain into any navigable water.
- All barnyards, holding pens, or animal feeding facilities located within 300 feet of any navigable water are subject to periodic inspection and review for possible pollution of those water. Moreover, waste collection and disposal systems may be required to prevent the manure from draining into any navigable water.

The ordinance provides that while industrial uses may be allowed upon issuance of a special exception permit by the planning and zoning committee, solid waste disposal use may be permitted upon issuance of a permit from the Department of Natural Resources and a special exception permit by the planning and zoning committee. 1352

Adams County, Wisconsin (region 4).—Adams County, Wisconsin, has adopted the Shoreland Protection Ordinance¹³⁵³ almost identical to the Shoreland/Wetland Protection Ordinance of Clark County, Wisconsin.

Wetlands conservation laws in the Chesapeake Bay critical area

Geographically allocated around the Chesapeake Bay area, Anne Arundel, Baltimore, and Harford Counties, Maryland, enacted Chesapeake Bay Critical Area and Wetlands Ordinances to protect the estuarine system. Within the Chesapeake Bay area, there are provisions for grading and sediment control, stormwater management, and zoning.

All persons who want to perform clearing, stripping, excavating, or grading on land or create burrow pits, spoil areas, quarries, material processing plants, or related facilities must obtain permits. In addition to other requirements, the ordinances provide that there must be a minimum 100-foot buffer landward from the mean high-water line of tidal water, tributary streams, and tidal wetlands. The ordinances also require the permit applicants to install or construct storm management facilities for a proposed development for managing increased runoff. Furthermore, the purpose of the zoning provisions is to divide the counties into zoning districts to minimize adverse impacts on water quality, conserve land, fish, and wildlife

1352 Id. § 17.08.460.

¹³⁵⁰The wide range of uses may include industrial, commercial, agricultural, residential, forestry, and recreational uses. Id. § 17.08.440.

¹³⁵¹Clark Shoreland Protection Ordinance, WI § 17.08.440.

¹³⁵³Adams County Shoreland Protection Ordinance § 1.0 et seq. (1990).

habitat, and foster more sensitive development activity for shoreline areas. These districts include critical area district, industrial district, and maritime group district.

Anne Arundel County, Maryland (region 1).—Acknowledging that the Chesapeake Bay area is an estuarine system of great importance to the State and to the nation as a whole, Maryland has enacted the Chesapeake Bay Critical Area Act. The Chesapeake Bay Critical Area Program Development Criteria in carrying out that act requires local jurisdictions to implement a management and resource protection program for those areas within 1,000 feet of tidal water and tidal wetlands and any additional areas that a local jurisdiction deems important. Also recognizing the importance of protecting the resources of the Chesapeake Bay, in 1993, the County Council of Anne Arundel County enacted the Chesapeake Bay Critical Area and Wetlands Ordinance, which in the same year, was re-enacted with the purpose of correcting some deficiencies in the previous ordinance.

Within the Chesapeake Bay area, there are provisions for grading and sediment control, stormwater management, and zoning. Each will be discussed in turn.

Grading and sediment control.—All persons who wish to perform clearing, stripping, excavating, or grading on land or create borrow pits, spoil areas, quarries, material processing plants, or related facilities must obtain permits. ¹³⁵⁷

To control soil erosion and sedimentation, the ordinance requires that there must be a minimum 100-foot buffer landward from the mean high-water line of tidal water, tributary streams, and tidal wetlands. This buffer must be expanded beyond 100 feet to include contiguous, sensitive areas such as steep slopes and hydric soils or highly erodible soils. Is If there are contiguous slopes of 15 percent or greater, the buffer must be expanded 4 feet for every 1 percent of slope or to the top of the slope, whichever is greater. Moreover, all development and grading activities in the critical area legally existing on or before December 1, 1985, are permitted if the applicable requirements are in compliance.

The ordinance provides a series of provisions for the critical areas. In the removal of trees, commercial harvesting of trees is allowed within a nontidal wetland if—sound silvicultural methods are used;

the harvesting undertaken must comply with a forest management plan and has been reviewed and approved by the State Forest, Park and Wildlife Service through the Anne Arundel County Forestry Board;

any commercial harvesting within nontidal wetlands must use forest harvest best management practices;

mitigation for commercial harvesting within nontidal wetlands must be done onsite through revegetation methods; and

¹³⁵⁴Chesapeake Bay Critical Area Act, Chapter 794, Laws of 1984.

¹³⁵⁵Id.

¹³⁵⁶County Council of Anne Arundel County, Maryland, the Chesapeake Bay Critical Area and Wetlands Ordinance, Legislative Session 1993, Legislative Day No. 40, Bill No. 120-93, reenacting, Bill No. 61-93.

¹³⁵⁷County Council of Anne Arundel County, Maryland, the Chesapeake Bay Critical Area and Wetlands Ordinance, Legislative Session 1993 § 2-201.

¹³⁵⁸Id. § 2-301(i).

¹³⁵⁹Id.

¹³⁶⁰Id. § 2-301(i).

¹³⁶¹Id. § 2-301(j).

clear cutting must be approved as part of an approved forest management plan. 1362

Moreover, to alter forest and developed woodland in limited development areas and resource conservation areas, a developer must comply with a set of requirements. ¹³⁶³ Moreover, when the woodland or forest is not replaced onsite or offsite, a developer must pay certain fees to the county. ¹³⁶⁴

Stormwater management.—The ordinance requires the permit applicant to install or construct storm management facilities for a proposed development for managing increased runoff. ¹³⁶⁵ It must be done so that—

zero-year predevelopment peak discharge is not exceeded and the predevelopment volume is not exceeded in 36 hours for sites in the critical areas;

accelerated channel erosion will not occur as a result of the proposed development; and

water quality will be improved for sites in the critical area. 1366

The water quality must be improved in the following specific ways:

- In intensely developed areas, pollutant loadings from impervious surfaces must be reduced by at least 10 percent.
- In limited development areas and resource conservation areas, stormwater runoff from impervious surfaces cannot cause downstream property, watercourses, channels, or conduits to receive stormwater runoff at a higher volume or rate than would have resulted from a 10-year storm were the land in a predevelopment state.

Zoning.—The purpose of the zoning provisions is to divide the county into zoning districts to minimize adverse impacts on water quality, conserve land, fish, and wildlife habitat, and foster more sensible development activity for shoreline areas. These districts include critical area district, industrial district, and maritime group district.

Critical area district.—The critical area district is zoned with the purpose to minimize adverse impacts on water quality, conserve land, fish, and wildlife habitat and foster more sensible development activity for shoreline areas. Within this area, the land is divided into intensely developed areas, limited development areas, and resource conservation areas. ¹³⁶⁹

Within the critical resource conservation areas, the ordinance only allows the existing industrial and commercial facilities, including facilities that directly support forestry, agriculture, aquaculture, or residential development, that have a density not greater than one unit for each 20 acres. ¹³⁷⁰ Roads, bridges, or utilities

¹³⁶²Clark Shoreland Protection Ordinance, WI § 2-314(a).

¹³⁶³Id. § 2-314(c).

¹³⁶⁴Id. § 2-314(d).

¹³⁶⁵Id. § 3-203(a).

¹³⁶⁶County Council of Anne Arundel County, Maryland, the Chesapeake Bay Critical Area and Wetlands Ordinance, Legislative Session 1993 § 3-203(a).

¹³⁶⁷Id. § 1-222.

¹³⁶⁸Id. § 1A-101.

¹³⁶⁹Id. § 1A-103(A).

¹³⁷⁰Id. § 1A-103(C).

are not permitted in any designated habitat protection area unless two conditions are met—

if there is no other feasible alternative; and

the roads, bridges, or utilities are located, designed, constructed, and maintained in compliance with a number of requirements, including

- each must provide maximum erosion protection and minimize negative impacts to wildlife and aquatic life and their habitats;
- hydrologic processes and water quality must be maintained;
- development activities that cross or affect streams must be designed to reduce increases in flood frequency and severity, retain tree canopy so as to maintain stream water temperature within normal variations, provide a natural substrate for streambeds, and minimize the adverse water quality and quantity impacts of stormwater.¹³⁷¹

Industrial district.—A number of subclass of industrial districts exist, including W1-Industrial Park District, W2-Light Industrial District, and W3-Heavy Industrial District. In all of these districts, water-dependent facilities located in the buffer in the critical area are allowed as a conditional use, provided that the applicable requirements are complied. These districts differentiate from each other by these applicable requirements.

Maritime group districts.—There are a number of subclass of this district, including MA1-Community Marina District, MA2-Commercial Marina District, MA3-Yacht Club District, MB-Maritime Group B District, and MC-Maritime Group C District.

Baltimore County, Maryland (region 1).—To comply with the purposes and requirements of the State Chesapeake Bay Critical Area Law, ¹³⁷² the Baltimore County Council enacted the Chesapeake Bay Critical Area Requirements Ordinance. ¹³⁷³

All applicants proposing development in the critical area must prepare a critical area plan, ¹³⁷⁴ which includes a very specific and numerous set of information. ¹³⁷⁵ However, the director of planning for development proposals may waive this requirement, provided that there is also a concurrent waiver of the director of the Department of Environmental Protection and Resource Management. ¹³⁷⁶

Within nontidal and tidal wetlands, the ordinance prohibits dredging, filling, or constructing other than approved bulkheading. This prohibition does not apply to proposed development that—

consists of utility, bridge, or street development in a nontidal wetland, and is not detrimental to the county's wetland management programs. 1378

¹³⁷¹County Council of Anne Arundel County, Maryland, the Chesapeake Bay Critical Area and Wetlands Ordinance, Legislative Session 1993 § 1A-103(f).

¹³⁷²Chesapeake Bay Critical Area Law, Md. Ann. Code, Nat. Res., tit. 8, subtit. 18, § 8-1801 et seq.

¹³⁷³ § 26-436 et seq.

¹³⁷⁴Id. § 26-442(a).

¹³⁷⁵Id. § 26-442(b). For the specific required information, Id.

¹³⁷⁶Id. § 26-443.

¹³⁷⁷Id. § 26-447.

¹³⁷⁸Id.

Moreover, to protect nontidal wetlands, the ordinance imposes the following requirements: 1379

- A minimum 25-foot buffer must be maintained around all nontidal wetlands.
- The hydrologic regime and water quality of nontidal wetlands must be
 protected by minimizing the alterations as to the surface or subsurface flow of
 water into and from the wetlands.
- If activities or uses (permitted as a result of their being water-dependent or of substantial economic benefit) will unavoidably cause adverse environmental effects to wetlands, they will be permitted only in conjunction with mitigation measures.
- For all nonagricultural activities, the Department of Environmental Protection and Resource Management must seek comments on mitigation plans from other agencies.

The ordinance also requires establishing a minimum 100-foot buffer landward from the mean high-water line of tidal water, tidal wetlands, and tributary streams. ¹³⁸⁰

Within habitat protection areas, all development activities or other land disturbances (including commercial tree harvesting and agricultural activities) are prohibited. Within intensely developed areas, new development, and redevelopment must use best management practices or other technology that reduces pollutant loading by 10 percent of the onsite level before new development or redevelopment. Within the limited development area, RC-20 and RC-50 zones, all development activities that cross or affect streams must be designed to—reduce increase in flood frequency and severity which are attributable to

the development, retain tree canopy so as to maintain stream water temperature within

provide a natural substrate for streambeds, and

minimize adverse water quality and quantity impacts of stormwater. Moreover, all developments are required to incorporate a wildlife corridor system that connects the largest most undeveloped or most vegetated tracts of land within the adjacent to the site. 1384

The ordinance prohibits developments of slope greater than 15 percent. The sum of all constructed impervious areas must not exceed 15 percent of the lot. The ordinance requires the developer to design an appropriate stormwater management system. Furthermore, within this area, all new or expanded water-dependent facilities must comply with the applicable procedures and standards. The sum of all the sum of the sum of

normal variation,

¹³⁷⁹Chesapeake Bay Critical Area Requirements, Baltimore County Code § 26-448.

¹³⁸⁰Id. § 26-449(a).

¹³⁸¹Id. § 26-451(a).

¹³⁸²Id. § 26-452(a).

¹³⁸³Id. § 26-453(a).

¹d. § 26-453(a). 1384Id. § 26-453(b).

¹³⁸⁵Id. § 26-453(d).

¹³⁸⁶Id. § 26-453(e).

¹³⁸⁷Id. § 26-453(h).

¹³⁸⁸Id. § 26-454.

Harford County, Maryland (region 1).—The County Council of Harford County also enacted a Chesapeake Bay Critical Area Ordinance.