

CHAPTER 6120
DEPARTMENT OF NATURAL RESOURCES
SHORELAND AND FLOODPLAIN
MANAGEMENT

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COUNTY MANAGEMENT OF STATE SHORELAND AREAS LOCATED IN UNINCORPORATED AREAS

6120.0100 DEFINITIONS.

Subpart 1. Scope of terms; shall; distances. For the purposes of these parts, certain terms or words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive. All distances unless otherwise specified shall be measured horizontally.

Subp. 2. Building line. "Building line" means that line measured across the width of the lot at the point where the main structure is placed in accordance with setback provisions.

Subp. 3. Cluster development. "Cluster development" means a pattern of subdivision development which places housing units into compact groupings while providing a network of commonly owned or dedicated open space.

Subp. 4. Conditional use. "Conditional use" means a use of shorelands which is permitted within a zoning district only when allowed by the county board of commissioners or their legally designated agent after a public hearing, if certain conditions are met which eliminate or minimize the incompatibility with other permitted uses of the district.

Subp. 5. Nonconforming use. "Nonconforming use" means any use of land

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established before the effective date of a county or local ordinance which does not conform to the use restrictions of a particular zoning district. This should not be confused with substandard dimensions of a conforming use.

Subp. 6. Normal high water mark. "Normal high water mark" means a mark delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. The normal high water mark is commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial.

Subp. 7. Public water. "Public water" means a body of water capable of substantial beneficial public use. This shall be construed to mean, for the purposes of these parts, any body of water which has the potential to support any type of recreational pursuit or water supply purpose. However, no lake, pond, or flowage of less than 25 acres in size and no river or stream having a total drainage area less than two square miles need be regulated by the county for the purposes of these parts. A body of water created by a private user where there was no previous shoreland, as defined herein, for a designated private use authorized by the commissioner shall be exempt from the provisions of the statewide standards and criteria.

A. The official determination of the size of lakes, ponds, or flowages shall be the areas listed in the Division of Waters, Soils and Minerals Bulletin No. 25, An Inventory of Minnesota Lakes, or in the event that lakes, ponds, or flowages are not listed therein, the official determination of size and physical limits shall be made by the commissioner.

B. The official determination of the size and physical limits of drainage areas of rivers and streams shall be made by the commissioner.

Subp. 8. Setback. "Setback" means the minimum horizontal distance between a structure and the normal high water mark or between a structure and a road or highway.

Subp. 9. Shoreland. "Shoreland" means land located within the following distances from public waters: 1,000 feet from the normal high water mark of a lake, pond, or flowage; and 300 feet from a river or stream, or the landward extent of a flood plain designated by ordinance on such a river or stream, whichever is greater. The practical limits of shorelands may be less than the statutory limits whenever the waters involved are bounded by natural topographic divides which extend landward from the waters for lesser distances and when approved by the commissioner.

Subp. 10. Structure. "Structure" means any building or appurtenance thereto, except aerial or underground utility lines, such as sewer, electric, telephone, telegraph, or gas lines, including towers, poles, and other supporting appurtenances.

Subp. 11. Subdivision. "Subdivision" means improved or unimproved land or lands which are divided for the purpose of ready sale or lease, or divided successively within a five year period for the purpose of sale or lease, into three or more lots or parcels of less than five acres each, contiguous in area and which are under common ownership or control.

Subp. 12. Substandard use. "Substandard use" means any use of shorelands existing prior to the date of enactment of any county ordinance which is permitted within the applicable zoning district but does not meet the minimum lot area and length of water frontage, structure setbacks, or other dimensional standards of the ordinance.

Subp. 13. Unincorporated area. "Unincorporated area" means the area outside a city, village, or borough.

Subp. 14. Variance. "Variance" means a modification or variation of the provisions of the local shoreland ordinance where it is determined that, by reason of exceptional circumstances, the strict enforcement of any provision of the local

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ordinance would cause unnecessary hardship, or that strict conformity with the provisions of the local ordinance would be unreasonable, impractical, or not feasible under the circumstances.

Subp. 15. **Water supply purpose.** "Water supply purpose" includes any uses of water for domestic, commercial, industrial, or agricultural purposes.

Statutory Authority: *MS s 105.485 subd 3*

6120.0200 POLICY.

The uncontrolled use of shorelands adversely affects the public health, safety, and general welfare by contributing to pollution of public waters and by impairing the local tax base. In accordance with the authority granted in the Laws of Minnesota 1969, chapter 777, and in furtherance of the policies declared in Minnesota Statutes, chapters 105, 115, 116, 394, and 396, the commissioner of natural resources, hereinafter referred to as the commissioner, does hereby provide the counties of the state with minimum standards and criteria for the subdivision, use, and development of the shorelands of public waters located in unincorporated areas and thus preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, and provide for the wise utilization of water and related land resources of the state.

Statutory Authority: *MS s 105.485 subd 3*

6120.0300 MINIMUM STANDARDS AND CRITERIA.

To achieve the policies declared in part 6120.0200, the commissioner has set forth minimum standards and criteria for the wise development of shorelands in parts 6120.0600 to 6120.1900 which include:

- A. classification of public waters;
- B. rules governing the type and placement of sanitary and waste disposal facilities in shoreland areas;
- C. rules governing the size and length of water frontage of lots suitable for building sites;
- D. rules governing the placement of structures in relation to shorelines and roads;
- E. rules governing alteration and preservation of the natural landscape;
- F. rules governing the subdivision of shoreland areas; and
- G. variances from the minimum standards and criteria.

These standards and criteria will provide minimum statewide requirements for county shoreland management ordinances for the shorelands of public waters which must be adopted no later than July 1, 1972. Each county shall be responsible for the administration and enforcement of the shoreland management ordinance. Nothing shall prevent counties or local units of government from enacting ordinances which are more restrictive than state standards.

Statutory Authority: *MS s 105.485 subd 3*

6120.0400 SCOPE.

The standards and criteria for shoreland management, as hereby adopted and established, pertain to the shorelands of public waters of the state located in unincorporated areas.

Statutory Authority: *MS s 105.485 subd 3*

6120.0500 SEVERABILITY.

The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision, or any other part.

Statutory Authority: *MS s 105.485 subd 3*

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6120.0600 PUBLIC WATERS CLASSIFICATION; LAND USE DESIGNATION.

In order to guide the wise development and utilization of shorelands of public waters for the preservation of water quality, economic and natural characteristics, and the general health, safety, and welfare; all public waters as defined in part 6120.0100 in unincorporated areas of Minnesota shall be given a public waters classification by the commissioner, and the uses of shorelands in these classes shall be designated by ordinances which provide for land use districts based on the compatibility of the designated type of land use with the public waters classification.

Statutory Authority: *MS s 105.485 subd 3*

6120.0700 PUBLIC WATERS CLASSIFICATION SYSTEM.

The classification system for public waters shall be based upon the suitability of each lake or stream for future or additional development and the desirable level of development.

The classification system of public waters shall consist of natural environment lakes and streams, recreational development lakes, general development lakes and streams, and critical lakes.

Statutory Authority: *MS s 105.485 subd 3*

6120.0800 MANAGEMENT GOALS AND OBJECTIVES.

Goals and objectives:

A. Natural environment lakes and streams: to preserve and enhance high quality waters by protecting them from pollution and to protect shorelands of waters which are unsuitable for development; to maintain a low density of development; and to maintain high standards of quality for permitted development.

B. Recreational development lakes: to provide management policies reasonably consistent with existing development and use; to provide for the beneficial use of public waters by the general public, as well as the riparian owners; to provide a balance between the lake resource and lake use; to provide for a multiplicity of lake uses; and to protect areas unsuitable for residential and commercial uses from development.

C. General development lakes and streams: to provide minimum regulations of areas presently developed as high density, multiple use areas; and to provide guidance for future growth of commercial and industrial establishments which require locations on public waters.

D. Critical lakes: to provide a more restrictive set of standards for badly deteriorated lakes which cannot be reasonably managed in any of the public waters classes defined in items A to C. These lakes, designated by the commissioner, shall be studied in further detail to determine appropriate standards for shoreland development for each individual lake. Until such studies are completed, these lakes shall be subject to the standards applied to natural environment lakes and streams.

Statutory Authority: *MS s 105.485 subd 3*

6120.0900 CLASSIFICATION CRITERIA.

Criteria for determining the classification of any public water shall be:

A. size: relating to available space for development on the shore and for use of the water space;

B. crowding potential: relating to the ratio of lake surface area to the length of shoreline;

C. amount and type of existing development;

D. existing natural characteristics of the public waters and surrounding shorelands; and

E. county and regional public waters needs.

Supporting data for the public waters classification is provided in Minnesota's Lakeshore; Part 1; Resources, Development, Policy Needs and Part 2; Statistical Summary, Minnesota Lakeshore Development Study, Department of Geography, University of Minnesota, 1970. Additional supporting data may be supplied, as needed, by or under the direction of the commissioner.

Statutory Authority: *MS s 105.485 subd 3*

6120.1000 RECLASSIFICATION OF PUBLIC WATER.

The commissioner may, as the need arises, reclassify any public water. Also, in the event a county feels that the classification of any particular body of water should be changed, a written request for reclassification of such waters, explaining the reasons for the proposed reclassification, may be submitted to the commissioner for consideration.

Statutory Authority: *MS s 105.485 subd 3*

6120.1100 LAND USE ZONING DISTRICTS.

The development of shorelands of public waters shall be controlled by means of land use zoning districts which are designated to be compatible with the classes of public waters (parts 6120.0700 to 6120.1000).

Management goals and objectives: land use zoning districts shall be established to provide for:

A. the management of areas unsuitable for development due to wet soils, steep slopes, or large areas of exposed bedrock; and the management of areas of unique natural and biological characteristics, in accordance with compatible uses;

B. the reservation of areas suitable for residential development from encroachment by commercial and industrial establishments;

C. the centralization of service facilities for recreational areas and enhancement of economic growth potential for those areas suitable for limited commercial development; and

D. the management of areas where use may be directed toward urban or municipal activities, rather than strictly recreational activities, and for use by industry requiring a location within shoreland areas.

Statutory Authority: *MS s 105.485 subd 3*

6120.1200 CRITERIA FOR LAND USE ZONING DISTRICTS.

The land use zoning districts established by counties shall be based on considerations of: preservation of natural areas; present ownership and development of lakeshore and adjacent land; shoreland soil types and their engineering capabilities; topographic characteristics; vegetative cover; county socioeconomic development needs and plans as they involve water and related land resources; the land requirements of industry requiring location in shoreland areas; and the necessity to preserve and restore certain areas having great historical or ecological value.

Statutory Authority: *MS s 105.485*

6120.1300 SANITARY PROVISIONS.

Subpart 1. **Purpose.** In order to ensure safe and healthful conditions, to prevent pollution and contamination of public surface and ground waters, and to guide development compatible with the natural characteristics of shorelands and related water resources, county ordinances shall control individual water supply and waste disposal systems in respect to location, construction, repair, use, and maintenance; commercial; agricultural; industrial and municipal waste disposal; and solid waste disposal sites.

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Subp. 2. **Water supply.** Any public or private supply of water for domestic purposes must conform to Minnesota Department of Health standards for water quality. Private wells shall be placed in areas not subject to flooding and upslope from any source of contamination. Wells already existing in areas subject to flooding shall be floodproofed, in accordance with procedures established in statewide standards and criteria for the management of floodplain areas of Minnesota in parts 6120.5000 to 6120.6200.

Subp. 3. **Sewage and waste disposal.** Any premises used for human occupancy shall be provided with an adequate method of sewage disposal to be maintained in accordance with acceptable practices.

A. Public or municipal collection and treatment facilities must be used where available and where feasible.

B. All private sewage and other sanitary waste disposal systems shall conform to applicable standards, criteria, and rules of the Minnesota Department of Health and the Minnesota Pollution Control Agency and any applicable local governmental regulations in terms of size, construction, use, and maintenance.

C. Location and installation of a septic tank and soil absorption system shall be such that, with reasonable maintenance, it will function in a sanitary manner and will not create a nuisance, endanger the safety of any domestic water supply, nor pollute or contaminate any waters of the state. In determining a suitable location for the system, consideration shall be given to the size and shape of the lot, slope of natural and finished grade, soil permeability, high ground water elevation, geology, proximity to existing or future water supplies, accessibility for maintenance, and possible expansion of the system.

D. Septic tank and soil absorption systems shall be set back from the normal high water mark in accordance with class of public waters:

- (1) on natural environment lakes and streams, at least 150 feet;
- (2) on recreational development lakes, at least 75 feet; and
- (3) on general development lakes and streams, at least 50 feet.

E. Septic tank and soil absorption or similar systems shall not be acceptable for disposal of domestic sewage for developments on lots adjacent to public waters under the following circumstances:

- (1) low swampy areas or areas subject to recurrent flooding; or
- (2) areas where the highest known ground water table is within four feet of the bottom of the soil absorption system; or
- (3) areas of exposed bedrock or shallow bedrock within four feet of the bottom of the soil absorption system or where subsurface conditions significantly restrict percolation of the effluent; or
- (4) areas of ground slope where there is danger of seepage of the effluent onto the surface of the ground.

F. County ordinances may require or allow alternative methods of sewage disposal, such as holding tanks, privies, electric or gas incinerators, biological and/or tertiary waste treatment plants or land disposal systems, provided such facilities meet the standards, criteria, and rules of the Minnesota Pollution Control Agency and the Minnesota Department of Health.

G. Public sewage disposal, commercial, agricultural, and industrial waste disposal, and the location of solid waste disposal sites shall be subject to the standards, criteria, and rules of the Minnesota Pollution Control Agency.

Statutory Authority: *MS s 105.485 subd 3*

6120.1400 ZONING PROVISIONS.

Subpart 1. **Purpose.** In order to reduce the effects of overcrowding and poorly planned shoreland development, to prevent pollution, to provide ample space on lots for sanitary facilities, to minimize flood damages, to maintain property

values, and to maintain natural characteristics of shorelands and adjacent water areas, county ordinances shall control lot size, placement of structures on lots, and alterations of shoreland areas.

Subp. 2. Lot size. Lot size:

A. For lots intended as residential building sites platted or created by metes and bounds description after the date of enactment of the county shoreland ordinance, the minimum size shall be:

(1) For natural environment lakes and streams: at least 80,000 square feet (approximately two acres) in area and at least 200 feet in width at the building line and at least 200 feet in width at the water line for lots abutting a public water.

(2) For recreational development lakes: at least 40,000 square feet in area (approximately one acre) and at least 150 feet in width at the building line and at least 150 feet in width at the water line for lots abutting a public water.

(3) For general development lakes and streams: at least 20,000 square feet in area and at least 100 feet in width at the building line and at least 100 feet in width at the water line for lots abutting a public water.

B. In addition to the requirements of item A lot size shall be increased so that the total area of all proposed structures on a lot shall not equal more than 30 percent of the lot area.

C. Substandard lots. Lots of record in the office of the county register of deeds (or registrar of titles) prior to the date of enactment of the county ordinance which do not meet the requirements of item A may be allowed as building sites provided such use is permitted in the zoning district, the lot is in separate ownership from abutting lands, and sanitary and dimensional requirements of the county ordinance are complied with insofar as practicable. Each county ordinance may set a minimum size for substandard lots consistent with the purposes and intent of these standards and criteria.

D. Exceptions and variances. Lot sizes smaller than those specified in item A may be permitted for planned cluster developments under the provisions set forth in part 6120.1800.

Lot sizes smaller than those specified in item A may be permitted for areas served by a public sewer. The lot size shall be determined by the commissioner after an evaluation of the individual body of water and its capabilities to support a greater density of development.

Subp. 3. Placement of structures on lots. The placement of structures on lots shall be controlled by county ordinance in accordance with the class of public waters, high water elevation, and location of roads and highways as follows:

A. Public waters class. The following minimum setbacks for each class of public waters shall apply to all structures except boat houses, piers, and docks:

(1) on natural environment lakes and streams, at least 200 feet from the normal high water mark;

(2) on recreational development lakes, at least 100 feet from the normal high water mark;

(3) on general development lakes and streams, at least 75 feet from the normal high water mark; and

(4) furthermore no structure shall be erected in the floodway of a stream as defined in Minnesota Statutes 1969, section 104.02.

B. High water elevation. In addition to the setback requirements of item A:

(1) For lakes, ponds, or flowages: No structure except boathouses, piers, and docks, shall be placed at an elevation such that the lowest floor, including a basement, is less than three feet above the highest known water level. In those instances where sufficient data on known high water levels are not

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available, the elevation of the line of permanent terrestrial vegetation shall be used as the estimated high water elevation. When fill is required to meet this elevation the fill shall be allowed to stabilize before construction is begun.

(2) For rivers or streams: Structures shall be placed at an elevation consistent with any applicable local floodplain management ordinances. Where no ordinances exist, the elevation to which the lowest floor of a structure, including a basement, shall be placed, shall be determined after an evaluation of available flood information and consistent with statewide standards and criteria for management of floodplain areas of Minnesota.

C. Proximity to roads and highways. No structure shall be placed nearer than 50 feet from the right-of-way line of any federal, state, or county trunk highway; or 30 feet from the right-of-way line of any town road, public street, or others not classified.

D. Exceptions.

(1) Boat houses may be located up to the normal high water mark provided they are not used for habitation and they do not contain sanitary facilities.

(2) Location of piers and docks shall be controlled by applicable state and local regulations.

E. Variances to the setback requirements of item A may be granted by the county under the following circumstances provided such structures are not within a floodway:

(1) where structures incorporate a method of sewage disposal other than soil absorption; or

(2) where development exists on both sides of a proposed building site, setbacks may be varied to conform to the existing setbacks; or

(3) in areas of unusual topography or substantial elevation above the lake level, setbacks may be varied to allow a riparian owner reasonable use and enjoyment of his property.

Subp. 4. Shoreland alterations. Shoreland alterations:

A. Natural vegetation in shoreland areas shall be preserved insofar as practical and reasonable to retard surface runoff and soil erosion, to utilize excess nutrients in the soil to alleviate pollution problems, and to provide sufficient cover to screen cars, dwellings, and other structures from view from the lake.

B. Grading and filling in shoreland areas or any alterations of the natural topography where the slope of the land is toward a public water shall be controlled by the county shoreland ordinance to prevent erosion and siltation of public waters and impairment of fish and aquatic life.

C. Alterations of beds of public waters.

(1) Any work which will change or diminish the course, current, or cross-section of a public water must be approved by the commissioner before the work is begun. This includes construction of channels and ditches, lagooning, dredging of lake bottom for the removal of muck, silt, or weeds, and filling in the lakebed, including low-lying marsh areas. Approval shall be construed to mean the issuance by the commissioner of a permit under the procedures of Minnesota Statutes 1969, section 105.44 and other related statutes.

(2) Excavations on shorelands where the intended purpose is connection to a public water, such as boat slips, canals, lagoons, and harbors, shall be controlled by the county shoreland ordinance. Permission for such excavations may be given only after the commissioner has approved the proposed connection to public waters. Approval will be given only if the proposed work is consistent with applicable state regulations for work in the beds of public waters.

Subp. 5. Exceptions to zoning provisions. Counties may, under special circumstances and with the commissioner's approval, adopt shoreland management

ordinances which are not in strict conformity with part 6120.1400 provided that the proposed ordinance is based upon individual public water capabilities pursuant to parts 6120.0700 to 6120.1000, and that the purposes of Minnesota Statutes, section 105.485 are satisfied.

Statutory Authority: *MS s 105.485 subd 3*

6120.1500 LAND SUITABILITY.

No land shall be subdivided which is held unsuitable by the county for the proposed use because of flooding, inadequate drainage, soil and rock formations with severe limitations for development, severe erosion potential, unfavorable topography, inadequate water supply or sewage disposal capabilities, or any other feature likely to be harmful to the health, safety, or welfare of the future residents of the proposed subdivision or of the community.

Statutory Authority: *MS s 105.485 subd 3*

6120.1600 INCONSISTENT PLATS REVIEWED BY COMMISSIONER.

All plats which are inconsistent with the county shoreland ordinance shall be reviewed by the commissioner before final county approval may be granted. Such review shall require that proposed plats be received by the commissioner at least ten days before a hearing is called by the county for consideration of approval of a final plat.

Statutory Authority: *MS s 105.485 subd 3*

6120.1700 COPIES OF PLATS SUPPLIED TO COMMISSIONER.

Copies of all plats within shoreland areas approved by the county shall be submitted to the commissioner within ten days of approval by the county.

Statutory Authority: *MS s 105.485 subd 3*

6120.1800 CLUSTER DEVELOPMENT.

Smaller lot sizes may be allowed as variances to the county shoreland ordinance for planned cluster developments provided:

A. Preliminary plans are approved by the commissioner prior to their enactment by the county.

B. Central sewage facilities are installed which at least meet the applicable standards, criteria, or rules of the Minnesota Department of Health and the Minnesota Pollution Control Agency.

C. Open space is preserved. This may be accomplished through the use of restrictive deed covenants, public dedication, or other methods.

D. There is not more than one centralized boat launching facility for each cluster.

Statutory Authority: *MS s 105.485 subd 3*

6120.1900 ADMINISTRATION OF COUNTY ORDINANCES.

Subpart 1. Procedures. Counties shall provide for the administration and enforcement of the county ordinance. A copy of all notices of any public hearings to consider variances to or conditional uses under the county shoreland ordinance shall be received by the commissioner at least ten days prior to such hearings. A copy of all decisions granting a variance or conditional use to the provisions of the county shoreland ordinance shall be forwarded to the commissioner within ten days of such actions.

Subp. 2. Board of adjustment. Counties shall provide for the creation of a Board of Adjustment, under authority of Minnesota Statutes 1969, section 394.27, to be responsible for granting variances to and interpreting the provisions of the county ordinance.

Subp. 3. Nonconforming uses. Under authority of Minnesota Statutes 1969,

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section 394.36, counties may adopt provisions to regulate and control, reduce the number or extent of or gradually eliminate nonconforming and substandard uses. The counties shall provide for the gradual elimination of sanitary facilities inconsistent with part 6120.1300, subpart 3, items B, C, and E over a period of time not to exceed five years from the date of enactment of the county ordinance.

Statutory Authority: *MS s 105.485 subd 3*

6120.2000 USE OF MODEL ORDINANCE.

The model ordinance in part 6120.2100 is designed as an illustration of the form and subject matter which the county should consider in adopting a shoreland management ordinance. It is the duty of the county to adapt the model ordinance to its own particular problems and needs. Adoption of the model ordinance verbatim or by reference will not necessarily constitute an adequate ordinance for the individual county within the meaning of Minnesota Statutes 1969, section 105.485, subdivision 4.

Statutory Authority: *MS s 105.485 subd 3*

6120.2100 MODEL ORDINANCE.

Ordinance for the management of shoreland areas of ____ County.

1.0 General provisions.

1.1 Statutory authorization.

This shoreland management ordinance is adopted pursuant to the authorization contained in the Laws of Minnesota 1969, chapter 777, and in furtherance of the policies declared in Minnesota Statutes, chapters 105, 115, 116, 394, and 396.

1.2 Policy.

The uncontrolled use of shorelands of ____ County, Minnesota affects the public health, safety, and general welfare not only by contributing to pollution of public waters, but also by impairing the local tax base. Therefore, it is in the best interests of the public health, safety, and welfare to provide for the wise development of shorelands of public waters. The legislature of Minnesota had delegated responsibility to the counties of the state to regulate the subdivision, use, and development of the shorelands of public waters located in unincorporated areas and thus preserve and enhance the quality of surface waters, preserve the economic and natural environmental values of shorelands, and provide for the wise utilization of waters and related land resources. This responsibility is hereby recognized by ____ County, Minnesota.

1.3 Statement of purpose.

To achieve the policies described in section 1.2 and to:

1.31 Designate suitable land use districts for each public water;

1.32 Regulate the placement of sanitary and waste disposal facilities on lots;

1.33 Regulate the area of a lot and the length of water frontage suitable for a building site;

1.34 Regulate alteration of the shorelands of public waters;

1.35 Regulate alterations of the natural vegetation and the natural topography;

1.36 Regulate the subdivision of land in unincorporated areas; and

1.37 Provide variances from the minimum standards and criteria; the county commissioners of ____ County, Minnesota do ordain as follows:

1.4 Jurisdiction.

The jurisdiction of this ordinance shall include the shorelands of all public waters in the unincorporated areas of ____ County, Minnesota.

1.5 Compliance.

The use of any shoreland of public waters; the size and shape of lots; the use, size, type, and location of structures on lots; the installation and maintenance of water supply and waste disposal facilities; the filling, grading, lagooning, or dredging of any shoreland area; the cutting of shoreland vegetation; and the subdivision of lots shall be in full compliance with the terms of this ordinance and other applicable regulations. Construction of buildings, private water supply and sewage disposal systems and erection of signs shall require a permit unless otherwise expressly excluded by the requirements of this ordinance.

1.6 Abrogation and greater restrictions.

1.61 This ordinance supersedes all provisions of any county zoning ordinance that relate to shorelands. However, the provisions of the existing county zoning ordinance and map of _____ County, Minnesota, dated _____, _____, are hereby incorporated by reference and shall, to the extent of greater restrictions only, be made as much a part of this ordinance as if the matter described were fully set out herein.

1.62 Notwithstanding the provisions of Minnesota Statutes, section 396.05, this ordinance shall not require approval or be subject to disapproval by any town or town board. However, this section does not prohibit a town from adopting or continuing in force, regulations which are more restrictive than those required by this ordinance.

1.63 It is not otherwise intended by this ordinance to repeal, abrogate, or impair any existing deed restrictions or ordinances other than zoning to the extent specified in section 1.61 of this ordinance; however, where this ordinance imposes greater restrictions the provisions of this ordinance shall prevail.

1.7 Interpretation.

In their interpretation and application, the provisions of this ordinance shall be held to be minimum requirements and shall be liberally construed in favor of the county and shall not be deemed a limitation or repeal of any other powers granted by Minnesota Statutes.

1.8 Severability.

The provisions of this ordinance shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision, or any other part.

1.9 Definitions.

For the purposes of this ordinance, certain terms or words used herein shall be interpreted as follows: The word "shall" is mandatory, not permissive. All distances unless otherwise specified shall be measured horizontally.

"Building line" means that line measured across the width of the lot at the point where the main structure is placed in accordance with setback provisions.

"Cluster development" means a pattern of subdivision development which places housing units into compact groupings while providing a network of commonly owned or dedicated open space.

"Conditional use" means a use of shorelands which is permitted within a zoning district only when allowed by the County Board of Adjustment, after a public hearing, if certain conditions are met which eliminate or minimize the incompatibility with other permitted uses of the district.

"Nonconforming use" means any use of land established before the effective date of the county ordinance which does not conform to the use restrictions of a particular zoning district.

"Normal high water mark" means a mark delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. The normal high water mark is commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial.

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“Public water” means a body of water capable of substantial beneficial public use. For the purpose of this ordinance, this shall be construed to mean any lake, pond or flowage of 25 acres in size or more, or any river or stream with a total drainage area of two square miles or more, which has the potential to support any type of recreational pursuit or water supply purpose. A body of water created by a private user where there was no previous shoreland as defined herein, for a designated private use authorized by the commissioner of natural resources shall be exempt from the provisions of this ordinance.

(a) The official determination of the size and physical limits of lakes, ponds, or flowages shall be the areas listed in the Division of Waters, Soils and Minerals Bulletin No. 25, An Inventory of Minnesota Lakes.

(b) The official determination of the size and physical limits of drainage areas of rivers and streams shall be the records of the Division of Waters, Soils, and Minerals.

“Setback” means the minimum horizontal distance between a structure and the normal high water mark or between a structure and a road or highway.

“Shoreland” means land located within the following distances from public waters: (1) 1,000 feet from the normal high water mark of a lake, pond, or flowage; and (2) 300 feet from a river or stream, or the landward extent of a floodplain designated by ordinance on such a river or stream, whichever is greater, except where the limits are designated by natural drainage divides at lesser distances, as designated on the official county zoning map of ____ County.

“Structure” means any building or appurtenance thereto, except aerial or underground utility lines, such as sewer, electric, telephone, telegraph, or gas lines, including towers, poles, and other supporting appurtenances.

“Subdivision” means improved or unimproved land or lands which are divided for the purpose of ready sale or lease, or divided successively within a five-year period for the purpose of sale or lease, into three or more lots or parcels of less than five acres each, contiguous in area and which are under common ownership or control.

“Substandard use” means any use of shorelands existing prior to the date of enactment of any county ordinance which is permitted within the applicable zoning district but does not meet the minimum lot area and length of water frontage, structure setbacks, or other dimensional standards of the ordinance.

“Unincorporated area” means the area outside a city, village, or borough.

“Variance” means a modification or variation of the provisions of the local shoreland ordinance where it is determined that, by reason of exceptional circumstances, the strict enforcement of any provision of the local ordinance would cause unnecessary hardship, or that strict conformity with the provisions of the local ordinance would be unreasonable, impractical, or not feasible under the circumstances.

“Water supply purpose” includes any uses of water for domestic, commercial, industrial, or agricultural purposes.

2.0 Designation of types of land use. In order to guide the wise development and utilization of shorelands of public waters for the preservation of water quality, natural characteristics, economic values and the general health, safety, and welfare, all public waters in the unincorporated areas of ____ County, Minnesota, have been given a public waters classification, and uses of shorelands in these classes are hereby designated by land use districts, based on the compatibility of the designated type of land use with the public waters classification.

2.1 Public waters classification system.

The public waters of ____ County, Minnesota, have been classified by the commissioner of natural resources as follows:

2.11 Natural environment lakes and streams

- 1.
2. (List and designate on
3. official county zoning map.)

- 4.
- 2.12 Recreational development lakes

- 1.
2. (List and designate on
3. official county zoning map.)

- 4.
- 2.13 General development lakes and streams

- 1.
2. (List and designate on
3. official county zoning map.)

2.14 The following lakes are designated as critical lakes (Note: These lakes are, at present, subject to the standards specified for natural environment lakes and streams. As further studies are completed, more restrictive standards may be specified for each lake to reflect their special problems):

- 1.
2. (List and designate on
3. official county zoning map.)

- 4.
- 2.2 Land use zoning maps.

The following land use zoning districts have been established in accordance with their compatibility with the public waters classification.

2.21 The shorelands of ____ County, Minnesota, are hereby divided into the following districts:

- (a) Special protection district
- (b) Residential-recreational district
- (c) Commercial-recreational district
- (d) General use district

2.22 The following high level aerial photography prints are hereby designated as the official shoreland zoning maps of ____ County, Minnesota.

- 1.
2. (List)
- 3.
- 4.

2.23 Final determination of the exact location of land use district boundaries shall be made by the zoning administrator subject to appeal to the Board of Adjustment as provided in section 7.2 of this ordinance.

2.3 Special protection district.

2.31 Purpose: to manage areas unsuitable for development due to wet soils, steep slopes, or large areas of exposed bedrock; and to manage areas of unique natural and biological characteristics in accordance with compatible uses.

2.32 Permitted uses

(a) All general agricultural pasture and minimum tillage cropland uses; except that no wetlands shall be drained to facilitate cultivation of shoreland areas within specified distances of lakes or streams depending upon topography.

(b) Forestry

(c) Parks, waysides, and golf courses which do not maintain overnight camping facilities.

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(d) Nature areas, hiking and riding trails, wildlife preserves, and designated official wetland areas.

(e) Designated historical sites.

2.33 Conditional uses

(a) All approved aerial or underground utility line crossings such as electrical, telephone, telegraph, or gas lines which cannot be reasonably located in other than a special protection district.

(b) Nonresidential structures used solely in conjunction with raising wild animals or fish provided the structures are of a design approved by the county board as being compatible with other general allowable uses of the district.

(c) (Others — List conditions which may be attached to the use.)

2.4 Residential, recreational districts.

2.41 Purpose: to reserve areas suitable for residential development from encroachment by commercial and industrial establishments.

2.42 Permitted uses

(a) Any permitted or conditional use allowed in special protection areas.

(b) Single family seasonal or year round residential uses.

(c) Multifamily seasonal or year round residential uses.

2.43 Conditional Uses

(a) Mobile Home Parks — provided:

(1) Site plans for mobile home parks shall be approved by the Board of Commissioners.

(2) Mobile home parks shall be licensed by and in conformance with the standards prescribed by the Minnesota Department of Health, except where provisions of this ordinance are more restrictive, and then these provisions shall prevail.

(3) Each mobile home shall meet the water and road setback provisions for the classes of public waters prescribed in section 4.2.

(4) There shall be at least ten feet between the sides of adjacent mobile homes, including their attachments, and at least three feet between mobile homes when parked end to end.

(5) Each mobile home site shall be at least 4,000 square feet in area.

(6) A centralized sewage disposal facility which meets the standards, criteria, rules, or regulations of the Minnesota Department of Health and the Minnesota Pollution Control Agency must be installed.

(7) The location of this facility shall be consistent with the number of units served, soil types, and topography. The facility shall be setback from the normal high water mark at a distance approved by the Board of Commissioners, and in no case less than the sewage disposal system setback distances prescribed in section 3.36(a).

(8) No individual on-site sewage disposal systems shall be used, unless site sizes meet the provisions of section 4.11 for lot area and length of water frontage.

(9) Adequate vegetative screening shall be maintained for the mobile home park consistent with the provisions of section 4.31 of this ordinance.

(b) Recreational Camping Vehicle Areas, provided:

(1) Site plans for recreational camping vehicle areas shall be approved by the Board of Commissioners.

(2) Recreational camping vehicle areas shall be licensed by and meet the standards prescribed by the Minnesota Department of Health, except where the provisions of this ordinance are more restrictive, and then these provisions shall prevail.

(3) No recreational camping vehicle shall be placed nearer the normal high water mark as specified in section 4.2 for the classes of public waters.

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(4) Each recreational camping vehicle site shall be at least 2,000 square feet in area.

(5) A centralized sewage disposal facility which meets the standards, criteria, or rules of the Minnesota Department of Health and the Pollution Control Agency must be installed.

(6) The location of this facility shall be consistent with the number of units served, soil types, and topography. The facility shall be setback from the normal high water mark at a distance approved by the Board of Commissioners, and in no case less than the sewage disposal system setback distances prescribed in section 3.36(a).

(7) No individual on-site sewage disposal systems shall be used, unless site sizes meet the provisions of section 4.11 for lot area and length of water frontage.

(8) Adequate vegetative screening for the recreational camping area shall be maintained consistent with the provisions of section 4.31 of this ordinance.

(c) (Others — List conditions which may be attached to the use.)

2.5 Commercial, recreational district.

2.51 Purpose: to centralize service facilities for recreational areas and to enhance the economic growth potential of those areas suitable for limited commercial development.

2.52 Permitted Uses

(a) Single and multifamily seasonal and year round residential uses.

(b) Hotels, motels, resorts, and other permanent buildings which provide sleeping accommodations on a transient rental basis.

(c) Restaurants, drive-ins, dinner clubs, taverns, and private clubs.

(d) Retail businesses, novelty shops, and service facilities, such as gas stations, and any other establishments except those engaged in manufacturing or processing enterprises.

(e) (Others)

2.53 Conditional Uses

(a) Mobile home parks, provided the conditions specified in section 2.43(a) are met.

(b) Recreational camping vehicle areas, provided the conditions specified in section 2.43(b) are met.

(c) (Others — List conditions which may be attached to the use.)

2.6 General use district.

2.61 Purpose: to manage areas where use may be directed toward urban or municipal activities, rather than strictly recreational activities.

2.62 Permitted Uses

(a) Commercial uses

(b) Industrial uses which require location within shoreland areas.

2.63 Conditional Uses

(List conditions which may be attached to the use.)

3.0 Sanitary provisions.

3.1 Water supply.

Any public or private supply of water for domestic purposes must conform to Minnesota Department of Health standards for water quality.

3.11 Public water supplies shall be used where available and where feasible.

3.12 Permit. No person, firm, or corporation shall install, alter, repair, or extend any private well without first obtaining a permit therefor from the zoning administrator for the specific installation, alteration, repair, or extension.

(a) Application for permits shall be made in writing upon printed blanks or forms furnished by the zoning administrator and shall be signed by the applicant.

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(b) Each application for a permit shall have thereon the correct legal description of the property on which the proposed installation, alteration, repair, or extension is to take place. Each application for a permit shall be accompanied by a plan of the site of reasonable scale and accuracy showing the location of any proposed or existing buildings located on the property with respect to the boundary lines of the property, and complete plans of the proposed water supply system with substantiating data, if necessary, attesting to the compliance with the minimum standards of this ordinance. A complete plan shall include the location, size and design of all parts of the well to be installed, altered, repaired, or extended. The application shall also show the present or proposed location of sewage disposal facilities and the name of the person, firm or corporation who is to install the system, and shall provide such further information as may be required by the zoning administrator.

(c) Administration. The zoning administrator may assign responsibility for administration of these provisions to a qualified inspector.

3.13 Private wells shall be so located and constructed that they will not be contaminated by any existing or future sewage disposal systems. They shall also be constructed to minimize the possible contamination from all possible external sources within the geological strata surrounding the well.

3.14 Private wells shall be located in a manner to be free from flooding and the top shall be so constructed and located as to be above all possible sources of pollution. Wells already existing in areas subject to flooding shall be flood-proofed.

3.15 No private well shall be located closer than three feet to the outside basement wall of a dwelling. The outside basement footing shall be continuous across the opening of the well alcove. No well shall be located closer than 15 feet to a property line. The following minimum distances between a well and possible sources of contamination shall be complied with:

(a) Buried or concealed extra heavy cast iron sewer or drain lines with lead calked, air tested joints — 20 feet.

(b) Vitrified clay or equivalent (or concrete sewers or cast iron sewers not of construction described above), septic tanks or drain fields — 50 feet.

(c) Dry wells or seepage pits — 75 feet.

3.2 Waste disposal.

3.21 The disposal of sewage, industrial wastes, or other wastes as defined in Minnesota Statutes, chapter 115 shall be subject to the standards, criteria, and rules of the Minnesota Pollution Control Agency.

3.22 No rubbish or trash of any sort shall be thrown or discarded in any manner into any public water or into any watercourse leading to a public water.

3.23 No solid waste disposal site shall be located within the jurisdiction of this ordinance, unless approved by the Minnesota Pollution Control Agency.

3.3 Sewage disposal.

Any premises intended for human occupancy must be provided with an adequate method of sewage disposal to be maintained in accordance with acceptable practices.

3.31 Public or municipal collection and treatment facilities must be used where available and where feasible.

3.32 Permit. No person, firm, or corporation shall install, alter, repair, or extend any individual sewage disposal system without first obtaining a permit therefor from the zoning administrator for the specific installation, alteration, repair, or extension.

(a) Application for permits shall be made in writing upon printed blanks or forms furnished by the Zoning Administrator and shall be signed by the applicant.

(b) Each application for a permit shall have thereon the correct legal description of the property on which the proposed installation, alteration, repair, or extension is to take place, and each application for a permit shall be accompanied by a plan of the site of reasonable scale and accuracy showing the location of any proposed or existing buildings located on the property with respect to the boundary lines of the property and complete plans of the proposed sewage disposal system with substantiating data, if necessary, attesting to the compliance with the minimum standards of this ordinance. A complete plan shall include the location, size, and design of all parts of the system to be installed, altered, repaired, or extended. The application shall also show the present or proposed location of water supply facilities and water supply piping, and the name of the person, firm, or corporation who is to install the system, and shall provide such further information as may be required by the zoning administrator.

(c) Administration. The zoning administrator may assign responsibility for administration of these provisions to a qualified inspector.

3.33 General requirements

(a) Location and installation of the individual sewage disposal system shall be such that, with reasonable maintenance, it will function in a sanitary manner and will not create a nuisance, endanger the safety of any domestic water supply, nor pollute any waters of the state. In determining a suitable location for the system, consideration shall be given to the size and shape of the lot, slope of natural and finished grade, soil permeability, high ground water elevation, geology, proximity to existing or future water supplies, and future expansion of the system.

(b) Raw sewage, septic tank effluent, or seepage from a soil absorption system shall not be discharged on to the ground surface, into abandoned wells, or bodies of surface water, or into any soil or rock formation, the structure of which is not conducive to purification of water by filtration, or into any well or other excavation in the ground which does not comply with the other requirements of this ordinance. This requirement shall not apply to the disposal of sewage in accordance with a process approved by the Department of Health and the Minnesota Pollution Control Agency.

(c) Bulldozers, trucks, or other heavy machinery shall not be driven over the system after installation.

3.34 Privies

(a) Privies shall be considered to be an adequate method of sewage disposal, provided they are maintained in a clean condition and do not constitute a public nuisance.

(b) Privies shall be located at least ten feet from a dwelling or lot line, and they shall meet the structural setbacks from public waters specified in section 4.21.

3.35 Septic tanks

(a) Only septic tanks meeting the specifications prescribed by the Minnesota Department of Health and Minnesota Pollution Control Agency may be installed or constructed.

(b) Location of septic tanks shall be subject to the following restrictions: ten feet from any building intended for human occupancy; ten feet from a lot line; 50 feet from a well or other water supply; and where feasible, the septic tank shall be placed downslope from a well.

3.36 Soil absorption systems

(a) Placement of soil absorption systems shall be in accordance with the public waters classification of the applicable public water body and shall be subject to the following specifications, where soil conditions are adequate:

(1) On natural environment lakes and streams, at least 150 feet from the normal high water mark.

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(2) On recreational development lakes, at least 75 feet from the normal high water mark.

(3) On general development lakes and streams, at least 50 feet from the normal high water mark.

(b) In addition, placement of soil absorption systems shall be subject to the following specifications: ten feet from a lot line; 20 feet from a building intended for human occupancy; and 50 feet from a well or other water supply source.

(c) Minimum seepage area of the disposal field (total flat area of trench bottom exclusive of sidewall area) shall be determined by the following percolation test procedure as applied to Table 1.

(1) Number and location of tests. Two or more tests shall be made in separate test holes spaced uniformly over the proposed absorption field site.

(2) Type of test hole. A hole with horizontal dimensions of four to 12 inches and vertical sides shall be dug or bored to the depth of the proposed absorption trench. The holes may be bored with an auger of not less than four-inch diameter.

Table 1: Absorption Area Requirements for Private

Residences and Other Establishments

(Per Bedroom Column Provides for Residential

Garbage Grinders and Automatic Sequence Washing Machines)

Percolation rate (time required for water to fall 1 inch, in minutes)	Required absorption area in square feet standard trench ¹ and Seepage pits ²	Per bedroom ³	Per gallon of waste per day
1 or less		70	.20
2		85	.30
3		100	.35
4		115	.40
5		125	.45
10		165	.65
15		190	.80
30 ⁴		250	1.10
45 ⁴		300	1.25
60 ^{4,5}		330	1.65

¹Absorption area for standard trenches is figured as trench-bottom area.

²Absorption area for seepage pits is figured as effective sidewall area beneath the inlet.

³In every case sufficient area should be provided for at least 2 bedrooms.

⁴Unsuitable for seepage pits if over 30.

⁵Unsuitable for absorption systems if over 60.

(3) Preparation of test hole. The bottom and sides of the hole shall be carefully scratched with a knife blade or sharp pointed instrument to remove any smeared soil surfaces and to provide a natural soil interface into which water may percolate. All loose material shall be removed from the hole and two inches of coarse sand or fine gravel shall be added to protect the bottom from scouring.

(4) Saturation and swelling of the soil. The hole shall be carefully filled with clear water to a minimum depth of 12 inches over the gravel. Water shall be kept in the hole for at least four hours, and preferably overnight, by refilling if necessary, or by supplying a surplus reservoir of water, such as in an automatic

siphon. In sandy soils containing little or no clay, the swelling procedure shall not be required and the test may be made as described under item (c)(5)(cc) after the water from one filling of the hole has completely seeped away.

(5) Percolation rate measurement. With the exception of sandy soils, percolation rate measurements shall be made on the day following the procedure described under item (c)(4).

(aa) If water remains in the test hole after the overnight swelling period, the depth shall be adjusted to approximately six inches over the gravel. From a fixed reference point the drop in water level shall be measured over a 30-minute period. This drop shall be used to calculate the percolation rate.

(bb) If no water remains in the hole after the overnight swelling period, clear water shall be added to bring the depth of water in the hole to approximately six inches over the gravel. From a fixed reference point the drop in water level shall be measured at approximately 30-minute intervals for four hours, refilling six inches over the gravel if necessary. The drop that occurs during the final 30-minute period shall be used to calculate the percolation rate.

(cc) In sandy soils or other soils in which the first six inches of water seeps away in less than 30 minutes after the overnight swelling period, the time interval between measurements shall be taken as ten minutes and the test shall be run for one hour. The drop that occurs during the final ten minutes shall be used to calculate the percolation rate.

(6) A modification of the percolation test may be used where the percolation test procedure has been previously used and knowledge is available on the character and uniformity of the soil.

(d) Soil absorption systems shall not be acceptable for disposal of domestic sewage wastes for developments on lots adjacent to public waters under the following conditions:

- (1) Low swampy areas or areas subject to recurrent flooding; or
- (2) Areas where the highest known ground water table is within four feet of the bottom of the soil absorption system at any time; or
- (3) Areas of exposed bedrock or shallow bedrock within four feet of the bottom of a soil absorption system or any other geologic formation which prohibits percolation of the effluent; or
- (4) Areas of ground slope where there is danger of seepage of effluent onto the surface of the ground, in accordance with the following critical slope values:

Percolation Rate (Minutes)	Critical Slope
Less than 3	20% or more
3 - 45	15% or more
45 - 60	10% or more; or

(5) Soils where the percolation rate is slower than one inch in 60 minutes.

3.37 Servicing of septic tanks and soil absorption units shall conform to the Minnesota Department of Health and Minnesota Pollution Control Agency specifications. Disposal of sludge and scum removed from the system shall be:

- (a) Into a municipal sewage disposal system where practicable.
- (b) In the absence of a public sewer, at a disposal site designated by the zoning administrator.
- (c) Sludge shall not be discharged into any lake or watercourse, nor on land without burial.

3.38 Alternative Systems

(a) Alternative methods of sewage disposal such as holding tanks, electric or gas incinerators, biological and/or tertiary waste treatment plants or land disposal systems, wherever required or allowed in particular circumstances, shall be

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subject to the standards, criteria, and rules of the Minnesota Department of Health and Minnesota Pollution Control Agency.

3.4 Agricultural waste disposal.

Any agricultural waste disposal operations in shoreland areas must conform to the standards, criteria, and rules of the Minnesota Pollution Control Agency.

4.0 Zoning provisions.

4.1 Lot size.

4.11 For lots newly platted or created by metes and bounds description:

(a) For natural environment lakes and streams, the minimum lot size shall be 80,000 square feet (approximately two acres) and at least 200 feet in width at the building line and at least 200 feet in width at the water line for lots abutting a public water.

(b) For recreational development lakes, the minimum lot size shall be 40,000 square feet (approximately one acre) and at least 150 feet in width at the building line and at least 150 feet in width at the water line for lots abutting a public water.

(c) For general development lakes and streams, the minimum lot size shall be 20,000 square feet and at least 100 feet in width at the building line and at least 100 feet in width at the water line for lots abutting a public water.

4.12 Furthermore, in addition to section 4.11, lot size shall be increased so that the total area of all structures proposed on a lot will not equal more than 30 percent of the lot area.

4.13 Substandard Lots

(a) Lots of record in the county register of deeds (or registrar of titles) office prior to (date of enactment of ordinance) which do not meet the requirements of section 4.11 may be allowed as building sites provided such use is permitted in the zoning district, the lot is in separate ownership from abutting lands, and all sanitary and dimensional requirements of the county ordinance are complied with insofar as practical.

(b) The minimum size and length of water frontage shall be:

(1) For natural environment lakes and streams: at least ____ square feet in size and ____ feet in width at the building line and ____ feet in width at the water line for lots abutting a public water.

(2) For recreational development lakes: at least ____ square feet in size and ____ feet in width at the building line and ____ feet in width at the water line for lots abutting a public water.

(3) For general development lakes and streams: at least ____ square feet in size and ____ feet in width at the building line and ____ feet in width at the water line for lots abutting a public water.

4.14 Smaller lot sizes may be granted for planned cluster developments under the provisions set forth in section 5.5

4.2 Placement of structures on lots.

4.21 Setbacks

All structures, except boat houses, piers, and docks shall be setback the following horizontal distances:

(a) On natural environment lakes, at least 200 feet from the normal high water mark.

(b) On recreational development lakes, at least 100 feet from the normal high water mark.

(c) On general development lakes, at least 75 feet from the normal high water mark.

(d) Outside of a floodway as defined in Minnesota Statutes Section 104.02.

4.22 High water elevation

In addition to the setback requirements of section 4.21:

(a) For lakes, ponds, or flowages: No structure, except boat houses, piers, and docks, shall be placed at an elevation such that the lowest floor, including basement floors, is less than three feet above the highest known water level. In those instances where sufficient data on known high water levels are not available, the elevation of the line of permanent shoreland vegetation shall be used as the estimated high water elevation. When fill is required to meet this elevation, the fill shall be allowed to stabilize, and construction shall not begin until the property has been inspected by the zoning administrator.

(b) For rivers or streams: Placement of structures shall be in conformance with any applicable local flood plain ordinances. Where no ordinances exist, the elevation of structures shall be determined after an evaluation of available flood information.

4.23 Erosion and sedimentation control

No structure shall be placed in any area which will require grading and/or filling which will result in impairment of public waters by reason of erosion and sedimentation, violate provisions of statewide standards and criteria for management of floodplain areas of Minnesota, or result in impairment of fish and aquatic life. (See section 4.32)

4.24 Location of structures in relation to side lot lines and roads:

(a) There shall be at least a ten foot sideyard between any structure and side lot lines.

(b) No structure shall be placed closer than 50 feet from the right-of-way line of any federal, state, or county trunk highway, or 30 feet from any town road, public street, or others not classified.

4.25 Boat houses shall be permitted to be located up to the normal high water mark subject to the issuance of a conditional use permit by the Board of Adjustment, provided they shall not be used for habitation and they shall not contain sanitary facilities.

4.26 Variances to the setback requirements of sections 4.21 and 4.24 may be granted under the following circumstances by the County Board of Adjustment, if not within a floodway:

(a) In areas where development exists on both sides of a proposed building site, water and road setbacks may be varied to conform to the existing established setbacks, or

(b) In areas of unusual topography or substantial elevation above the lake level, the water setback may be varied to allow a riparian owner reasonable use and enjoyment of his property, or

(c) Where homes incorporate a method of sewage disposal other than soil absorption, water setbacks specified in section 4.21 may be reduced by one-third.

4.27 Locations of signs and structural appurtenances thereto: All commercial advertising signs shall be of a size, shape, and location so as not to be unduly prominent in their surroundings. The rules of signs hereunder are in addition to the provisions of Minnesota Statutes 1969, chapter 173 and rules promulgated pursuant thereto.

(a) Signs intended to be read from the water shall be set back to the established structure setback from the normal high water elevation, shall be attached to a building, and shall not exceed 30 square feet in gross area.

(b) All signs, except the following when they are not more than six square feet in area, shall require a permit to be erected:

- (1) Signs advertising a customary home occupation,
- (2) Temporary signs advertising the sale, rent, or lease of property,
- (3) Recreational directory signs.

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(c) Prohibited signs are:

- (1) Those which interfere with visibility of drivers or obstruct traffic signs.
- (2) Those which are illuminated by a flashing light or by any light directed toward a neighboring residence or toward the water, except emergency or warning signs.
- (3) Those which are composed of any conspicuous animated part.
- (4) Those which are mounted on a dock or float.

4.3 Shoreland alterations.

4.31 The removal of natural vegetation shall be restricted to prevent erosion into public waters, to consume nutrients in the soil, and to preserve shoreland aesthetics. Removal shall be restricted within a strip paralleling the lakeshore and extending inland a specified distance from the normal high water mark. This specified distance will depend upon lake class:

(a) Natural environment lakes and streams: 100 feet from the normal high water mark.

(b) Recreational development lakes: 50 feet from the normal high water mark.

(c) General development lakes and streams: 35 feet from the normal high water mark.

(d) To allow a view corridor to the water, 25 percent of the length of this strip may be clear cut to the depth of the strip. In the remaining 75 percent of this strip, cutting shall leave sufficient cover to screen cars, dwellings, and other structures, except boat houses, piers, docks and marinas, from view from the lake.

(e) Section 4.31 shall not apply to permitted uses which normally require the removal of the natural vegetation.

4.32 Grading and filling in shoreland areas or any alterations of the natural topography where the slope of the land is toward a public water or a watercourse leading to a public water must be authorized by a conditional use permit obtained from the Board of Adjustment. The permit may be granted subject to the conditions that:

(a) The smallest amount of bare ground is exposed for as short a time as feasible,

(b) Temporary ground cover, such as mulch, is used and permanent ground cover, such as sod, is planted,

(c) Methods to prevent erosion and trap sediment are employed, and

(d) Fill is stabilized to accepted engineering standards.

4.33 Excavations on shorelands where the intended purpose is connection to a public water shall require a permit from the county zoning administrator before construction is begun. Such permit may be obtained only after the commissioner of natural resources has issued a permit for work in the beds of public waters.

5.0 Subdivision regulations.

5.1 Land suitability.

No land shall be subdivided which is held unsuitable for the proposed use by the Board of Commissioners for reason of flooding, inadequate drainage, soil and rock formations with severe limitations for development, severe erosion potential, unfavorable topography, inadequate water supply or sewage disposal capabilities, or any other feature likely to be harmful to the health, safety, or welfare of the future residents of the proposed subdivision or of the community. The Board of Commissioners in applying the provisions of this section shall in writing recite the particular facts upon which it bases its conclusions that the land is not suitable for the proposed use and afford the subdivider an opportunity to present evidence regarding such suitability at a public hearing as provided in

section 8.4. Thereafter the Board of Commissioners may affirm, modify or withdraw its determination of unsuitability.

5.2 Design standards.

5.21 All subdivision layouts shall be developed in proper relation to existing and proposed streets, topography, surface water, vegetative cover, other natural features, and the most advantageous development of adjoining areas.

5.22 Lot size

(A) Lots within a plat shall be of a size and shape to satisfy the requirements of section 4.1.

(b) The shape of individual lots may render portions unusable for installing private sewage disposal systems or providing adequate separating distances between them and watercourses or water wells. Therefore, any part of a lot less than 30 feet wide shall not be used in computing the minimum lot area.

5.23 Public streets

(a) Public streets shall be designed and located to take into account:

- (1) Existing and planned streets,
- (2) Topographic conditions including the bearing capacity and erosion potential of the soil,
- (3) Public convenience and safety including facilitating fire protection, snow plowing, and pedestrian traffic,
- (4) Requirements of public utility facilities,
- (5) The proposed uses of land to be served,
- (6) Anticipated traffic volumes, and
- (7) Further resubdivision possibilities.

(b) Width: Public streets shall be of the right-of-way, roadway and surface width specified by the county highway commissioner and approved by the county board.

(c) Construction standards for public streets: Where there are no local road standards, the minimum standards of the Minnesota Department of Transportation shall apply. The subdivider shall grade the roadbeds in the roadway width to subgrade and shall surface all roadways to the width prescribed by these regulations.

(d) Sale of lands abutting on private way: No person shall sell any parcel of land in a subdivision located in shoreland areas if it abuts on a road which has not been accepted as a public road unless the seller informs the purchaser in writing of the fact that the road is not a public road and is not required to be maintained by the town or county.

5.24 Storm drainage

Storm drainage facilities, where required, shall be designed to permit the unimpeded flow of natural watercourses; ensure the drainage of all points along the line of streets; and provide positive drainage away from on-site sewage disposal facilities. In designing storm drainage facilities, special consideration shall be given to protection against shoreland erosion and siltation of surface waters and preventing excess runoff on adjacent property.

5.25 Water Supply Facilities

Where there is an existing public water supply system on or near the subdivision, the local municipality furnishing such service and the Board of Commissioners shall determine the feasibility of service and the requirements to be followed by the subdivider in connecting to the system. Where there is no existing public water supply, individual water supply systems will be permitted in accordance with the minimum standards and regulations of the Department of Health.

5.26 Sanitary sewerage

(a) In areas that have a sanitary sewer system on or near the proposed

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subdivision, the local municipality furnishing such service and the Board of Commissioners shall determine the feasibility of service and the procedures to be followed by the subdivider in joining the system.

(b) In areas that are not to be served by sewer systems, on-site sewage disposal systems utilizing septic tank and soil absorption fields will be permitted only where soil borings and percolation tests indicate the systems will function adequately. Disposal systems shall be constructed to meet the requirements of the Minnesota Department of Health, the standards set out in section 3.3 of this ordinance, and other state and local requirements. The subdivider shall carry out sufficient soil borings and percolation tests to adequately portray the character of the soil, ground water levels, and depth to bedrock. Each lot shall have at least 50 percent of its area free of all of the limiting conditions set forth in section 3.36(d) of this ordinance.

(c) The Board of Commissioners may prohibit the installation of sewage disposal facilities utilizing septic tank and soil absorption fields where such systems would impair water quality, and the commissioners may require alternative methods of waste treatment and disposal including, but not limited to, biological and/or tertiary treatment plants, or incinerator, or chemical toilets.

(d) Plans for private sewage disposal systems not utilizing septic tank and soil absorption fields, as specified in paragraph (c), shall be approved in writing by the Minnesota Pollution Control Agency or Minnesota Department of Health. The subdivider shall clearly indicate on the face of the plat and in any deed of conveyance that septic tank and soil absorption fields are not to be used.

5.3 Dedications.

5.31 The Board of Commissioners may require that suitable sites in the subdivision be dedicated or reserved for future public use, such as schools, parks, playgrounds, public access, and open spaces as needed by the subdivision.

5.32 Any part of a street or other public way which is indicated on a comprehensive plan or plan component shall conform to the arrangement, width, and location indicated, and shall be offered for dedication to the county or town.

5.33 The Board of Commissioners may require that easements for drainage ways of widths sufficient to accommodate anticipated storm water runoff be provided.

5.34 The Board of Commissioners may require that easements for public utilities be provided.

5.4 Procedures for submitting a plat.

All plats, replats or any modifications thereof shall be submitted to the County Board of Commissioners in the manner set forth in Minnesota Statutes 1969, chapter 505.

5.41 Any proposed plat in shoreland areas which is inconsistent with the provisions of this ordinance, shall first be approved by the commissioner of natural resources.

5.42 Survey monuments

The subdivider shall install survey monuments in accordance with the requirements of Minnesota Statutes, section 505.02.

5.5 Cluster development.

Smaller lot sizes may be allowed for planned cluster developments provided:

5.51 Preliminary plans are first approved by the commissioner of natural resources.

5.52 Central sewage facilities are installed which meet the standards, criteria, rules, or regulations of the Minnesota Department of Health and the Minnesota Pollution Control Agency.

5.53 Open space is preserved.

5.54 There is not more than one centralized boat launching facility for each cluster.

5.55 Any attached conditions are met, such as limits on overall density, minimum size of the cluster development, restriction to residential uses, or minimum length of water frontage.

6.0 Nonconforming and substandard uses.

6.1 Nonconforming uses:

Any uses in existence prior to the date of enactment of the shoreland ordinance which do not conform to the use restrictions of the established zoning district are nonconforming uses. All sanitary facilities inconsistent with sections 3.33 and 3.36(d) shall be brought into conformity or discontinued within five years from the date of enactment of this ordinance. All other nonconforming uses shall be subject to the following conditions:

6.11 No such use shall be expanded or enlarged except in conformity with the provisions of this ordinance.

6.12 No structural alteration, addition, or repair to any nonconforming structure over the life of the structure shall exceed 50 percent of its assessed value at the time of its becoming a nonconforming use unless permanently changed to a conforming use.

6.13 If such use is discontinued for 12 consecutive months, any future use of the building or premises shall conform to this ordinance. The county assessor shall notify the zoning administrator in writing of instances of nonconforming uses which have been discontinued for a period of 12 consecutive months.

6.14 Uses or adjuncts thereof which are nuisances shall not be permitted to continue as nonconforming uses.

6.2 Substandard uses:

Any uses of shorelands in existence prior to the date of enactment of this ordinance which are permitted within the applicable zoning district, but do not meet the minimum lot area, setbacks, or other dimensional requirements of this ordinance are substandard uses. Substandard uses, including substandard sanitary facilities, shall be allowed to continue. However, any structural alteration or addition to a substandard use which will increase the substandard dimensions shall not be allowed.

7.0 Administration and enforcement.

7.1 Zoning administrator.

The office of the zoning administrator is hereby established, for which the Board of County Commissioners may appoint such employee or employees of the county as it may deem proper. The term of office of the zoning administrator shall be indefinite and shall terminate at the pleasure of the Board of County Commissioners.

7.11 Duties

The zoning administrator shall:

(a) Act as building inspector for the county;

(b) Enforce and administer the provisions of this ordinance;

(c) Issue permits and certificates of occupancy and maintain records thereof;

(d) Receive and forward to the Board of County Commissioners, the County Planning Commission, and the commissioner of natural resources, all applications for conditional use permits (See section 7.4).

(e) Receive and forward all applications and petitions for matters to come before the Board of Adjustment;

(f) Receive and forward to the Board of County Commissioners, the County Planning Commission, and the commissioner of natural resources all applications for amendments to this ordinance (See section 8.0).

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(g) Inspect all construction and development to insure that the standards of this ordinance are being complied with;

(h) Provide and maintain a public information bureau relative to matters arising out of this ordinance; and

(i) Maintain the county zoning map as required in section 2.2.

7.2 Board of Adjustment.

A Board of Adjustment is hereby established and vested with such authority as is hereinafter provided and as provided by Laws of Minnesota 1959, chapter 559, as amended. Such board shall consist of three members, one of which shall be a member of the County Planning Commission, excluding any elected officer of the County or employee of the Board of County Commissioners. The three board members shall be appointed by the Board of County Commissioners. The board members shall be appointed for terms coinciding with terms on the County Planning Commission.

7.21 The Board of Adjustment shall elect a chairman and vice chairman from among its members. It shall adopt rules for the transaction of its business and shall keep a public record of its transactions, findings and determinations.

7.22 The meetings of the Board of Adjustment shall be held at the call of the chairman and at such other times as the Board in its rules of procedure may specify.

7.23 Powers. The Board of Adjustment shall have the following powers:

(a) To grant a variance as provided in section 7.3 of this ordinance.

(b) To interpret zoning district boundaries on official zoning maps.

(c) To permit the extension of a zoning district where the boundary line thereof divides a lot in one ownership at the time of the passage of this ordinance, but such extension of any district shall not exceed 100 feet.

(d) To act upon all questions as they may arise in the administration of this ordinance; and to hear and decide appeals from and to review any order, requirements, decision, or determination made by an administrative official charged with enforcing this ordinance adopted pursuant to the provisions of Minnesota Statutes, sections 394.21 to 394.37, Laws of Minnesota 1959, chapter 559, as amended.

(e) To grant conditional use permits as specified in section 7.4.

7.3 Variances from standards.

In any case where, upon application of any responsible parties to the Board of Adjustment, it appears, that by reason of exceptional circumstances, the strict enforcement of any provision of the standards would cause unnecessary hardship or that strict conformity with the standards would be unreasonable, impractical or not feasible under the circumstances, the Board of Adjustment may permit a variance therefrom upon such conditions as it may prescribe for management of shorelands consistent with the general purposes of this ordinance and the intent of this and all other applicable state and local rules and laws, provided that:

7.31 The condition causing the hardship is unique to that property.

7.32 The variance is proved necessary in order to secure for the applicant a right or rights that are enjoyed by other owners in the same area or district.

7.33 The granting of the variance will not be contrary to the public interest or damaging to the rights of other persons or to property values in the neighborhood.

7.34 The granting of the variance will not be contrary to management policies of the area or district.

7.35 No variance shall be granted simply because there are no objections or because those who do not object outnumber those who do; nor for any other reason than a proved hardship.

7.4 Conditional uses.

7.41 Application for conditional use permit

Any use listed as a conditional use in this ordinance shall be permitted only upon application to the zoning administrator and issuance of a conditional use permit by the Board of Adjustment.

7.42 Standards applicable to all conditional uses

In passing upon a conditional use permit the Board of Adjustment shall evaluate the effect of the proposed use upon:

- (a) The maintenance of safe and healthful conditions.
- (b) The prevention and control of water pollution including sedimentation.
- (c) Existing topographic and drainage features and vegetative cover on the site.
- (d) The location of the site with respect to floodplains and floodways of rivers or streams.
- (e) The erosion potential of the site based upon degree and direction of slope, soil type, and vegetative cover.
- (f) The location of the site with respect to existing or future access roads.
- (g) The need of the proposed use for a shoreland location.
- (h) Its compatibility with uses on adjacent land.
- (i) The amount of liquid wastes to be generated and the adequacy of the proposed disposal systems.

(j) Locational factors under which:

- (1) Domestic uses shall be generally preferred;
- (2) Uses not inherently a source of pollution within an area shall be preferred over uses that are or may be a pollution source;
- (3) Use locations within an area tending to minimize the possibility of pollution shall be preferred over use locations tending to increase that possibility.

7.43 Conditions attached to conditional uses

Upon consideration of the factors listed above, the Board of Adjustment may attach such conditions, in addition to those required elsewhere in this ordinance, that it deems necessary in furthering the purposes of this ordinance. Violation of any of these conditions shall be deemed a violation of this ordinance. Such conditions may include specifications for, without limitation because of specific enumeration: type of shore cover; increased setbacks and yards; specified sewage disposal and water supply facilities; landscaping and planting screens; period of operation; operational control; sureties; deed restrictions; locations of piers, docks, parking, and signs; type of construction or any other requirements necessary to fulfill the purpose and intent of this ordinance.

In order to secure information upon which to base its determination the Board of Adjustment may require the applicant to furnish, in addition to the information required for a zoning permit, the following information:

- (a) A plan of the area showing contours, soil types, high water mark, ground-water conditions, bedrock, slope, and vegetative cover.
- (b) Location of buildings, parking areas, traffic access, driveways, walkways, piers, open spaces, and landscaping.
- (c) Plans of buildings, sewage disposal facilities, water supply systems, and arrangements of operations.
- (d) Specifications for areas of proposed filling, grading, lagooning, or dredging.
- (e) Other pertinent information necessary to determine if the proposed use meets the requirements of this ordinance.

The Board of Adjustment in evaluating each application may request the

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County Soil and Water Conservation District to make available expert assistance from those state and federal agencies which are assisting said district under a memorandum of understanding and any other state or federal agency which can provide technical assistance.

7.44 Notice and public hearing

Before passing upon an application for conditional use permit the Board of Adjustment shall hold a public hearing. Notice of such public hearing specifying the time, place, and matters to come before the board shall be published in the official paper of the county at least ten days in advance of such hearing.

7.45 Fees

The applicant, upon filing of his application, shall pay a fee to the zoning administrator not to exceed administrative costs. Such fees shall be determined by the County Board of Commissioners.

7.5 Permits and certificate of occupancy.

7.51 Building permit

(a) Hereafter no person shall erect, alter, or move any building or part thereof without first securing a building permit therefor. No permit fee shall be charged for an alteration costing less than \$1,000.

(b) Application for a building permit shall be made to the zoning administrator on blank forms to be furnished by the county. Each application for a permit to construct or alter a building shall be accompanied by a plan drawn to scale showing the dimensions of the lot to be built upon and the size and location of the building and accessory buildings to be erected. Applications for any kind of building permit shall contain such other information as may be deemed necessary for the proper enforcement of this ordinance or any other. The zoning administrator shall issue the building permit only after determining that the building plans, together with the application, comply with the terms of this ordinance, except where such setback does not comply with the planning of future road construction, which information shall be furnished by the county.

7.52 Other Permits

Permits for installing water and sewage disposal systems, and excavations intended for connection to a public water and the erection of signs in shoreland areas must also be obtained from the county zoning administrator before construction is begun.

7.53 Permit fees and inspection fees as may be established by resolution of the Board of County Commissioners shall be collected by the zoning administrator for deposit with the county and credited to the general revenue fund.

7.54 Certificate of occupancy

(a) A certificate of occupancy shall be obtained from the zoning administrator before any building hereafter erected or structurally altered is occupied or used or the use of any such building is altered.

(b) Application for a certificate of occupancy for a new building or for an existing building which has been altered shall be made to the zoning administrator as part of the application for a building permit as required in section 7.51.

(c) Every certificate of occupancy shall state that the building or proposed use of a building or land complies with all provisions of law and this ordinance. A record of all certificates of occupancy shall be kept on file in the office of the zoning administrator, and copies shall be furnished on request to any person having a proprietary or tenancy interest in the building or land affected.

7.6 Enforcement.

7.61 This ordinance shall be administered and enforced by the zoning administrator, who is hereby designated the enforcing officer.

7.62 In the event of a violation or a threatened violation of this ordinance, the Board of County Commissioners or any member thereof, in addition to other

remedies, may institute appropriate actions or proceedings to prevent, restrain, correct, or abate such violations or threatened violations, and it shall be the duty of the county attorney to institute such action.

7.63 Any taxpayer or taxpayers of the county may institute mandamus proceedings in the district court to compel specific performance by the proper official or officials of any duty required by this ordinance.

7.64 Any person, firm, or corporation who shall violate any of the provisions hereof or who shall fail to comply with any of the provisions hereof or who shall make any false statement in any document required to be submitted under the provisions hereof, shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not to exceed \$300.00 or by imprisonment of not to exceed 90 days or both. Each day that a violation continues shall constitute a separate offense.

8.0 Amendment.

8.1 Application.

8.11 This ordinance may be amended whenever the public necessity and the general welfare require such amendment by following the procedure specified in this section.

8.12 Requests for amendment of this ordinance shall be initiated by a petition of the owner or owners of the actual property; a recommendation of the Planning Advisory Commission; or by action of the Board of County Commissioners.

8.13 An application for an amendment shall be filed with the zoning administrator. All applications for changes in the boundaries of any zoning district which are initiated by the petition of the owner or owners of the property, the zoning of which is proposed to be changed, shall be accomplished by a map or plat showing the lands proposed to be changed and all lands within 500 feet of the boundaries of the property proposed to be rezoned, together with the names and addresses of the owners of the lands in such area as the name appears on the records of _____ County.

8.14 Notice shall be sent by letter, when an amendment application has been filed for change in district boundary, to all property owners within 500 feet as to the time and place of the public hearing.

8.2 Public hearing.

Upon receipt in proper form of the application and other requested material, the Planning Advisory Commission shall conduct a public hearing in the manner prescribed by Minnesota Statutes 1969, section 394.26.

8.3 Authorization.

Following the public hearing, the Planning Advisory Commission shall make a report of its recommendations on the proposed amendment and shall file a copy with the county board within 60 days after the hearing.

8.4 Fees.

To defray the administrative costs of processing of requests for an amendment to this ordinance, a fee not exceeding administrative costs shall be paid by the petitioner. Such fee shall be determined by the County Board of Commissioners.

9.0 Date of effect. This ordinance shall be in full force and effect from and after its passage and approval, as provided by law.

Statutory Authority: *MS s 105.485 subd 3*

NOTE: Minnesota Statutes, section 396.05, was repealed by Laws of Minnesota 1974, chapter 571, section 51.

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5481 SHORELAND AND FLOODPLAIN MANAGEMENT 6120.2500

MUNICIPAL MANAGEMENT OF STATE SHORELAND AREAS LOCATED IN MUNICIPALITIES

6120.2500 DEFINITIONS.

Subpart 1. **Scope of terms; shall; distances.** For the purpose of these parts, certain terms or words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive. All distances, unless otherwise specified, shall be measured horizontally.

Subp. 2. **Boathouse.** "Boathouse" means a structure used solely for the storage of boats or boating equipment.

Subp. 3. **Building line.** "Building line" means that line measured across the width of the lot at the point where the main structure is placed in accordance with setback provisions.

Subp. 4. **Clear cutting.** "Clear cutting" means the removal of an entire stand of trees.

Subp. 5. **Conditional use.** "Conditional use" means a use of shorelands which is permitted within a zoning district only when allowed by the municipality after a public hearing, if certain conditions are met which eliminate or minimize the incompatibility with other permitted uses of the district.

Subp. 6. **Crowding potential.** "Crowding potential" means the ratio of total acreage of a water body to shore miles.

Subp. 7. **Hardship.** "Hardship" means the property in question cannot be put to a reasonable use under the conditions allowed by the official controls; the plight of the landowner is due to circumstances unique to his property, not created by the landowner; and the variance, if granted, will not alter the essential character of the locality. Economic considerations alone shall not constitute a hardship if a reasonable use for the property exists under terms of the official controls.

Subp. 8. **Lot.** "Lot" means a parcel of land designated by metes and bounds, registered land survey, auditors plot, or other accepted means and separated from other parcels or portions by said description for the purpose of sale, lease, or separation thereof. For the purposes of these parts, a lot shall be considered to be an individual building site which shall be occupied by no more than one principal structure equipped with sanitary facilities.

Subp. 9. **Municipality.** "Municipality" means any city.

Subp. 10. **Nonconforming use.** "Nonconforming use" means any use of land established before the effective date of a municipal ordinance which does not conform to the use restrictions of a particular zoning district. This should not be confused with substandard dimensions of a conforming use.

Subp. 11. **Ordinary high water mark.** "Ordinary high water mark" means a mark delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. The ordinary high water mark is commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial.

Subp. 12. **Planned unit development.** "Planned unit development" means a type of development which may incorporate a variety of land uses planned and developed as a unit. The planned unit development is distinguished from the traditional subdivision process of development in that zoning standards such as density, setbacks, height limits, and minimum lot sizes may be altered by negotiation and agreement between the developer, the municipality, and the commissioner.

Subp. 13. **Public waters.** "Public waters" means any waters of the state which serve a beneficial public purpose, as defined in Minnesota Statutes 1974, section 105.37, subdivision 6. However, no lake, pond, or flowage of less than ten acres in size and no river or stream having a total drainage area less than two square miles need be regulated by the municipality for the purposes of these parts. A

body of water created by a private user where there was no previous shoreland, as defined herein, for a designated private use authorized by the commissioner shall be exempt from the provisions of these parts.

The official determination of the size and physical limits of drainage areas of rivers and streams shall be made by the commissioner. The official size of lakes, ponds, or flowages shall be the areas listed in the Division of Waters, Soils and Minerals Bulletin 25, An Inventory of Minnesota Lakes, or in the event that lakes, ponds, or flowages are not listed therein, official determination of size and physical limits shall be made by the commissioner in cooperation with municipalities.

Subp. 14. Setback. "Setback" means the minimum horizontal distance between a structure or sanitary facility and the ordinary high water mark or between a structure or sanitary facility and a road, highway, or property line.

Subp. 15. Shoreland. "Shoreland" means land located within the following distances from public water: 1,000 feet from the ordinary high water mark of a lake, pond, or flowage; and 300 feet from a river or stream, or the landward extent of a flood plain designated by ordinance on such a river or stream, whichever is greater. The practical limits of shorelands may be less than the statutory limits whenever the waters involved are bounded by topographic divides which extend landward from the waters for lesser distances and when approved by the commissioner.

Subp. 16. Structure. "Structure" means any building or appurtenance thereto, except aerial or underground utility lines, such as sewer, electric, telephone, telegraph, or gas lines, including towers, poles, and other supporting appurtenances.

Subp. 17. Subdivision. "Subdivision" means improved or unimproved land or lands which are divided for the purpose of sale or lease, or divided successively within a five-year period for the purpose of sale or lease, into three or more lots or parcels of less than five acres each, contiguous in area and which are under common ownership or control.

Subp. 18. Substandard use. "Substandard use" means any use of shorelands existing prior to the date of enactment of any municipal ordinance which is permitted within the applicable zoning district but does not meet the minimum lot area and length of water frontage, structure setbacks, or other dimensional standards of the ordinance.

Subp. 19. Variance. "Variance" means any modification or variation of official controls where it is determined that, because of hardships, strict enforcement of the official controls is impractical.

Statutory Authority: *MS s 105.485 subd 3*

6120.2600 POLICY.

The uncontrolled use of shorelands adversely affects the public health, safety, and general welfare by contributing to pollution of public waters and by impairing the local tax base. In accordance with the authority granted in the Laws of Minnesota 1973, chapter 379, and in furtherance of the policies declared in Minnesota Statutes 1974, chapters 105, 115, 116, and 462, the commissioner of natural resources, hereinafter referred to as the commissioner, does hereby provide the municipalities of the state with minimum standards and criteria for the subdivision, use, and development of the shorelands of public waters located in municipalities in order to preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, and provide for the wise utilization of water and related land resources of the state.

Statutory Authority: *MS s 105.485 subd 3*

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6120.2700 MINIMUM STANDARDS AND CRITERIA.

To achieve the policies declared in part 6120.2600, the commissioner here sets forth minimum standards and criteria for the wise use and development of shorelands in parts 6120.2500 to 6120.3900 which include:

- A. classification of public waters;
 - B. rules providing for the designation of land use zoning districts compatible with shoreland management classification;
 - C. rules providing minimum dimensions for the size and length of water frontage of lots suitable for building sites;
 - D. rules governing the placement of structures in relation to shorelines and roads;
 - E. rules governing the amount of impervious surface allowed on each lot;
 - F. rules governing the type and placement of sanitary and waste disposal facilities;
 - G. rules governing the alteration of natural shorelands in municipalities;
 - H. rules governing the placement of roads and parking areas in shoreland areas;
 - I. rules governing the subdivision of shoreland areas in municipalities;
- and
- J. provisions for the enforcement and administration of municipal shoreland management ordinances.

These are minimum standards and criteria for municipal shoreland management ordinances. Each municipality shall be responsible for the administration and enforcement of the shoreland management ordinance adopted in compliance with these standards and criteria. Nothing in these standards and criteria shall be construed as prohibiting or discouraging a municipality from adopting and enforcing ordinances, or rules which are more restrictive.

Statutory Authority: *MS s 105.485 subd 3*

6120.2800 SCOPE.

These minimum standards and criteria apply to those shorelands of public waters of the state which are located in municipalities.

Statutory Authority: *MS s 105.485 subd 3*

6120.2900 SEVERABILITY.

The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision, or any other part.

Statutory Authority: *MS s 105.485 subd 3*

6120.3000 SHORELAND MANAGEMENT CLASSIFICATION SYSTEM.

Subpart 1. **Criteria.** The commissioner shall classify all public waters in municipalities in accordance with the provisions of parts 6120.0700 to 6120.0900 and the following criteria:

- A. Those waters whose shores are presently characterized by industrial, commercial, or high density residential development shall be classified as general development.
- B. Those waters whose shores are presently characterized by medium density residential development with or without limited service-oriented commercial development shall be classified as recreational development.
- C. Those waters whose shores are presently characterized by low density, single-family residential development shall be classified as natural environment.
- D. Those waters whose shores are not yet densely developed, so that the

future character of the waters is a matter of choice, shall be classified as either natural environment or recreational development, depending on:

- (1) existing natural characteristics of the waters and shorelands;
- (2) the ability of the waters and adjacent shorelands, based on size and crowding potential, to accept, without degradation, medium density shoreland development;
- (3) state, regional, county, and municipal plans; and
- (4) existing land use restrictions.

Subp. 2. **Supporting data.** Supporting data for the shoreland management classification is supplied by the records and files of the Department of Natural Resources, Bulletin No. 25 of the Division of Waters, Soils and Minerals (1968); other supporting data is provided in Minnesota's Lakeshore, part 2, Statistical Summary, Department of Geography, University of Minnesota; and additional supporting data may be supplied, as needed, by the commissioner.

Subp. 3. **Classification procedures.** Public waters shall be classified by the commissioner. The commissioner shall document each classification with appropriate supporting data. He shall submit a preliminary list of classified public waters to each affected municipality. Each affected municipality shall be given an opportunity to request a change in the proposed classification. If a municipality feels such a change is needed, a written request with supporting data may be submitted to the commissioner for consideration. If a municipality requests a change in a proposed shoreland management classification and the public water is located partially within the jurisdiction of another governmental unit, the commissioner shall review the recommendations of the other governmental unit(s) prior to making a final decision on the proposed change.

Subp. 4. **Reclassification.** The commissioner may, as the need arises, reclassify any public water. Also, any municipality may at any time submit a resolution and supporting data requesting a change in any shoreland management classification of waters within its jurisdiction to the commissioner for consideration.

Subp. 5. **Modification and expansion of system.** The commissioner may, as the need arises, modify or expand the shoreland classification system to provide specialized shoreland management rules based upon unique characteristics and capabilities of any public water(s).

Statutory Authority: *MS s 105.485 subd 3*

6120.3100 LAND USE DISTRICTS.

The development of shorelands of public waters shall be controlled by means of land use zoning districts which are designated to be compatible with the classes of public waters set forth in part 6120.3000. Land use zoning districts shall be established to provide for:

A. the management of areas unsuitable for development due to wet soils, steep slopes, flooding, inadequate drainage, severe erosion potential, or any other feature likely to be harmful to the health, safety, or welfare of the residents of the community;

B. the reservation of areas suitable for residential development from encroachment by commercial and industrial uses;

C. the centralization of service facilities for residential areas and enhancement of economic growth for those areas suitable for limited commercial development; and

D. the management of areas where use may be directed toward commercial or industrial uses, rather than strictly residential uses, which by their nature require location in shoreland areas.

Statutory Authority: *MS s 105.485 subd 3*

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6120.3200 CRITERIA FOR LAND USE ZONING DISTRICT DESIGNATION.

The land use zoning districts established by municipalities shall be based on considerations of: preservation of natural areas; present ownership and development of shoreland areas; shoreland soil types and their engineering capabilities; topographic characteristics; vegetative cover; municipal socioeconomic development needs and plans as they involve water and related land resources; the land requirements of industry which, by its nature, requires location in shoreland areas; and the necessity to preserve and restore certain areas having significant historical or ecological value.

Statutory Authority: *MS s 105.485 subd 3*

6120.3300 ZONING PROVISIONS.

Subpart 1. Purpose. In order to reduce the effects of overcrowding, to prevent pollution of waters of the state, to provide ample space on lots for sanitary facilities, to minimize flood damages, to maintain property values, and to maintain natural characteristics of shorelands and adjacent water areas, municipal shoreland ordinances shall control lot sizes, placement of structures on lots, and alterations of shoreland areas.

Subp. 2. Lot size. All lots intended as residential building sites platted or created by metes and bounds description after the date of enactment of the municipal shoreland ordinance shall conform to the following dimensions:

A. For natural environment waters, lots not served by public sewer shall be at least 80,000 square feet (approximately two acres) in area and at least 200 feet in width at the building line and at the ordinary high water mark (for lots abutting a public water). Lots served by public sewer and which abut a public water shall be at least 40,000 square feet (approximately one acre) in area and at least 125 feet in width at the building line and at the ordinary high water mark. All other lots served by a public sewer shall be at least 20,000 square feet (approximately one-half acre) in area and at least 125 feet in width at the building line.

B. For recreational development waters, lots not served by public sewer shall be at least 40,000 square feet (approximately one acre) in area and at least 150 feet in width at the building line and at the ordinary high water mark (for lots abutting a public water). Lots served by public sewer and which abut a public water shall be at least 20,000 square feet (approximately one-half acre) in area and at least 75 feet in width at the building line and at the ordinary high water mark. All other lots served by a public sewer shall be at least 15,000 square feet in area and at least 75 feet in width at the building line.

C. For general development waters, lots not served by a public sewer shall be at least 20,000 square feet (approximately one-half acre) in area and at least 100 feet in width at the building line and at the ordinary high water mark (for lots abutting a public water). Lots served by a public sewer and which abut a public water, shall be at least 15,000 square feet in area and at least 75 feet in width at the building line and at the ordinary high water mark. All other lots served by a public sewer shall be at least 10,000 square feet in area and at least 75 feet in width at the building line.

D. Lots of record in the office of the county register of deeds on the date of enactment of the municipal shoreland ordinance which do not meet the requirements of items A to D may be allowed as building sites provided such use is permitted in the zoning district, the lot is in separate ownership from abutting lands and sanitary and dimensional requirements of the shoreland ordinance are complied with insofar as practicable. Each municipal ordinance may, consistent with these standards and criteria, set a minimum size for substandard lots or impose their restrictions on the development of substandard lots, including the prohibition of development until the substandard lot(s) are served by public sewer and water.

E. Exceptions to the provisions of items A to D may be permitted for planned unit developments pursuant to part 6120.3800.

Subp. 3. Placement of structures on lots. The placement of structures on lots shall be controlled by the municipal shoreland ordinance in accordance with the class of public waters, high water elevation, and location of roads and highways as follows:

A. The following minimum setbacks for each class of public waters shall apply to all structures except those specified as exceptions in item F:

(1) for natural environment waters, at least 200 feet from the ordinary high water mark for lots not served by public sewer and at least 150 feet from the ordinary high water mark for lots served by public sewer;

(2) for recreational development waters, at least 100 feet from the ordinary high water mark for lots not served by public sewer and at least 75 feet from the ordinary high water mark for lots served by public sewer;

(3) for general development waters, at least 75 feet from the ordinary high water mark for lots not served by public sewer and at least 50 feet from the ordinary high water mark for lots served by public sewer; and

(4) furthermore, no structure shall be erected in the floodway of a river or stream as defined in Minnesota Statutes 1974, section 104.02.

B. High water elevations. In addition to the setback requirements of subpart 3, municipal shoreland ordinances shall control placement of structures in relation to high water elevation. Structures shall be placed at an elevation consistent with any applicable local floodplain management ordinances. When fill is required to meet this elevation, the fill shall be allowed to stabilize to accepted engineering standards before construction is begun. When no ordinances exist, the elevation to which the lowest floor, including basement, shall be placed shall be determined as follows:

(1) For lakes, ponds, and flowages, by an evaluation of available flood information and consistent with statewide standards and criteria for management of floodplain areas of Minnesota or placing the lowest floor at a level at least three feet above the highest known water level. In those instances where sufficient data on known high water levels are not available, the ordinary high water mark shall be used.

(2) For rivers and streams, by an evaluation of available flood information and consistent with statewide standards and criteria for management of flood plain areas of Minnesota.

C. Proximity to roads and highways. No structure shall be placed nearer than 50 feet from the right-of-way line of any federal, state, or county trunk highway; or 20 feet from the right-of-way line of any town road, public street, or others not classified.

D. All structures, except nonresidential agricultural structures, shall not exceed 35 feet in height, unless such structures are approved as part of a planned unit development pursuant to the procedures set forth in part 6120.3800.

E. The total area of all impervious surfaces on a lot shall not exceed 30 percent of the total lot area.

F. Exceptions.

(1) Boathouses may be located landward of the ordinary high water mark as a conditional use provided they are not used for habitation and they do not contain sanitary facilities.

(2) Location of piers and docks shall be controlled by applicable state and local rules.

(3) Where development exists on both sides of a proposed building site, structural setbacks may be altered to take setbacks of existing structures into account.

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(4) Commercial, industrial, or permitted open space uses requiring location on public waters may be allowed as conditional uses closer to such waters than the setbacks specified in this subpart.

Subp. 4. Shoreland alterations. Shoreland alterations:

A. Natural vegetation in shoreland areas shall be preserved insofar as practical and reasonable in order to retard surface runoff and soil erosion, and to utilize excess nutrients. The removal of natural vegetation shall be controlled by the municipal shoreland ordinance in accordance with the following criteria:

(1) Clear cutting shall be prohibited, except as necessary for placing public roads, utilities, structures, and parking areas.

(2) Natural vegetation shall be restored insofar as feasible after any construction project.

(3) Selective cutting of trees and underbrush shall be allowed as long as sufficient cover is left to screen motor vehicles and structures when viewed from the water.

B. Grading and filling in shoreland areas or any other substantial alteration of the natural topography shall be controlled by the municipal shoreland ordinance in accordance with the following criteria:

(1) The smallest amount of bare ground shall be exposed for as short a time as feasible.

(2) Temporary ground cover, such as mulch, shall be used and permanent vegetative cover, such as sod, shall be provided.

(3) Methods to prevent erosion and trap sediment shall be employed.

(4) Fill shall be stabilized to accepted engineering standards.

C. Alterations of beds of public waters. Any work which will change or diminish the course, current, or cross-section of a public water shall be approved by the commissioner before the work is begun. This includes construction of channels and ditches, lagooning, dredging of lakes or stream bottom for removal of muck, silt, or weeds, and filling in the lake or stream bed. Approval shall be construed to mean the issuance by the commissioner of a permit under the procedures of Minnesota Statutes 1974, section 105.42 and other related statutes.

Excavations on shorelands where the intended purpose is connection to a public water, such as boat slips, canals, lagoons, and harbors, shall be controlled by the municipal shoreland ordinance. Permission for such excavations may be given only after the commissioner has approved the proposed connection to public waters. Approval shall be given only if the proposed work is consistent with applicable state regulations for work in beds of public waters.

Subp. 5. **Placement of roads and parking areas.** The placement of roads and parking areas shall be controlled in order to retard the runoff of surface waters and excess nutrients. The placement of roads and parking areas shall be controlled by the municipal shoreland ordinance in accordance with the following criteria:

A. No impervious surface shall be placed within 50 feet of the ordinary high water mark.

B. Where feasible and practical, all roads and parking areas shall meet the setback requirements established for structures in subpart 3.

C. Natural vegetation or other natural materials shall be used in order to screen parking areas when viewed from the water.

Subp. 6. **Exception to zoning provisions.** Municipalities may, under special circumstances and with the commissioner's approval, adopt shoreland management ordinances which are not in strict conformity with this part provided that the proposed ordinance is based upon individual public water capabilities and that the purposes of Minnesota Statutes 1974, section 105.484 are satisfied.

Statutory Authority: *MS s 105.485 subd 3*

6120.3400 SANITARY PROVISIONS.

Subpart 1. **Purpose.** In order to ensure safe and healthful conditions, to prevent pollution and contamination of surface and ground waters, and to guide development compatible with the natural characteristics of shorelands and related water resources, municipal shoreland ordinances shall control individual water supply and waste disposal systems in respect to location, construction, repair, use, and maintenance; and shall control commercial, agricultural, industrial, and municipal waste disposal, and solid waste disposal sites.

Subp. 2. **Water supply.** Water supply:

A. Any public or private supply of water for domestic purposes shall conform to Minnesota Department of Health Standards for water quality.

B. Private wells shall be placed in areas not subject to flooding and upslope from any source of contamination. Wells already existing in areas subject to flooding shall be floodproofed in accordance with accepted engineering standards.

Subp. 3. **Sewage and waste disposal.** Any premises used for human occupancy shall be provided with an adequate method of sewage disposal to be maintained in accordance with acceptable practices.

A. Public or municipal collection and treatment facilities shall be used where available or feasible.

B. All private sewage and other sanitary waste disposal systems shall conform to applicable standards, criteria, and rules of the Minnesota Department of Health, the Minnesota Pollution Control Agency, and any applicable local government rules in terms of size, construction, use, and maintenance.

C. Location and installation of a septic tank and soil absorption system shall be such that, with reasonable maintenance, it will function in a sanitary manner and will not create a nuisance, endanger the quality of any domestic water supply, or pollute or contaminate any waters of the state. In determining a suitable location for the system, consideration shall be given to the size and shape of the lot, slope of natural and finished grade, soil permeability, high groundwater elevation, geology, proximity to existing or future water supplies, accessibility for maintenance, and possible expansion of the system.

D. Septic tank and soil absorption systems shall be set back from the ordinary high water mark in accordance with the class of public waters:

- (1) on natural environment waters, at least 150 feet;
- (2) on recreational development waters, at least 75 feet; and
- (3) on general development waters, at least 50 feet.

E. Soil absorption systems shall not be allowed in the following areas for disposal of domestic sewage:

- (1) low, swampy areas or areas subject to recurrent flooding;
- (2) areas where the highest known groundwater table, bedrock, or impervious soil conditions are within four feet of the bottom of the system; and
- (3) areas of ground slope which create a danger of seepage of the effluent onto the surface of the ground.

F. Municipal shoreland ordinances may require or allow alternative methods of sewage disposal such as holding tanks, privies, electric or gas incinerators, biological and/or tertiary waste treatment plants or land disposal systems, provided such facilities meet the standards, criteria, and rules of the Minnesota Pollution Control Agency and the Minnesota Department of Health.

G. Public sewage disposal and commercial, agricultural, solid waste, and industrial waste disposal shall be subject to the standards, criteria, and rules of the Minnesota Pollution Control Agency.

Statutory Authority: *MS s 105.485 subd 3*

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6120.3500 LAND SUITABILITY.

No land shall be subdivided which is held unsuitable by the municipality for the proposed use because of flooding, inadequate drainage, soil and rock formations with severe limitations for development, severe erosion potential, unfavorable topography, inadequate water supply or sewage disposal capabilities, or any other feature likely to be harmful to the health, safety, or welfare of future residents of the proposed subdivision or of the community.

Statutory Authority: *MS s 105.485 subd 3*

6120.3600 INCONSISTENT PLATS REVIEWED BY COMMISSIONER.

All plats which are inconsistent with the municipal shoreland ordinance shall be reviewed by the commissioner before approval by the municipality may be granted. Such review shall require that the proposed plats be received by the commissioner at least ten days before a hearing is called by the municipality for consideration of approval of a final plat.

Statutory Authority: *MS s 105.485 subd 3*

6120.3700 COPIES OF PLATS SUPPLIED TO COMMISSIONER.

Copies of all plats within shoreland areas shall be submitted to the commissioner within ten days of final approval by the municipality.

Statutory Authority: *MS s 105.485 subd 3*

6120.3800 PLANNED UNIT DEVELOPMENT.

Altered zoning standards may be allowed as exceptions to the municipal shoreland ordinance for planned unit developments provided:

A. Preliminary plans shall be approved by the commissioner prior to their approval by the municipality.

B. Central sewage facilities shall be installed which at least meet the applicable standards, criteria, or rules of the Minnesota Department of Health and the Minnesota Pollution Control Agency or the planned unit development is connected to a municipal sanitary sewer.

C. Open space is preserved. This may be accomplished through the use of restrictive deed covenants, public dedications, or other methods.

D. That the following factors are carefully evaluated to ensure that the increased density of development is consistent with the resource limitations of the public water:

- (1) suitability of the site for the proposed use;
- (2) physical and aesthetic impact of increased density;
- (3) level of current development;
- (4) amount and ownership of undeveloped shoreland;
- (5) levels and types of water surface use and public access; and
- (6) possible effects on overall public use.

E. Any commercial, recreational, community, or religious facility allowed as part of the planned unit development shall conform to all applicable federal and state regulations including, but not limited to the following:

- (1) licensing provisions or procedures;
- (2) waste disposal rules;
- (3) water supply rules;
- (4) building codes;
- (5) safety rules;
- (6) rules concerning the appropriation and use of public waters as defined in Minnesota Statutes 1974, chapter 105; and
- (7) applicable rules of the Minnesota Environmental Quality Board.

F. The final plan for a planned unit development shall not be modified, amended, repealed, or otherwise altered unless approved in writing by the developer, the municipality, and the commissioner.

G. There are centralized shoreline recreation facilities such as beaches, docks, and boat launching facilities.

Statutory Authority: *MS s 105.485 subd 3*

6120.3900 ADMINISTRATION.

Subpart 1. Administration and enforcement. Municipalities shall provide for the administration and enforcement of the municipal shoreland ordinance adopted pursuant to Minnesota Statutes 1974, section 462.362.

Subp. 2. Permit system. In order to facilitate orderly and efficient administration and enforcement of municipal shoreland ordinances, municipalities shall establish permit procedures for building construction, installation of sewer and water facilities, and grading and filling in shoreline areas.

Subp. 3. Variances. Variances shall only be granted when there are particular hardships which make strict enforcement of official controls impractical. They shall not circumvent the general purposes and intent of the official controls. No variance may be granted that would allow any use that is prohibited in the zoning district in which the subject property is located. Conditions may be imposed in the granting of variances to ensure compliance and to protect adjacent properties and the public interest.

Subp. 4. Nonconforming uses. Under authority of Minnesota Statutes 1974, section 462, municipalities may adopt provisions to regulate, control, and reduce the number or extent of and gradually eliminate nonconforming and substandard uses. Municipalities shall provide for the elimination of sanitary facilities inconsistent with part 6120.3400, subpart 3, items B, C, and E over a period of time not to exceed five years from the date of enactment of the municipal ordinance.

Subp. 5. Joint exercise of powers. In order to facilitate more logical, consistent, and efficient administration of municipal shoreland management ordinances, municipalities are encouraged, wherever feasible and practicable, to enter into joint powers agreements with adjacent or otherwise similarly situated local units of government for the purpose of jointly administering and enforcing shoreland management ordinances pursuant to the procedures and authority of Minnesota Statutes 1974, sections 394.32 and 471.59.

Subp. 6. Notification procedures. Copies of all notices of any public hearings to consider variances, amendments, or conditional uses under the municipal shoreland management ordinance shall be received by the commissioner at least ten days prior to such hearings.

A copy of amendments and final decisions granting variances or conditional uses under the municipal shoreland management ordinance shall be received by the commissioner within ten days of final action or amendment.

Statutory Authority: *MS s 105.485 subd 3*

FLOODPLAIN MANAGEMENT

6120.5000 DEFINITIONS.

Subpart 1. Scope of terms. For the purposes of these rules, certain terms or words used herein shall be interpreted as follows.

Subp. 2. Building code. "Building code" means a collection of regulations adopted by a local governing body setting forth standards for the construction, addition, modification, and repair of buildings and other structures for the purpose of protecting the public health, safety, and general welfare.

Subp. 3. Channel. "Channel" means a natural or artificial depression of perceptible extent, with definite bed and banks to confine and conduct flowing water either continuously or periodically.

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Subp. 4. **Commissioner.** "Commissioner" means the commissioner of natural resources.

Subp. 5. **Encroachment lines.** "Encroachment lines" means the lateral limits or lines drawn along each side and generally parallel to a stream or another body of water, which delineates the floodway and within which the flood-carrying capacity of the stream or other body of water is to be preserved. Their location, if along a stream, should be such that the floodway between them will effectively carry and discharge a flood not less than the regional flood.

Subp. 6. **Equal degree of encroachment.** "Equal degree of encroachment" means a method of determining the location of encroachment lines so that floodplain lands on both sides of a stream are capable of conveying a proportionate share of flood flows. This is determined by considering the effect of encroachment on the hydraulic efficiency of the floodplain along both sides of a stream for a significant reach.

Subp. 7. **Flood.** "Flood" means a temporary rise in stream flow or stage which results in inundation of the areas adjacent to the channel.

Subp. 8. **Flood frequency.** "Flood frequency" means the average frequency, statistically determined, for which it is expected that a specific flood stage or discharge may be equalled or exceeded. By strict definition, such estimates are designated "exceedence frequency," but in practice the term "frequency" is used. The frequency of a particular stage or discharge is usually expressed as having a probability of occurring once within a specified number of years. See also recurrence interval in subpart 20.

Subp. 9. **Flood fringe.** "Flood fringe" means that portion of the floodplain outside of the floodway.

Subp. 10. **Flood peak.** "Flood peak" means the highest value of stage or discharge attained during a flood event; thus peak stage or peak discharge.

Subp. 11. **Floodplain.** "Floodplain" means the areas adjoining a watercourse which has been or hereafter may be covered by the regional flood.

Subp. 12. **Floodplain management.** "Floodplain management" means the full range of public policy and action for ensuring wise use of the floodplains. It includes everything from collection and dissemination of flood control information to actual acquisition of floodplain lands, construction of flood control measures, and enactment and administration of codes, ordinances, and statutes regarding floodplain land use.

Subp. 13. **Floodplain regulations.** "Floodplain regulations" means the full range of codes, ordinances, and other regulations relating to the use of land and construction within floodplain limits. The term encompasses zoning ordinances, subdivision regulations, and sanitary and building codes.

Subp. 14. **Flood profile.** "Flood profile" means a graph or a longitudinal plot of water surface elevations of a flood event along a reach of a stream or river.

Subp. 15. **Floodproofing.** "Floodproofing" means a combination of structural provisions, changes or adjustments to properties and structures subject to flooding primarily for the reduction or elimination of flood damages to properties, water and sanitary facilities, structures, and contents of buildings in a flood hazard area.

Subp. 16. **Flood stage.** "Flood stage" means, as commonly used by the U.S. Weather Bureau and others, that stage, at a particular river gauge, where overflow of the natural banks of the stream results in significant flood damage in any portion of the reach for which the gauge is a representative index.

Subp. 17. **Floodway.** "Floodway" means the channel of the watercourse and those portions of the adjoining floodplains which are reasonably required to carry and discharge the regional flood.

Subp. 18. **Local governmental unit.** "Local governmental unit" means a county, city, village, or borough.

Subp. 19. **Reach.** "Reach" means the hydraulic engineering term used to describe longitudinal segments of a stream or river influenced by a natural or man made obstruction. In an urban area, the segment of a stream or river between two consecutive bridge crossings would typically constitute a reach.

Subp. 20. **Recurrence interval.** "Recurrence interval" means the average interval of time, based on a statistical analysis of actual or representative stream flow records, which can be expected to elapse between floods equal to or greater than a specified stage or discharge. The recurrence interval is generally expressed in years. See also flood frequency in subpart 8.

Subp. 21. **Regional flood.** "Regional flood" means a flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval.

Subp. 22. **Rural areas.** "Rural areas" means all areas not included under urban areas, such as agricultural, forest, and undeveloped areas.

Subp. 23. **Standard project flood.** "Standard project flood" means the flood that may be expected from the most severe combination of meteorological and hydrological conditions that is considered reasonably characteristic of the geographical area in which the drainage basin is located, excluding extremely rare combinations. Such floods are intended as practicable expressions of the degree of protection that should be sought in the design of flood control works, the failure of which might be disastrous.

Subp. 24. **Subdivision regulations.** "Subdivision regulations" means regulations and standards established by a local unit of government with authority granted under a state enabling law, for the subdivision of land in order to secure coordinated land development.

Subp. 25. **Urban areas.** "Urban areas" means the area within the present corporate limits plus the adjoining areas that are or could be under the statutory extraterritorial zoning jurisdiction of any city, village, or borough.

Subp. 26. **Watercourse.** "Watercourse" means a channel in which a flow of water occurs either continuously or intermittently in a definite direction. The term applies to either natural or artificially constructed channels.

Subp. 27. **Zoning ordinance.** "Zoning ordinance" means an ordinance adopted by a local unit of government, with authority from state enabling legislation, which under the police power divides local governmental areas into districts and, within each district, regulates the use of land.

Statutory Authority: *MS s 104.05*

6120.5100 POLICY.

The following standards and criteria establishing minimum floodplain management standards are promulgated in accordance with the authority granted in Minnesota Statutes 1969, section 104.05 and apply to land adjacent to all watercourses of the state except as herein provided.

Statutory Authority: *MS s 104.05*

6120.5200 SCOPE.

These standards and criteria for the management of flood-prone areas and private and governmental uses located therein pertain to all watercourses, both intrastate and interstate, where the drainage area of the watercourse is over two square miles and where the commissioner finds a watercourse having a drainage area under two square miles has significant flood hazard.

Statutory Authority: *MS s 104.05*

6120.5300 SEVERABILITY.

The provisions of these rules shall be severable and the invalidity of any

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lettered paragraph, subparagraph, or subdivision thereof shall not invalidate any other lettered paragraph or subparagraph, subdivision, or any other part.

Statutory Authority: *MS s 104.05*

6120.5400 LOCAL DUTIES.

In accordance with Minnesota Statutes 1969, chapter 104, local governmental units shall:

A. submit to the commissioner for his review a list of available flood data, floodplain maps, and degree of flood damage potential for each watercourse having flood hazards;

B. adopt or amend a floodplain management ordinance which meets these minimum standards and criteria for floodplain management, upon the determination of the commissioner that sufficient technical information is available for the delineation of floodplains and floodways on a watercourse;

C. submit proposed floodplain management ordinances to the commissioner for his review and approval before adoption;

D. administer and enforce floodplain management ordinances upon adoption; and

E. submit to the commissioner for approval any amendments to floodplain management ordinances before adoption.

Statutory Authority: *MS s 104.05*

6120.5500 COMMISSIONER'S DUTIES.

The commissioner shall:

A. Establish statewide standards for management of floodplain areas which apply to private and governmental uses located therein.

B. Determine the availability of sufficient technical information for the delineation of floodplains and floodways on a watercourse.

C. Upon request, assist the local governmental unit in the drafting of a floodplain management ordinance which meets the provisions of Minnesota Statutes 1969, chapter 104 and the minimum standards set forth herein. This assistance may include, but not be limited to, creation of specific guidelines to be used locally in the formulation of reasonable regulations and other floodplain management practices based on sound technical data and consistent with state standards and community land use needs.

D. Review and approve floodplain management ordinances prior to adoption by the local governmental unit.

E. Where sufficient information is not available, cooperate to the fullest practical extent with appropriate federal agencies and local governmental units in securing adequate technical information which can be used for the delineation of floodplains and floodways along the state's watercourses.

F. Periodically review and upgrade floodplain management criteria based on new hydrologic, hydraulic, and other technical methodologies.

G. Disseminate to local governmental units, whenever available, technical information including information of federal programs involving floodplain areas, educational materials, and other material useful in carrying out a floodplain management program.

H. Survey the enforcement of floodplain management ordinances.

I. Coordinate federal, state, and local floodplain management activities in the state.

Statutory Authority: *MS s 104.05*

6120.5600 TECHNICAL STANDARDS AND REQUIREMENTS FOR FLOODPLAIN EVALUATION.

Subpart 1. **Scope.** Except as otherwise provided herein, or as new hydrologic and hydraulic techniques of nationwide scope and acceptance are developed and deemed acceptable by the commissioner, any federal, state, or local agency, any of their consultants, or any private consultants involved in the establishment and/or implementation of floodplain management studies or programs in Minnesota shall comply with technical standards prescribed in all applicable sections of these standards and criteria.

Subp. 2. **Flood frequency techniques for delineation of floodplain.** The regional flood shall serve as the basis for delineation of the floodplain and floodway for regulatory purposes.

The basic method of flood frequency analysis in the determination of regional flood flows shall be the log, Pearson Type III distribution (with log, normal as a special case) as described in the Federal Water Resources Council Bulletin 15, A Uniform Technique for Determining Flood Flow Frequencies, December 1967.

In those instances where inadequate stream flow data exists to allow use of the method outlined in the preceding paragraph, the commissioner may use or authorize use of other acceptable hydrologic methods or techniques.

Subp. 3. **Determination of extreme flooding events.** Whenever the commissioner finds that sufficient technical information is available to estimate the magnitude of floods larger than the regional flood (such as the standard project flood) this information shall be made available by the commissioner to the local unit of government for use by the public as general information.

Subp. 4. **Standards for technical hydrologic and hydraulic techniques in flood hazard evaluation.** In order to provide uniformity in the analysis of flood hazards and the effects of various artificial and natural obstructions to flood flows within floodplain areas the commissioner will adopt and require use of a uniform system for the analysis of technical factors including:

A. minimum required survey data needed to provide adequate vertical and horizontal ground control elevations and distances for the channel of a stream or river and the adjoining floodplain area;

B. referencing of bench marks used for vertical control data; and

C. procedures for computation of water surface profiles and analysis of backwater effects in floodplain areas.

Statutory Authority: *MS s 104.05*

6120.5700 MINIMUM FLOODPLAIN MANAGEMENT STANDARDS FOR LOCAL ZONING ORDINANCES.

Subpart 1. **In general.** The standards contained in this part apply to the amendment or creation of local floodplain zoning ordinances.

To provide for comprehensive floodplain management, supplemental measures as contained in part 6120.5900 shall be enacted consistent with these standards.

These standards and criteria are considered to provide only a minimum degree of flood protection for floodplain developments. Local governmental units may enact local floodplain regulations which exceed these standards.

Subp. 2. **Minimum mapping standard.** All mapping used to delineate floodplain zoning districts shall include the following properly identified regulatory districts: floodplains, floodways, and flood fringe areas. Where adequate information is available the limits of the area subject to inundation by floods larger than the regional flood, as provided in part 6120.5600, subpart 3, shall be designated for public information purposes.

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Local ordinances may superimpose the floodplain zoning districts on the prior official zoning map or the ordinance may adopt, by reference, a supplemental official map providing the supplemental map is approved by the commissioner.

The floodplain limits on the zoning map shall correspond to the actual area subject to inundation, not street or property lines, unless use of the latter would include all areas subject to inundation.

Subp. 3. Delineation of the floodplain. Delineation:

A. The delineation of the floodplain shall be based on the flood protection elevation as set forth in subpart 5.

B. Procedures for floodplain determination shall conform to technical standards established in part 6120.5600, subparts 2 and 4. Each local floodplain zoning ordinance must include a floodplain map conforming to the standards established in subpart 2.

C. In special instances and upon approval of the commissioner, the use of other techniques such as maps indicating limits of past flooding, detailed soil maps, and/or aerial photographic interpretation may initially serve as a basis for the delineation of floodplains for regulatory purposes provided that:

- (1) the affected floodplains are generally undeveloped;
- (2) the associated text of the zoning ordinance provides for a special permit use procedure to determine the effects of proposed construction upon flood stages and flood flows and to establish the flood protection elevation; and
- (3) the local unit of government has initiated a program to ultimately obtain regional flood data.

D. Where a conflict exists between the floodplain limits illustrated on the official zoning map and actual field conditions, the flood elevations shall be the governing factor in locating the regulatory floodplain limits.

Subp. 4. **Delineation of the floodway.** Local government floodplain zoning ordinances shall designate a floodway. Exceptions may be allowed by the commissioner for those conditions listed in subpart 3, item C. A portion of the floodplain, outside of the immediate channel of a watercourse, shall be selected and designated as the floodway by a local governmental unit upon approval of the commissioner. The selection must be based on an evaluation of the flood hazard for the area which may be involved or affected by such designation and must conform to the following standards:

A. The limits of the floodway shall be designated so that permissible encroachments on the floodplain will not cause an increase in stage of the regional flood of more than 0.5 feet in any one reach or for the cumulative effect of several reaches of a watercourse. If the increase in flood stage will materially increase the flood damage potential, the commissioner may require that such increases be less than 0.5 feet. The commissioner may authorize increases greater than 0.5 feet where studies show that further increases in flood stages will not materially increase the flood damage potential.

B. The limits of the floodway shall be based on a uniform degree of encroachment for a significant reach on both sides of a watercourse. Variances from this part may be authorized by the commissioner when topography, existing development patterns, and comprehensive land use plans justify a modified approach.

C. The floodway shall be determined consistent with minimum standards for technical hydrologic and hydraulic techniques and mapping standards contained in parts 6120.5600, subpart 4 and 6120.5700, subpart 2.

Subp. 5. **Flood protection elevations.** The flood protection elevations shall correspond to a point not less than one foot above the water surface profile associated with the regional flood plus any increases in flood stages attributable

to encroachments on the floodplain established under subpart 4, item A. The flood protection elevations shall be clearly lettered at identifiable positions on the official zoning district map consistent with the water surface profile of the regional flood, or the profile shall be attached to and made part of the official zoning district map.

Statutory Authority: *MS s 104.05*

6120.5800 ZONING: LAND USES PERMITTED IN FLOODWAY AND FLOOD FRINGE AREAS.

Subpart 1. Certification of compliance. No vacant flood plain land shall be occupied or used and no building hereafter erected, altered, or moved shall be occupied until the applicant submits to the appropriate local official a certification by a registered professional engineer, land surveyor, or other qualified person designated by the local governing body that the finished fill and building floor elevations or other flood protection measures are in compliance with appropriate flood plain zoning provisions and other flood plain regulations.

Subp. 2. Removal of lands from a flood plain district. The floodplain designation on official zoning maps shall not be removed from floodplain areas adjacent to and outside of floodways unless it can be shown that the areas are filled to an elevation at or above the flood protection level and are contiguous to other lands lying outside the floodplain district or unless flood control measures which meet the standards of part 6120.5900, subpart 6, items B, subitem (1) and D are constructed and operative.

Subp. 3. Permitted uses within the floodway or between levees. Local zoning ordinances may designate specified uses as permitted or special permit uses provided such uses have a low flood damage potential and will not materially obstruct flood flows or increase velocities or stages of the regional flood. However, uses that are likely to cause pollution of waters, as defined in Minnesota Statutes 1969, section 115.01, are prohibited unless adequate safeguards approved by the state water pollution control agency are provided. All other uses are prohibited including storage of any potentially hazardous materials which if subject to flooding may become buoyant, flammable, explosive, or may be injurious to human, animal, or plant life. Permitted uses must not be detrimental to the uses permitted in adjoining districts. The following uses may be permitted within the floodway or between levees:

A. Uses having a low flood damage potential including agricultural uses, recreational uses, parking lots, loading areas, storage yards, airport landing strips, certain sand and gravel operations, water control structures, navigation facilities, and other open space uses.

B. Structures accessory to the above uses and commercial excavation and stockpiling of materials may be permitted if:

- (1) structures are not intended for human habitation;
- (2) structures will have a low flood damage potential;
- (3) structures or stockpiles of materials, if permitted, will be constructed and placed so as to offer a minimal obstruction to the flow of flood waters;
- (4) structures will be firmly anchored to prevent flotation; and
- (5) service facilities within these structures, such as electrical and heating equipment, will be at or above the flood protection elevation for the site as described in part 6120.5700, subpart 5, or adequately floodproofed as provided in part 6120.5900, subpart 3, item D.

C. Channel and harbor connections to public waters, constructed under authority of Minnesota Statutes 1969, chapter 105, which can be shown will not cause material increases in flood stages within the floodplain and which will not increase the flood hazard to properties adjacent to the floodplain.

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D. Public utility facilities and water oriented industries which must be adjacent to watercourses provided that the development is located in such a manner that it will not significantly alter flood flows, heights, or velocities of the regional flood. Whenever necessary, compensating measures shall be required to be undertaken to offset any adverse effects of allowing the use within the floodway and to keep increases in stages of the regional flood within the limits specified in part 6120.5700, subpart 4, item A.

Subp. 4. Development of flood fringe areas adjacent to and outside of floodways. Development:

A. General provisions. All floodplain developments within designated flood fringe areas shall be compatible with local comprehensive plans.

Floodplain developments shall not adversely affect the efficiency or unduly restrict the capacity of the channels or floodways of any tributaries to the main stream, drainage ditches, or any other drainage facilities or systems.

B. Residential areas. The finished surface of the first floor or basement floor of any residential building or structure to be erected, constructed, reconstructed, altered, or moved on the floodplain shall ordinarily be placed on fill at or above the flood protection elevation. The fill shall be at or above the elevation associated with the regional flood plus any increase in the water surface elevation due to floodplain encroachment as described in part 6120.5700, subpart 4, item A. The fill shall extend at such elevation at least 15 feet beyond the limits of any structure or building erected thereon. Where existing streets or utilities are at elevations which make strict compliance with this provision impractical, the commissioner may authorize use of floodproofing or other measures or methods to provide protection to the flood protection elevation. Floodproofing or other protective measures may be allowed only upon issuance of a special use permit by the local governmental unit.

C. Commercial areas. Commercial buildings or structures generally are to be constructed on fill with no first floor or basement floor below the flood protection elevation. Accessory land uses such as yards, railroad tracks, and parking lots may be at lower elevations. However, in the absence of an adequate local flood warning system, no area shall be designed for use by the public which would be inundated to a depth greater than two feet or subjected to flood velocities greater than four feet per second upon the occurrence of the regional flood.

D. Manufacturing and industrial areas. Manufacturing and industrial buildings, structures, and appurtenant works shall be protected to the flood protection elevation. Measures shall be taken to minimize interference with normal plant operations especially for streams having protracted flood durations. Certain accessory land uses such as yards, railroad tracks, and parking lots may be at lower elevations subject to requirements of item C. Local ordinances shall give due consideration to needs of industries whose businesses require that they be located in a floodplain area.

E. Public utilities, roads, and bridges. Public utility facilities, roads, railroad tracks, and bridges within the floodplain should be designed to minimize increases in flood elevations and should be compatible with existing local comprehensive floodplain development plans. When failure or interruption of these public facilities would result in danger to the public health or safety or where such facilities are essential to the orderly functioning of the area, protection to the flood protection elevation shall be provided. Where failure or interruption of service would not endanger life or health, a lesser degree of protection may be provided for minor or auxiliary roads, railroad tracks, or utilities.

F. Storage of materials. Materials that, in time of flooding, are buoyant, flammable, explosive, or could be injurious to human, animal, or plant life shall be stored at or above the flood protection elevation, floodproofed, or protected

by structural measures consistent with the standards set forth herein. Furthermore, storage of materials likely to cause pollution of the waters, as defined in Minnesota Statutes 1969, section 115.01, if subject to flooding are prohibited unless adequate safeguards approved by the state water pollution control agency are provided.

Subp. 5. Nonconforming uses of the floodplain. Local floodplain management ordinances may, where appropriate, provide for the gradual elimination of nonconforming uses within the floodway. Any addition or modification to a lawful nonconforming use shall be in conformance with the provisions of these standards and criteria and shall not increase the flood damage potential or increase the degree of obstruction to flood flows.

Nonconforming uses within the flood fringe may be continued provided that such uses will not have an unduly adverse effect on flood flows, velocities, or stages associated with the regional flood. Any addition or modification to a lawful nonconforming use within the flood fringe shall be in conformance with the provisions of these standards and criteria. Where applicable, provisions shall be made to allow the proposed modifications and additions to be protected to the flood protection elevation by an approved use of supplemental floodplain management measures as outlined in part 6120.5900.

Statutory Authority: *MS s 104.05*

6120.5900 SUPPLEMENTAL STANDARDS AND CRITERIA FOR FLOODPLAIN MANAGEMENT.

Subpart 1. In general. Supplemental measures for floodplain management should be included in local governmental comprehensive floodplain management programs and adopted or provided in addition to local zoning ordinances when sufficient technical data and resources are available for their effectuation. All local governmental units shall provide for control of the development and use of floodplains in flood hazard areas by adopting the following specific regulations and measures where practical to supplement and complement floodplain zoning ordinances and provide comprehensive floodplain management.

Subp. 2. Subdivision regulations. Local government floodplain subdivision regulations shall regulate floodplain land subdivision in order to promote the public health, safety, and general welfare; promote wise use of floodplain lands; assure that floodplain lands are suitable for building sites and public improvements; provide for adequate drainage of the subdivided area; provide for ingress and egress to all lands involved; promote proper surveying, legal description, and monumenting of subdivided land; and establish procedures for vacating, correcting, and revising plats. The subdivision regulations shall establish standards for protection of roads, sewers, water supply, and other facilities from floods. In addition the regulations shall provide that:

A. the floodplain, floodway, and flood fringe areas as determined by standards set forth in part 6120.5600, subpart 4, be clearly labeled on the plat;

B. subdivision of lands within floodplain areas may not be approved if the cost of providing governmental services would impose an unreasonable economic burden on the local government unit; and

C. restrictive deed covenants shall be filed with the final plat and shall provide that the floodplain area be left essentially in the state shown on the plat, establish finished elevations of buildings, structures, and private streets and roads, and require that additions or modifications to these facilities will not violate any provisions of the floodplain zoning ordinances or supplemental regulations.

Subp. 3. Building codes. Building codes shall provide for the control of the design, construction, addition, and modification of buildings or structures placed in floodplain areas under authorized floodplain management ordinances. Floodplain building codes shall provide for necessary construction measures to protect

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health, safety, and welfare and to reduce the damaging effects and hazards of floods subject to the following standards:

A. The degree of flood protection required for building construction by building codes shall be based on the flood protection elevation described in part 6120.5700, subpart 5, and on flood velocities and duration of the regional flood for the particular area.

B. Whenever feasible and compatible with floodplain zoning ordinances and other regulations, all new buildings or structures located, constructed, or reconstructed in the floodplain shall conform to the following provisions:

(1) The first floors or basement floors of the buildings or structures shall be at or above the flood protection elevation in accordance with parts 6120.5700, subpart 5 and 6120.5800.

(2) Those portions of buildings, structures, and appurtenances located below the flood protection elevation shall be adequately floodproofed as provided in item D.

C. Alterations or additions to existing buildings or structures may be permitted if such will:

(1) decrease the flood damage potential of the building or structure;

(2) not increase the degree of obstruction to flood flows;

(3) provide for adequate protection of the building or structure to the flood protection elevations where applicable, in accordance with the provisions of part 6120.5700, subpart 5; and

(4) not endanger human life.

D. Where floodproofing is incorporated into new buildings or structures, and into alterations or additions to existing nonconforming structures, floodproofing measures shall be provided to the flood protection elevations described in part 6120.5700, subpart 5, and designed to withstand flood velocities, depths, durations, forces, and any other factors associated with the regional flood. A plan or document certified by a registered professional engineer or architect that the floodproofing measures are adequately designed to withstand regional flood conditions shall be submitted to the local government unit for approval before authorization is granted for the proposed work. Where this is not practical because of the particular circumstances, the commissioner may authorize other methods to determine the adequacy of floodproofing measures. Authorized floodproofing measures may include such provisions as anchorage of structures to prevent flotation, installation of watertight barriers over openings, reinforcement of walls to resist water pressures, use of materials to reduce wall seepage, construction or modification of water supply and waste disposal systems to prevent entry of flood waters, placement of essential utilities above the flood protection elevation, and installation of pumping facilities for internal and subsurface drainage.

Subp. 4. Sanitary regulations. In addition to all applicable state rules, regulations, requirements and laws, and local laws, local sanitary regulations shall:

A. Require the floodproofing of proposed water supply systems in floodplain areas to prevent entry of flood waters by means of floodproofing techniques consistent with subpart 3, item D.

B. Control the location, construction, or modification of private and public liquid or solid waste treatment and disposal facilities in floodplain areas so that:

(1) No new construction, addition, or modification to existing sewage, industrial waste, or other waste disposal systems shall be permitted within the floodplain unless emergency plans and procedures for action to be taken in the event of flooding are prepared, filed with, and approved by the state water pollution control agency.

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(2) Emergency plans and procedures established consistent with item B, subitem (1) must provide for measures to prevent introduction of any pollutant or toxic material into the flood waters.

(3) Public or municipal collection and treatment facilities are used where available and where feasible.

(4) There shall be no disposal of garbage or solid waste materials within any floodplain areas, except at those disposal sites approved by the state water pollution control agency provided there will be no further encroachment on the floodway.

Subp. 5. Warning signs and public information regulations. Local governmental regulations shall provide for adequate floodplain warning and public informational services as follows:

A. In urban areas the limits of the areas which have been or would be inundated by the regional flood or by experienced floods of greater magnitude shall be delineated in the field at reasonable intervals by means of firmly placed markers of a sufficient size to be easily read from a distance of 20 feet.

The markers shall record the maximum known depth of flooding or height to the flood protection elevation, whichever is greater, as well as the zoned land use classification of the area involved.

The local government unit may prescribe the shape, size, lettering, and installation instructions for floodplain markers.

The cost of preparing and installing floodplain markers in future subdivided areas should be borne by the subdivider and the markers shall be installed prior to the sale of lots and construction of any buildings or structures.

Provisions should be made to monument bench marks for vertical control data as provided in part 6120.5600, subpart 4.

B. To fulfill the intent of Minnesota Statutes 1969, section 104.03, every local governmental unit with flood hazard areas and a floodplain management program shall submit to the commissioner by March 30 an annual report outlining and summarizing the previous year's activity and progress in floodplain management activities on a form to be provided by the commissioner. The report shall include information as to:

(1) progress in the acquisition of technical floodplain information, including a summary of any flood crest elevations, cross sectional data and maps or illustrative material prepared by or for the local governmental unit;

(2) progress in floodplain management program administration, including a summary of zoning permits issued, subdivision plats approved, building permits issued, variances granted, enforcement action, etc.; and

(3) flood warning and information sources, including a summary of flood warning systems established or implemented, emergency plans prepared, and public informational reports and studies concerning various aspects of local floodplain management.

Subp. 6. Measures for flood control. When local floodplain management plans provide for structural works for flood control, such as levees, floodwalls, channel improvements, and reservoirs, all structural works or land treatment practices shall be consistent with the following statewide standards and criteria for floodplain management practices:

A. Any proposed work in the beds of public waters, as defined in Minnesota Statutes 1969, chapter 105, which will change the course, current, or cross-section of public waters of the state shall be subject to the provisions of Minnesota Statutes 1969, chapter 105, and other applicable statutes.

B. The minimum height and structural design of any dikes, levees, floodwalls, or similar structural works in place, or proposed to be placed in the floodplain shall be based on the flood profile of the regional flood confined between the structures subject to the following:

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(1) For urban areas the minimum authorized height and design of proposed structural works shall be at least three feet above the elevation of the regional flood, as confined by the structures, or shall be at the elevation of the standard project flood, whichever provides the greater protection from flooding.

(2) Increases in upstream flood stages which would result from construction of dikes, levees, floodwalls, or similar structures for protection of urban areas and for agricultural uses in rural areas shall not increase the stage of the regional flood in excess of amounts listed in part 6120.5700, subpart 4, item A, and shall be reflected in the flood protection elevations for the upstream reach.

(3) Modifications and additions to existing structural works shall be regulated to assure that the proposed work will provide a means of decreasing the flood damage potential in the area and will provide the most reasonable protection of properties in heavily populated floodplain areas consistent with these standards and criteria. Any existing structural work which potentially threatens public health or safety shall be modified or reconstructed in order to meet the standards contained herein within a reasonable period of time based on agreement between the local government unit and the commissioner.

C. Flood protection elevations and floodway limits which reflect proposed measures for flood control shall not be effective until such measures are constructed and operative unless the proposed measures will increase flood heights in a given reach.

D. Floodplain development landward of any levee or floodwall shall provide for interior drainage including designation of ponding areas to protect against flooding from interior drainage.

Statutory Authority: *MS s 104.05*

6120.6000 REGULATION OF PUBLIC USES.

In accordance with Minnesota Statutes 1969, sections 104.03 and 104.05, all state agencies and local units of government, in the construction of buildings, structures, roads, bridges, or other facilities located within floodplain areas delineated by local ordinances shall comply with the standards set out in these administrative rules.

Statutory Authority: *MS s 104.05*

6120.6100 VARIANCE FROM STANDARDS.

Local governmental units may permit variances to the provisions of their floodplain management ordinances where it appears that by reason of exceptional circumstances the strict enforcement of the local ordinance would cause undue hardship and strict conformity with the standards would be unreasonable, impractical, and not feasible under the circumstances. Variances granted by local governmental units must be consistent with the general purpose of these standards and the intent of applicable state and national laws and programs. Although variances may be used to modify permissible methods of flood protection, no variance shall provide for a lesser degree of flood protection than stated in these standards.

Statutory Authority: *MS s 104.05*

6120.6200 GENERAL ADMINISTRATION OF FLOODPLAIN MANAGEMENT ORDINANCES.

Subpart 1. Procedures. Local governmental units shall provide for the administration and enforcement of their floodplain management ordinances. To aid the commissioner in evaluating the effectiveness of local administration and enforcement, as provided in Minnesota Statutes 1969, section 104.03, the zoning administrator or other officer designated by the local governing body shall submit to the commissioner a copy of any application for a variance or special permit use where a hearing is to be held to consider such application. The commissioner

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shall receive at least ten days' notice of the hearing. Such notice shall specify the time, place, and subject matter of the hearing and shall be accompanied by such supporting information as is necessary to indicate the nature and effect of the proposed use. A copy of all decisions granting a variance or special permit to the provisions of the local floodplain management ordinance shall be forwarded to the commissioner within ten days of such action.

Subp. 2. Technical assistance. The local governmental unit may request technical assistance from the commissioner in evaluating requests for variances or special permits to the local floodplain management ordinance. Such assistance shall be provided by the commissioner within the limits of available appropriations and personnel.

Statutory Authority: *MS s 104.05*