

**CHAPTER 6120**  
**DEPARTMENT OF NATURAL RESOURCES**  
**SHORELAND AND FLOODPLAIN MANAGEMENT**

**SHORELAND MANAGEMENT**

- 6120.2500 DEFINITIONS
- 6120.2600 POLICY.
- 6120.2800 SCOPE.
- 6120.3000 SHORELAND MANAGEMENT CLASSIFICATION SYSTEM.
- 6120.3100 LAND USE DISTRICTS.
- 6120.3200 CRITERIA FOR LAND USE ZONING DISTRICT DESIGNATION.
- 6120.3300 ZONING PROVISIONS.
- 6120.3400 SANITARY PROVISIONS.
- 6120.3500 SUBDIVISION PROVISIONS.
- 6120.3800 PLANNED UNIT DEVELOPMENT.
- 6120.3900 ADMINISTRATION.

**FLOODPLAIN MANAGEMENT**

- 6120.5000 DEFINITIONS.
- 6120.5100 POLICY.
- 6120.5200 SCOPE.
- 6120.5300 SEVERABILITY.

- 6120.5400 LOCAL DUTIES.
- 6120.5500 COMMISSIONER'S DUTIES
- 6120.5600 TECHNICAL STANDARDS AND REQUIREMENTS FOR FLOODPLAIN EVALUATION.
- 6120.5700 MINIMUM FLOODPLAIN MANAGEMENT STANDARDS FOR LOCAL ZONING ORDINANCES.
- 6120.5800 ZONING: LAND USES PERMITTED IN FLOODWAY AND FLOOD FRINGE AREAS.
- 6120.5900 SUPPLEMENTAL STANDARDS AND CRITERIA FOR FLOODPLAIN MANAGEMENT.
- 6120.6000 REGULATION OF PUBLIC USES.
- 6120.6100 VARIANCE FROM STANDARDS.
- 6120.6200 GENERAL ADMINISTRATION OF FLOODPLAIN MANAGEMENT ORDINANCES.

- 6120.0100** [Repealed, 13 SR 3029]
- 6120.0200** [Repealed, 13 SR 3029]
- 6120.0300** [Repealed, 13 SR 3029]
- 6120.0400** [Repealed, 13 SR 3029]
- 6120.0500** [Repealed, 13 SR 3029]
- 6120.0600** [Repealed, 13 SR 3029]
- 6120.0700** [Repealed, 13 SR 3029]
- 6120.0800** [Repealed, 13 SR 3029]
- 6120.0900** [Repealed, 13 SR 3029]
- 6120.1000** [Repealed, 13 SR 3029]
- 6120.1100** [Repealed, 13 SR 3029]
- 6120.1200** [Repealed, 13 SR 3029]
- 6120.1300** [Repealed, 13 SR 3029]
- 6120.1400** [Repealed, 13 SR 3029]
- 6120.1500** [Repealed, 13 SR 3029]
- 6120.1600** [Repealed, 13 SR 3029]
- 6120.1700** [Repealed, 13 SR 3029]
- 6120.1800** [Repealed, 13 SR 3029]
- 6120.1900** [Repealed, 13 SR 3029]
- 6120.2000** [Repealed, 13 SR 3029]
- 6120.2100** [Repealed, 13 SR 3029]

**SHORELAND MANAGEMENT**

**6120.2500 DEFINITIONS.**

Subpart 1. **Scope of terms; mandatory; distances.** For the purpose of parts 6120.2500 to 6120.3900, certain terms or words used shall be interpreted as follows: the word "shall" is

mandatory, not permissive. All distances, unless otherwise specified, shall be measured horizontally.

Subp. 1a. **Accessory structure or facility.** "Accessory structure" or "facility" means any building or improvement subordinate to a principal use which, because of the nature of its use, can reasonably be located at or greater than normal structure setbacks.

Subp. 1b. **Bluff.** "Bluff" means a topographic feature such as a hill, cliff, or embankment having all of the following characteristics:

A. part or all of the feature is located in a shoreland area;

B. the slope rises at least 25 feet above the ordinary high water level of the waterbody;

C. the grade of the slope from the toe of the bluff to a point 25 feet or more above the ordinary high water level averages 30 percent or greater; and

D. the slope must drain toward the waterbody.

An area with an average slope of less than 18 percent over a distance for 50 feet or more shall not be considered part of the bluff.

Subp. 1c. **Bluff impact zone.** "Bluff impact zone" means a bluff and land located within 20 feet from the top of a bluff.

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

Subp. 3. **Building line.** "Building line" means a line parallel to a lot line or the ordinary high water level at the required setback beyond which a structure may not extend.

Subp. 3a. **Commercial planned unit developments.** "Commercial planned unit developments" are typically uses that provide transient, short-term lodging spaces, rooms, or parcels and their operations are essentially service-oriented. For example, hotel/motel accommodations, resorts, recreational vehicle and camping parks, and other primarily service-oriented activities are commercial planned unit developments.

Subp. 3b. **Commercial use.** "Commercial use" means the principal use of land or buildings for the sale, lease, rental, or trade of products, goods, and services.

Subp. 3c. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources.

Subp. 4. [Repealed, 13 SR 3029]

Subp. 5. **Conditional use.** "Conditional use" means a use as this term is defined in Minnesota Statutes, chapter 394.

Subp. 6. [Repealed, 13 SR 3029]

Subp. 6a. **Deck.** "Deck" means a horizontal, unenclosed platform with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site and at any point extending more than three feet above ground.

Subp. 6b. **Duplex, triplex, and quad.** "Duplex," "triplex," and "quad" means a dwelling structure on a single lot, having two, three, and four units respectively, being attached by common walls and each unit equipped with separate sleeping, cooking, eating, living, and sanitation facilities.

Subp. 6c. **Dwelling site.** "Dwelling site" means a designated location for residential use by one or more persons using temporary or movable shelter, including camping and recreational vehicle sites.

Subp. 6d. **Dwelling unit.** "Dwelling unit" means any structure or portion of a structure, or other shelter designed as short- or long-term living quarters for one or more persons, including rental or timeshare accommodations such as motel, hotel, and resort rooms and cabins.

Subp. 6e. **Extractive use.** "Extractive use" means the use of land for surface or subsurface removal of sand, gravel, rock, industrial minerals, other nonmetallic minerals, and peat not regulated under Minnesota Statutes, sections 93.44 to 93.51.

Subp. 6f. **Forest land conversion.** "Forest land conversion" means the clear cutting of forested lands to prepare for a new land use other than reestablishment of a subsequent forest stand.

Subp. 6g. **Guest cottage.** "Guest cottage" means a structure used as a dwelling unit that may contain sleeping spaces and kitchen and bathroom facilities in addition to those provided in the primary dwelling unit on a lot.

Subp. 7. **Hardship.** "Hardship" means the same as that term is defined in Minnesota Statutes, chapter 394.

Subp. 7a. **Height of building.** "Height of building" means the vertical distance between the highest adjoining ground level at the building or ten feet above the lowest ground level, whichever is lower, and the highest point of a flat roof or average height of the highest gable of a pitched or hipped roof.

Subp. 7b. **Industrial use.** "Industrial use" means the use of land or buildings for the production, manufacture, warehousing, storage, or transfer of goods, products, commodities, or other wholesale items.

Subp. 7c. **Intensive vegetation clearing.** "Intensive vegetation clearing" means the complete removal of trees or shrubs in a contiguous patch, strip, row, or block.

Subp. 8. **Lot.** "Lot" means a parcel of land designated by plat, 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.

Subp. 9. **Lot width.** "Lot width" means the shortest distance between lot lines measured at the midpoint of the building line.

Subp. 10. **Nonconformity.** "Nonconformity" means the same as that term is defined or described in Minnesota Statutes, chapter 394.

Subp. 11. **Ordinary high water level.** "Ordinary high water level" means the boundary of public waters and wetlands, and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

Subp. 12. **Planned unit development.** "Planned unit development" means a type of development characterized by a unified site design for a number of dwelling units or dwelling sites on a parcel, whether for sale, rent, or lease, and also usually involving clustering of these units or sites to provide areas of common open space, density increases, and a mix of structure types and land uses. These developments may be organized and operated as condominiums, time-share condominiums, cooperatives, full fee ownership, commercial enterprises, or any combination of these, or cluster subdivisions of dwelling units, residential condominiums, townhouses, apartment buildings, campgrounds, recreational vehicle parks, resorts, hotels, motels, and conversions of structures and land uses to these uses.

Subp. 13. **Public waters.** "Public waters" means any waters as defined in Minnesota Statutes, section 105.37, subdivisions 14 and 15. However, no lake, pond, or flowage of less than ten acres in size in municipalities and 25 acres in size in unincorporated areas need be regulated for the purposes of parts 6120.2500 to 6120.3900. A body of water created by a private user where there was no previous shoreland may, at the discretion of the local government, be exempted from parts 6120.2500 to 6120.3900.

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

Subp. 13a. **Residential planned unit development.** "Residential planned unit development" means a use where the nature of residency is nontransient and the major or primary focus of the development is not service-oriented. For example, residential apartments, manufactured home parks, time-share condominiums, townhouses, cooperatives, and full fee ownership residences would be considered as residential planned unit developments.

Subp. 13b. **Semipublic use.** "Semipublic use" means the use of land by a private, non-profit organization to provide a public service that is ordinarily open to some persons outside the regular constituency of the organization.

Subp. 13c. **Sensitive resource management.** "Sensitive resource management" means the preservation and management of areas unsuitable for development in their natural state due to constraints such as shallow soils over groundwater or bedrock, highly erosive or ex-

pansive soils, steep slopes, susceptibility to flooding, or occurrence of flora or fauna in need of special protection.

Subp. 14. **Setback.** "Setback" means the minimum horizontal distance between a structure, sewage treatment system, or other facility and an ordinary high water level, sewage treatment system, top of a bluff, road, highway, property line, or other facility.

Subp. 14a. **Sewage treatment system.** "Sewage treatment system" means a septic tank and soil absorption system or other individual or cluster type sewage treatment system as described and regulated in chapter 7080.

Subp. 14b. **Sewer system.** "Sewer system" means pipelines or conduits, pumping stations, and force main, and all other constructions, devices, appliances, or appurtenances used for conducting sewage or industrial waste or other wastes to a point of ultimate disposal.

Subp. 14c. **Shore impact zone.** "Shore impact zone" means land located between the ordinary high water level of a public water and a line parallel to it at a setback of 50 percent of the structure setback.

Subp. 15. **Shoreland.** "Shoreland" means land located within the following distances from public water: 1,000 feet from the ordinary high water level 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 a river or stream, whichever is greater. The limits of shorelands may be reduced 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. 15a. **Significant historic site.** "Significant historic site" means any archaeological site, standing structure, or other property that meets the criteria for eligibility to the National Register of Historic Places or is listed in the State Register of Historic Sites, or is determined to be an unplatted cemetery that falls under the provisions of Minnesota Statutes, section 307.08. A historic site meets these criteria if it is presently listed on either register or if it is determined to meet the qualifications for listing after review by the Minnesota state archaeologist or the director of the Minnesota Historical Society. All unplatted cemeteries are automatically considered to be significant historic sites.

Subp. 15b. **Steep slope.** "Steep slope" means land where agricultural activity or development is either not recommended or described as poorly suited due to slope steepness and the site's soil characteristics, as mapped and described in available county soil surveys or other technical reports, unless appropriate design and construction techniques and farming practices are used in accordance with the provisions of these regulations. Where specific information is not available, steep slopes are lands having average slopes over 12 percent, as measured over horizontal distances of 50 feet or more, that are not bluffs.

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

Subp. 17. **Subdivision.** "Subdivision" means land that is divided for the purpose of sale, rent, or lease, including planned unit development.

Subp. 18. [Repealed, 13 SR 3029]

Subp. 18a. **Surface water-oriented commercial use.** "Surface water-oriented commercial use" means the use of land for commercial purposes, where access to and use of a surface water feature is an integral part of the normal conductance of business. Marinas, resorts, and restaurants with transient docking facilities are examples of such use.

Subp. 18b. **Toe of the bluff.** "Toe of the bluff" means the lower point of a 50-foot segment with an average slope exceeding 18 percent.

Subp. 18c. **Top of the bluff.** "Top of the bluff" means the higher point of a 50-foot segment with an average slope exceeding 18 percent.

Subp. 19. **Variance.** "Variance" means the same as that term is defined or described in Minnesota Statutes, chapter 394.

Subp. 20. **Water-oriented accessory structure or facility.** "Water-oriented accessory structure or facility" means a small, above ground building or other improvement, except stairways, fences, docks, and retaining walls, which, because of the relationship of its use to a surface water feature, reasonably needs to be located closer to public waters than the normal

# MINNESOTA RULES 1993

401

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.2800

structure setback. Examples of such structures and facilities include boathouses, gazebos, screen houses, fish houses, pump houses, and detached decks.

Subp. 21. **Wetland.** "Wetland" means a surface water feature classified as a wetland in the United States Fish and Wildlife Service Circular No. 39 (1971 edition), which is hereby incorporated by reference, is available through the Minitex interlibrary loan system, and is not subject to frequent change.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

### 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 furtherance of the policies declared in Minnesota Statutes, chapters 105, 115, 116, 394, 396, and 462, the commissioner provides the following minimum standards and criteria for the subdivision, use, and development of the shorelands of public waters. The standards and criteria are intended to preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, and provide for the wise use of water and related land resources of the state.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

### 6120.2700 [Repealed, 13 SR 3029]

### 6120.2800 SCOPE.

Subpart 1. **Responsibilities and authorities.** These minimum standards and criteria apply to those shorelands of public waters of the state which are subject to local government land use controls. They are intended to be incorporated into local government shoreland management controls. Each local government is responsible for administration and enforcement of its shoreland management controls adopted in compliance with these standards and criteria. Nothing in these standards and criteria shall be construed as prohibiting or discouraging a local government from adopting and enforcing controls that are more restrictive.

Subp. 1a. **North Shore Management plan.** The minimum standards and criteria for the subdivision, use, and development of the shoreland of Lake Superior, other than for the city of Duluth, are those specified in the North Shore Management plan, A Shoreland Management Plan for Lake Superior's North Shore, December 1988, adopted by the North Shore Management Board on November 29, 1988. The plan is incorporated by reference, is available through the Minitex interlibrary loan system, and is not subject to frequent change.

Local governments shall comply with part 6120.3900, subpart 6, in administration of their shoreland management controls.

Local governments shall adopt shoreland management controls conforming to the North Shore Management Plan within 18 months of the effective date of this part.

Subp. 2. **Adoption schedule.** Counties, and those cities designated by the commissioner in consultation with the appropriate county, must adopt or amend land use controls to bring them into substantial compliance with these standards and criteria within two years of being notified by the commissioner.

Subp. 3. **Implementation flexibility.** Local governments may, under special circumstances and with the commissioner's approval, adopt shoreland management controls that are not in strict conformity with these minimum standards and criteria, provided the purposes of Minnesota Statutes, section 105.485, are satisfied.

A. Special circumstances may include the following situations:

(1) where shorelands have been developed with an assortment of urban land uses for many years and much of the development does not meet the standards in parts 6120.2500 to 6120.3900;

(2) cities with central business districts located within shorelands;

(3) cities whose only shorelands are along rivers classified as tributary;

(4) small cities that have not had, and do not anticipate, much development activity within shorelands;

(5) counties or portions of counties with topography or vegetation characteristics that would make use of particular minimum state standards impractical;

(6) shorelands that are managed under other water and related land resource management programs authorized by state or federal legislation with goals compatible with Minnesota Statutes, section 105.485, and parts 6120.2500 to 6120.3900; or

(7) individual lakes or systems of lakes that are being managed under standards developed specifically for these water resources after a comprehensive study and planning effort.

B. Alternative management standards may use the following concepts and approaches, or others:

(1) expanded or different public waters classification systems;

(2) designation of areas where land use districts and associated standards are more restrictive than these standards and criteria as trade-offs for other areas where they are less restrictive;

(3) standards and other management approaches that are developed for specific water resources after a comprehensive evaluation and planning effort;

(4) standards developed to take into account commonly occurring hydrologic, geologic, property ownership, topographic, and vegetation patterns and shoreland accessibility issues that would make use of these standards and criteria impractical; or

(5) other types of management or acquisition programs such as stormwater management and public land acquisition programs that reduce the need for use of specific standards in parts 6120.2500 to 6120.3900.

C. Local governments must request consideration of an alternative approach under this subpart and must provide written justification and supporting information, maps, and documents, as appropriate, to justify the request to the commissioner, including the following:

(1) existing land use plans and controls for shorelands of each public water;

(2) for the shorelands of each public water, the number, average size, and percent of shoreline occupied by undeveloped lots of record and land in public ownership;

(3) characteristics of existing development, including types, densities, heights, colors, and presence or absence of screening vegetation or topography;

(4) presence or absence of public sewer and stormwater management practices or facilities; and

(5) explanations of how deviations from state standards are justified.

D. The commissioner shall respond to the local government's request for consideration of an alternative approach under this subpart in accordance with subitems (1) to (5).

(1) The commissioner shall in writing acknowledge and approve or deny the request within 60 days of receipt of the request and all necessary supporting documents and technical data. For extraordinarily complex issues and requests involving multigovernment coordination or multiorganization coordination, the commissioner and the affected local units of government may mutually agree to an extension of the 60-day response.

(2) The commissioner in the approval or denial pursuant to this subpart shall state to the local governments the reasons for the approval or denial and, as appropriate, suggest alternative solutions or regulatory approaches that would be acceptable to the commissioner.

(3) The local governments proposing the alternative control and the commissioner shall solicit the input of the public and other governmental bodies that could be affected by the alternate control.

(4) Alternate shoreland controls must be approved by other units of government having adjacent land use authority impacted by the alternate controls.

(5) The local government either proposing an alternate local control or a local government being impacted by an alternate local control may request a contested case hearing under Minnesota Statutes, section 105.44, subdivision 3.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029; 14 SR 1718*

6120.2900 [Repealed, 13 SR 3029]

**6120.3000 SHORELAND MANAGEMENT CLASSIFICATION SYSTEM.**

Subpart 1. **Criteria.** The commissioner shall classify all public waters in accordance with the following criteria:

- A. size and shape;
- B. amount and type of existing development;
- C. road and service center accessibility;
- D. existing natural characteristics of the waters and shorelands;
- E. state, regional, and local plans and management programs;
- F. existing land use restrictions; and
- G. presence of significant historic sites.

Subp. 1a. **Classes.** The classes of public waters are natural environment lakes, recreational development lakes, general development lakes, remote river segments, forested river segments, transition river segments, agricultural river segments, urban river segments, and tributary river segments. All of the river classes except tributary consist of watercourses that have been identified as being recreationally significant on a statewide basis. The tributary class consists of all other watercourses identified in the protected waters inventory. General descriptions of each class follow:

A. Natural environment lakes are generally small, often shallow lakes with limited capacities for assimilating the impacts of development and recreational use. They often have adjacent lands with substantial constraints for development such as high water tables, exposed bedrock, and unsuitable soils. These lakes, particularly in rural areas, usually do not have much existing development or recreational use.

B. Recreational development lakes are generally medium-sized lakes of varying depths and shapes with a variety of landform, soil, and groundwater situations on the lands around them. They often are characterized by moderate levels of recreational use and existing development. Development consists mainly of seasonal and year-round residences and recreationally-oriented commercial uses. Many of these lakes have capacities for accommodating additional development and use.

C. General development lakes are generally large, deep lakes or lakes of varying sizes and depths with high levels and mixes of existing development. These lakes often are extensively used for recreation and, except for the very large lakes, are heavily developed around the shore. Second and third tiers of development are fairly common. The larger examples in this class can accommodate additional development and use.

D. Remote river segments are primarily located in roadless, forested, sparsely-populated areas of the northeastern part of the state. Common land uses include multiple-use forestry, some recreation facilities, and occasional seasonal or year-round residential. Low intensity recreational uses of these river segments and adjacent lands are common. This class has limited potential for additional development and recreational use due to land suitability and road access constraints.

E. Forested river segments are located in forested, sparsely to moderately populated areas with some roads in the north-central part of the state. Predominant land uses include multiple-use forestry, some recreation facilities, seasonal residential, and, within commuting distances of several cities, some year-round residential. Low-intensity recreational uses of these rivers and adjacent lands are common. This class has substantial potential for additional development and recreational use.

F. Transition river segments are generally either located within the Minnesota and Mississippi river valleys, or within the middle reaches of several rivers in all regions except the north-central and northeast. Common land uses include forested within riparian strips and mixtures of cultivated, pasture, and forested beyond. Some seasonal and year-round residential development exists, particularly within commuting distance of major cities. The types and intensities of recreational uses within this class vary widely.

G. Agricultural river segments are located in well-roaded, intensively cultivated areas of the western and southern regions of the state. Cultivated crops are the predominant land use, with some pasture and occasional feedlots, small municipalities, and small forested

areas. Residential development is not common, but some year-round residential use is occurring within commuting distances of major cities. Some intensive recreational use occurs on these river segments in particular areas, but overall recreational use of these waters and adjacent lands is low. Although potential exists for additional development and recreation, water quality constraints and competing land uses, particularly agriculture, will inhibit expansions.

H. Urban river segments are located within or adjacent to major cities throughout the state. A variety of residential and other urban land uses exists within these segments. Recreational uses of these segments and adjacent lands are common, but vary widely in types and intensities. These segments have potential for additional development, for redevelopment, and for additional recreational use, although recreational use on some of these segments competes with commercial river traffic.

I. Tributary river segments consist of watercourses mapped in the Protected Waters Inventory that have not been assigned one of the river classes in items D to H. These segments have a wide variety of existing land and recreational use characteristics. The segments have considerable potential for additional development and recreational use, particularly those located near roads and cities.

Subp. 2. **Supporting data.** Supporting data for shoreland management classifications is supplied by the records and files of the Department of Natural Resources, including maps, lists, and other products of the Protected Waters Inventory; data and publications of the Shoreland Update Project; the Minnesota Department of Natural Resources Statewide Outstanding Rivers Inventory; Bulletin No. 25 (1968); and Supplementary Report No. 1 – Shoreland Management Classification System for Public Waters (1976) of the Division of Waters, 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. These publications are incorporated by reference, are available through the Minitex interlibrary loan system, and are not subject to frequent change.

Subp. 3. **Classification procedures.** Public waters shall be classified by the commissioner. The commissioner shall document each classification with appropriate supporting data. A preliminary list of classified public waters shall be submitted to each affected local government. Each affected local government shall be given an opportunity to request a change in the proposed classification. If a local government feels such a change is needed, a written request with supporting data may be submitted to the commissioner for consideration. If a local government 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 units before making a final decision on the proposed change.

Subp. 4. **Reclassification.** The commissioner may, as the need arises, reclassify any public water. Also, any local government 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 standards based upon unique characteristics and capabilities of any public waters.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

### 6120.3100 LAND USE DISTRICTS.

The development of shorelands of public waters must be controlled by means of land use zoning districts which are designated to be compatible with the classes of public waters in part 6120.3000. Land use zoning districts may 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, presence of significant historic sites, 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;

D. the management of areas for commercial or industrial uses which, by their nature, require location in shoreland areas;

E. the protection of valuable agricultural lands from conversion to other uses; and

F. the preservation and enhancement of the quality of water-based recreational use of public waters including provisions for public accesses.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

### **6120.3200 CRITERIA FOR LAND USE ZONING DISTRICT DESIGNATION.**

Subpart 1. **Criteria.** The land use zoning districts established by local governments must be based on considerations of:

A. preservation of natural areas;

B. present ownership and development of shoreland areas;

C. shoreland soil types and their engineering capabilities;

D. topographic characteristics;

E. vegetative cover;

F. in-water physical characteristics, values, and constraints;

G. recreational use of the surface water;

H. road and service center accessibility;

I. socioeconomic development needs and plans as they involve water and related land resources;

J. the land requirements of industry which, by its nature, requires location in shoreland areas; and

K. the necessity to preserve and restore certain areas having significant historical or ecological value.

Subp. 2. **Designation of zoning districts.** Local governments with adopted land use zoning districts in effect on the date of adoption of parts 6120.2500 to 6120.3900 may continue to use the districts until revisions are proposed. When amendments to zoning districts on lakes are considered, local governments, at least for all the shoreland within the community of the public water involved and preferably for all shoreland areas within the community, must revise existing zoning district and use provisions to make them substantially compatible with the framework in subpart 4. On a river, zoning districts and use provisions for all shoreland on both sides within the same class in the community must be revised to make them substantially compatible with the framework in subpart 5. If the same river class is contiguous for more than a five-mile segment, only the shoreland for a distance of 2.5 miles up and down stream or to the class boundary, if closer, need be evaluated. When an interpretation question arises about whether a specific land use fits within a category in subpart 4 or 5, the question must be resolved through procedures in local government official controls and state statutes.

Subp. 3. **Land use district descriptions.** Land use district descriptions are as follows:

A. A special protection district is intended to be used for two basic purposes. The first purpose is to limit and properly manage development in areas that are generally unsuitable for development or uses due to flooding, erosion, limiting soil conditions, steep slopes, or other major physical constraints. A second purpose is to manage and preserve areas with special historical, natural, or biological characteristics.

B. A residential district is primarily intended to allow low to medium density seasonal and year-round residential uses on lands suitable for such uses. It is also intended to prevent establishment of various commercial, industrial, and other uses in these areas that cause conflicts or problems for residential uses. Some nonresidential uses with minimal impacts on residential uses are allowed if properly managed under conditional use procedures.

# MINNESOTA RULES 1993

## 6120.3200 SHORELAND AND FLOODPLAIN MANAGEMENT

406

C. A high density residential district is intended for use on lands with heterogeneous mixes of soils, vegetation, and topography that are not well suited to residential development using standard, lot–block subdivisions. This approach enables such areas to be developed, often even with higher than lot–block densities, while also avoiding and preserving unsuitable terrain and soils. Other compatible uses such as residential planned unit development, surface water–oriented commercial, multiple unit single–family, parks, historic sites, and semipublic, are also allowed, primarily as conditional uses.

D. A water–oriented commercial district is intended to be used only to provide for existing or future commercial uses adjacent to water resources that are functionally dependent on such close proximity.

E. A general use district is intended to be used only for lands already developed or suitable for development with concentrated urban, particularly commercial, land uses. It should not generally be used on natural environment lakes or remote river classes. Several other intensive urban uses such as industrial and commercial planned unit development are allowed in this district if handled as conditional uses.

Subp. 4. **Shoreland classifications and uses; lakes.** For the lake classes, districts, and uses in this subpart, P = permitted uses, C = conditional uses, and N = prohibited uses.

### A. Lake classes in special protection districts.

Uses	General development	Recreational development	Natural environment
Forest management	P	P	P
Sensitive resource management	P	P	P
Agricultural: cropland and pasture	P	P	P
Agricultural feedlots	C	C	C
Parks and historic sites	C	C	C
Extractive use	C	C	C
Single residential	C	C	C
Mining of metallic minerals and peat	P	P	P

### B. Lake classes in residential districts.

Uses	General development	Recreational development	Natural environment
Single residential	P	P	P
Semipublic	C	C	C
Parks and historic sites	C	C	C
Extractive use	C	C	C
Duplex, triplex, quad residential	P	P	C
Forest management	P	P	P
Mining of metallic minerals and peat	P	P	P

### C. Lake classes in high density residential districts.

Uses	General development	Recreational development	Natural environment
Residential planned unit developments	C	C	C
Single residential	P	P	P
*Surface water oriented commercial	C	C	C
Semipublic	C	C	C

# MINNESOTA RULES 1993

407

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.3200

Parks and historic sites	C	C	C
Duplex, triplex, quad residential	P	P	P
Forest management	P	P	P

### D. Lake classes in water-oriented commercial districts.

Uses	General development	Recreational development	Natural environment
Surface water-oriented commercial	P	P	C
**Commercial planned unit development	C	C	C
Public, semipublic	C	C	C
Parks and historic sites	C	C	C
Forest management	P	P	P

### E. Lake classes in general use districts.

Uses	General development	Recreational development	Natural environment
Commercial	P	P	C
**Commercial planned unit development	C	C	C
Industrial	C	C	N
Public, semipublic	P	P	C
Extractive use	C	C	C
Parks and historic sites	C	C	C
Forest management	P	P	P
Mining of metallic minerals and peat	P	P	P

\*As accessory to a residential planned unit development

\*\* Limited expansion of a commercial planned unit development involving up to six additional dwelling units or sites may be allowed as a permitted use provided the provisions of part 6120.3800, subpart 2, are satisfied

Subp. 5. **Shoreland classifications and uses; rivers.** For the river classes, districts, and uses in this subpart, P = permitted uses, C = conditional uses, and N = prohibited uses.

### A. River classes in special protection districts.

Uses	Re- mote	For- ested	Trans- ition	Agri- cultural	Urban	Tribu- tary
Forest management	P	P	P	P	P	P
Sensitive resource management	P	P	P	P	P	P
Agricultural: cropland and pasture	P	P	P	P	P	P
Agricultural feedlots	C	C	C	C	C	C
Parks and historic sites	C	C	C	C	C	C
Extractive use	C	C	C	C	C	C
Single residential	C	C	C	C	C	C
Mining of metallic minerals and peat	P	P	P	P	P	P

# MINNESOTA RULES 1993

## 6120.3200 SHORELAND AND FLOODPLAIN MANAGEMENT

408

### B. River classes in residential districts.

Uses	Re- mote	For- ested	Trans- ition	Agri- cultural	Urban	Tribu- tary
Single residential	P	P	P	P	P	P
Semipublic	C	C	C	C	C	P
Parks and historic sites	C	C	C	C	C	P
Extractive use	C	C	C	C	C	C
Duplex, triplex, quad residential	C	C	C	C	P	C
Forest management	P	P	P	P	P	P
Mining of metallic minerals and peat	P	P	P	P	P	P

### C. River classes in high density residential districts.

Uses	Re- mote	For- ested	Trans- ition	Agri- cultural	Urban	Tribu- tary
Residential planned unit developments	C	C	C	C	C	C
Single residential	P	P	P	P	P	P
*Surface water oriented commercial	C	C	C	C	C	C
Semipublic	C	C	C	C	C	C
Parks and historic sites	C	C	C	C	C	C
Duplex, triplex, quad residential	P	P	P	P	P	P
Forest management	P	P	P	P	P	P

### D. River classes in water-oriented commercial districts.

Uses	Re- mote	For- ested	Trans- ition	Agri- cultural	Urban	Tribu- tary
Surface water-oriented commercial	C	C	C	C	C	C
**Commercial planned unit development	C	C	C	C	C	C
Public, semipublic	C	C	C	P	P	P
Parks and historic sites	C	C	C	C	C	C
Forest management	P	P	P	P	P	P

### E. River classes in general use districts.

Uses	Re- mote	For- ested	Trans- ition	Agri- cultural	Urban	Tribu- tary
Commercial	C	C	C	C	P	C
**Commercial planned unit development	C	C	C	C	C	C
Industrial	N	C	N	N	C	C
Public, semipublic	C	C	C	C	P	C
Extractive use	C	C	C	C	C	C
Parks and historic sites	C	C	C	C	C	C
Forest management	P	P	P	P	P	P
Mining of metallic minerals and peat	P	P	P	P	P	P

\*As accessory to a residential planned unit development

\*\* Limited expansion of a commercial planned unit development involving up to six additional dwelling units or sites may be allowed as a permitted use provided the provisions of part 6120.3800, subpart 2, are satisfied

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

### 6120.3300 ZONING PROVISIONS.

Subpart 1. **Purpose.** To manage the effects of shoreland and water surface crowding, to prevent pollution of surface and ground waters of the state, to provide ample space on lots for sewage treatment systems, to minimize flood damages, to maintain property values, to maintain historic values of significant historic sites, and to maintain natural characteristics of shorelands and adjacent water areas, shoreland controls must regulate lot sizes, placement of structures, and alterations of shoreland areas.

Subp. 2. **Residential lot size.** All single, duplex, triplex, and quad residential lots created after the date of enactment of the local shoreland controls must meet or exceed the dimensions presented in subparts 2a and 2b, and the following:

A. Lots must not be occupied by any more dwelling units than indicated in subparts 2a and 2b. Residential subdivisions with dwelling unit densities exceeding those in the tables in subparts 2a and 2b can only be allowed if designed and approved as residential planned unit developments under part 6120.3800. Only land above the ordinary high water level of public waters can be used to meet lot area standards, and lot width standards must be met at both the ordinary high water level and at the building line. The sewer lot area dimensions in subpart 2a, items D to F can only be used if publicly owned sewer system service is available to the property.

B. On natural environment lakes, subdivisions of duplexes, triplexes, and quads must also meet the following standards:

(1) Each building must be set back at least 200 feet from the ordinary high water level.

(2) Each building must have common sewage treatment and water systems that serve all dwelling units in the building.

(3) Watercraft docking facilities for each lot must be centralized in one location and serve all dwelling units in the building.

(4) No more than 25 percent of a lake's shoreline can be in duplex, triplex, or quad developments.

C. One guest cottage may be allowed in local controls on lots meeting or exceeding the duplex dimensions presented in subparts 2a and 2b if the controls also require all of the following standards to be met:

(1) For lots exceeding the minimum lot dimensions of duplex lots, the guest cottage must be located within the smallest duplex-sized lot that could be created including the principal dwelling unit.

(2) A guest cottage must not cover more than 700 square feet of land surface and must not exceed 15 feet in height.

(3) A guest cottage must be located or designed to reduce its visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of government, assuming summer leaf-on conditions.

D. Lots of record in the office of the county recorder on the date of enactment of local shoreland controls that do not meet the requirements of items A to E and subparts 2a and 2b may be allowed as building sites without variances from lot size requirements provided the use is permitted in the zoning district, the lot has been in separate ownership from abutting lands at all times since it became substandard, was created compliant with official controls in effect at the time, and sewage treatment and setback requirements of the shoreland controls are met. Necessary variances from setback requirements must be obtained before any use, sewage treatment system, or building permits are issued for the lots. In evaluating all the variances, boards of adjustment shall consider sewage treatment and water supply capabilities or constraints of the lots and shall deny the variances if adequate facilities cannot be

provided. If, in a group of two or more contiguous lots under the same ownership, any individual lot does not meet the requirements of items A to E and subparts 2a and 2b, the lot must not be considered as a separate parcel of land for the purposes of sale or development. The lot must be combined with the one or more contiguous lots so they equal one or more parcels of land, each meeting the requirements of items A to E and subparts 2a and 2b as much as possible. Local shoreland controls may set a minimum size for nonconforming lots or impose their restrictions on their development.

E. If allowed by local governments, lots intended as controlled accesses to public waters or recreation areas for use by owners of nonriparian lots within subdivisions must meet or exceed the following standards:

(1) They must meet the width and size for residential lots, and be suitable for the intended uses of controlled access lots. If docking, mooring, or over-water storage of watercraft is to be allowed at a controlled access lot, then the width of the lot must be increased by the percent of the requirements for riparian residential lots for each watercraft provided for by covenant beyond six, consistent with the following table:

Controlled Access Lot Frontage Requirements

Ratio of lake size to shore length (acres/mile)	Required increase in frontage (percent)
Less than 100	25
100-200	20
201-300	15
301-400	10
Greater than 400	5

(2) They must be jointly owned by all purchasers of lots in the subdivision or by all purchasers of nonriparian lots in the subdivision who are provided riparian access rights on the access lot.

(3) Covenants or other equally effective legal instruments must be developed that specify which lot owners have authority to use the access lot and what activities are allowed. The activities may include watercraft launching, loading, storage, beaching, mooring, or docking. They must also include other outdoor recreational activities that do not significantly conflict with general public use of the public water or the enjoyment of normal property rights by adjacent property owners. Examples of the nonsignificant conflict activities include swimming, sunbathing, or picnicking. The covenants must limit the total number of vehicles allowed to be parked and the total number of watercraft allowed to be continuously moored, docked, or stored over water, and must require centralization of all common facilities and activities in the most suitable locations on the lot to minimize topographic and vegetation alterations. They must also require all parking areas, storage buildings, and other facilities to be screened by vegetation or topography as much as practical from view from the public water, assuming summer, leaf-on conditions.

Subp. 2a. **Lot area and width standards for single, duplex, triplex, and quad residential development; lake classes.** The lot area and width standards for single, duplex, triplex, and quad residential developments for the lake classes are:

A. Natural Environment, no sewer:

Lot area (square feet)	Riparian lots	Nonriparian lots
Single	80,000	80,000
Duplex	120,000	160,000
Triplex	160,000	240,000
Quad	200,000	320,000
 Lot width (feet)		
Single	200	200
Duplex	300	400

# MINNESOTA RULES 1993

411

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.3300

Triplex	400	600
Quad	500	800

### B. Recreational Development, no sewer:

#### Lot area (square feet)

	Riparian lots	Nonriparian lots
Single	40,000	40,000
Duplex	80,000	80,000
Triplex	120,000	120,000
Quad	160,000	160,000

#### Lot width (feet)

Single	150	150
Duplex	225	265
Triplex	300	375
Quad	375	490

### C. General Development, no sewer:

#### Lot area (square feet)

	Riparian lots	Nonriparian lots
Single	20,000	40,000
Duplex	40,000	80,000
Triplex	60,000	120,000
Quad	80,000	160,000

#### Lot width (feet)

Single	100	150
Duplex	180	265
Triplex	260	375
Quad	340	490

### D. Natural Environment, sewer:

#### Lot area (square feet)

	Riparian lots	Nonriparian lots
Single	40,000	20,000
Duplex	70,000	35,000
Triplex	100,000	52,000
Quad	130,000	65,000

#### Lot width (feet)

Single	125	125
Duplex	225	220
Triplex	325	315
Quad	425	410

# MINNESOTA RULES 1993

## 6120.3300 SHORELAND AND FLOODPLAIN MANAGEMENT

412

### E. Recreational Development, sewer:

#### Lot area (square feet)

	Riparian lots	Nonriparian lots
Single	20,000	15,000
Duplex	35,000	26,000
Triplex	50,000	38,000
Quad	65,000	49,000

#### Lot width (feet)

Single	75	75
Duplex	135	135
Triplex	195	190
Quad	255	245

### F. General Development, sewer:

#### Lot area (square feet)

	Riparian lots	Nonriparian lots
Single	15,000	10,000
Duplex	26,000	17,500
Triplex	38,000	25,000
Quad	49,000	32,500

#### Lot width (feet)

Single	75	75
Duplex	135	135
Triplex	195	190
Quad	255	245

**Subp. 2b. Lot width standards for single, duplex, triplex, and quad residential development; river classes.** The lot width standards for single, duplex, triplex, and quad residential development for river classes are:

#### Lot width (feet)

	Re- mote	For- ested	Trans- ition	Agri- cultural	Urban & Tributary No sewer	Sewer
Single	300	200	250	150	100	75
Duplex	450	300	375	225	150	115
Triplex	600	400	500	300	200	150
Quad	750	500	625	375	250	190

**Subp. 3. Placement and height of structures and facilities on lots.** When more than one setback requirement applies to a site, structures and facilities must be located to meet all setbacks. The placement of structures and other facilities on all lots must be managed by shoreland controls as follows:

**A. Structure setbacks.** The following minimum setbacks presented in the following table for each class of public waters apply to all structures, except water-oriented accessory structures and facilities that are managed according to item H:



(1) Structure setback standards

Class	Ordinary high water level setback (feet)		Setback from top of bluff (feet)
	Unsewered	Sewered	
Natural environment	150	150	30
Recreational development	100	75	30
General development	75	50	30
Remote river segments	200	200	30
Forested and transition river segments	150	150	30
Agricultural, urban, and tributary river segments	100	50	30

(2) Exceptions to structure setback standards in subitem (1). Where structures exist on the adjoining lots on both sides of a proposed building site, structure setbacks may be altered without a variance to conform to the adjoining setbacks provided the proposed building site is not located in a shore impact zone or in a bluff impact zone.

B. High water elevations. In addition to the setback requirements of item A, local shoreland controls must regulate placement of structures in relation to high water elevation. Where state-approved, local flood plain management controls exist, structures must be placed at an elevation consistent with the controls. Where these controls do not exist, the elevation to which the lowest floor, including basement, is placed or flood-proofed must be determined as follows:

(1) For lakes, by placing the lowest floor at a level at least three feet above the highest known water level, or three feet above the ordinary high water level, whichever is higher. In instances where lakes have a history of extreme water level fluctuations or have no outlet capable of keeping the lake level at or below a level three feet above the ordinary high water level, local controls may require structures to be placed higher.

(2) For rivers and streams, by placing the lowest floor at least three feet above the flood of record, if data are available. If data are not available, by placing the lowest floor at least three feet above the ordinary high water level, or by conducting a technical evaluation to determine effects of proposed construction upon flood stages and flood flows and to establish the flood protection elevation. Under all three approaches, technical evaluations must be done consistent with parts 6120.5000 to 6120.6200 governing the management of flood plain areas. If more than one approach is used, the highest flood protection elevation determined must be used for placing structures and other facilities.

(3) Water-oriented accessory structures may have the lowest floor placed lower than the elevation determined in this subpart if the structure is constructed of flood-resistant materials to the elevation, electrical and mechanical equipment is placed above the elevation and, if long duration flooding is anticipated, the structure is built to withstand ice action and wind-driven waves and debris.

C. Bluff impact zones. Structures and accessory facilities, except stairways and landings, must not be placed within bluff impact zones.

D. Steep slopes. Local government officials must evaluate possible soil erosion impacts and development visibility from public waters before issuing a permit for construction of sewage treatment systems, roads, driveways, structures, or other improvements on steep slopes. When determined necessary, conditions must be attached to issued permits to prevent erosion and to preserve existing vegetation screening of structures, vehicles, and other facilities as viewed from the surface of public waters, assuming summer, leaf-on vegetation.

E. Proximity to unplatted cemeteries and significant historic sites. No structure may be placed nearer than 50 feet from the boundary of an unplatted cemetery protected under Minnesota Statutes, section 307.08, unless necessary approval is obtained from the Minnesota State Archaeologist's Office. No structure may be placed on a significant historic site in a manner that affects the values of the site unless adequate information about the site has been removed and documented in a public repository.

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

G. Height. All structures in residential districts in cities, except churches and non-residential agricultural structures, must not exceed 25 feet in height.

H. Accessory structures and facilities. All accessory structures and facilities, except those that are water-oriented, must meet or exceed structure setback standards. If allowed by local government controls, each residential lot may have one water-oriented accessory structure or facility located closer to public waters than the structure setback if all of the following standards are met:

(1) The structure or facility must not exceed ten feet in height, exclusive of safety rails, and cannot occupy an area greater than 250 square feet. Detached decks must not exceed eight feet above grade at any point.

(2) The setback of the structure or facility from the ordinary high water level must be at least ten feet.

(3) The structure or facility must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of government, assuming summer, leaf-on conditions.

(4) The roof may be used as a deck with safety rails, but must not be enclosed or used as a storage area.

(5) The structure or facility must not be designed or used for human habitation and must not contain water supply or sewage treatment facilities.

(6) As an alternative for general development and recreational development waterbodies, water-oriented accessory structures used solely for watercraft storage, and including storage of related boating and water-oriented sporting equipment, may occupy an area up to 400 square feet provided the maximum width of the structure is 20 feet as measured parallel to the configuration of the shoreline.

(7) Any accessory structures or facilities not meeting the above criteria, or any additional accessory structures or facilities must meet or exceed structure setback standards.

I. Stairways, lifts, and landings. Stairways and lifts are the preferred alternative to major topographic alterations for achieving access up and down bluffs and steep slopes to shore areas. Stairways and lifts must meet the following design requirements:

(1) Stairways and lifts must not exceed four feet in width on residential lots. Wider stairways may be used for commercial properties, public open-space recreational properties, and planned unit developments.

(2) Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet may be used for commercial properties, public open-space recreational properties, and planned unit developments.

(3) Canopies or roofs are not allowed on stairways, lifts, or landings.

(4) Stairways, lifts, and landings may be either constructed above the ground on posts or pilings, or placed into the ground, provided they are designed and built in a manner that ensures control of soil erosion.

(5) Stairways, lifts, and landings must be located in the most visually inconspicuous portions of lots, as viewed from the surface of the public water assuming summer, leaf-on conditions, whenever practical.

(6) Facilities such as ramps, lifts, or mobility paths for physically handicapped persons are also allowed for achieving access to shore areas, provided that the dimensional and performance standards of subitems (1) to (5) are complied with in addition to the requirements of chapter 1340.

J. Decks. Except as provided in item H, decks must meet the structure setback standards. Decks that do not meet setback requirements from public waters may be allowed without a variance to be added to structures existing on the date the shoreland structure setbacks were established by ordinance, if all of the following criteria and standards are met:

# MINNESOTA RULES 1993

415

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.3300

(1) a thorough evaluation of the property and structure reveals no reasonable location for a deck meeting or exceeding the existing ordinary high water level setback of the structure;

(2) the deck encroachment toward the ordinary high water level does not exceed 15 percent of the existing shoreline setback of the structure from the ordinary high water level or does not encroach closer than 30 feet, whichever is more restrictive; and

(3) the deck is constructed primarily of wood, and is not roofed or screened.

**Subp. 4. Shoreland alterations.** Vegetative alterations and excavations or grading and filling necessary for the construction of structures and sewage treatment systems under validly issued permits for these facilities are exempt from the vegetative alteration standards in this subpart and separate permit requirements for grading and filling. However, the grading and filling conditions of this subpart must be met for issuance of permits for structures and sewage treatment systems. Alterations of vegetation and topography must be controlled by local governments to prevent erosion into public waters, fix nutrients, preserve shoreland aesthetics, preserve historic values, prevent bank slumping, and protect fish and wildlife habitat. Public roads and parking areas, as regulated by subpart 5, are exempt from the provisions of this part.

A. Removal or alterations of vegetation, except for forest management or agricultural uses as provided for in subparts 7 and 8, is allowed according to the following standards:

(1) Intensive vegetation clearing within the shore and bluff impact zones and on steep slopes is not allowed. Intensive vegetation clearing outside of these areas is allowed if the activity is consistent with the forest management standards in subpart 8.

(2) Limited clearing of trees and shrubs and cutting, pruning, and trimming of trees to accommodate the placement of stairways and landings, picnic areas, access paths, livestock watering areas, beach and watercraft access areas, and permitted water-oriented accessory structures or facilities, as well as providing a view to the water from the principal dwelling site, in shore and bluff impact zones and on steep slopes is allowed, provided that:

(a) the screening of structures, vehicles, or other facilities as viewed from the water, assuming summer, leaf-on conditions, is not substantially reduced;

(b) along rivers, existing shading of water surfaces is preserved; and

(c) the above provisions are not applicable to the removal of trees, limbs, or branches that are dead, diseased, or pose safety hazards.

(3) Use of fertilizer and pesticides in the shoreland management district must be done in such a way as to minimize runoff into the shore impact zone or public water by the use of earth, vegetation, or both.

B. Before grading or filling on steep slopes or within shore or bluff impact zones involving the movement of more than ten cubic yards of material or anywhere else in a shoreland area involving movement of more than 50 cubic yards of material, it must be established by local official permit issuance that all of the following conditions will be met. The following conditions must also be considered during subdivision, variance, building permit, and other conditional use permit reviews.

(1) Before authorizing any grading or filling activity in any type 2, 3, 4, 5, 6, 7, or 8 wetland, local officials must consider how extensively the proposed activity would affect the following functional qualities of the wetland:

(a) sediment and pollutant trapping and retention;

(b) storage of surface runoff to prevent or reduce flood damage;

(c) fish and wildlife habitat;

(d) recreational use;

(e) shoreline or bank stabilization; or

(f) noteworthiness, including special qualities such as historic significance, critical habitat for endangered plants and animals, or others.

This evaluation must also include a determination of whether the wetland alteration being proposed requires permits, reviews, or approvals by other local, state, or federal agencies such as a watershed district, the Minnesota Department of Natural Resources, or the United States Army Corps of Engineers.

(2) Alterations must be designed and conducted in a manner that ensures only the smallest amount of bare ground is exposed for the shortest time possible.

(3) Mulches or similar materials must be used, where necessary, for temporary bare soil coverage, and a permanent vegetation cover must be established as soon as possible.

(4) Methods to minimize soil erosion and to trap sediments before they reach any surface water feature must be used.

(5) Altered areas must be stabilized to acceptable erosion control standards consistent with the field office technical guides of the local soil and water conservation districts and the United States Soil Conservation Service.

(6) Fill or excavated material must not be placed in a manner that creates an unstable slope.

(7) Plans to place fill or excavated material on steep slopes must be reviewed by qualified professionals for continued slope stability and must not create finished slopes of 30 percent or greater.

(8) *Fill or excavated material must not be placed in bluff impact zones.*

(9) Any alterations below the ordinary high water level of public waters must first be authorized by the commissioner under Minnesota Statutes, section 105.42.

(10) Alterations of topography must only be allowed if they are accessory to permitted or conditional uses and do not adversely affect adjacent or nearby properties.

(11) Placement of natural rock riprap, including associated grading of the shoreline and placement of a filter blanket, is permitted if the finished slope does not exceed three feet horizontal to one foot vertical, the landward extent of the riprap is within ten feet of the ordinary high water level, and the height of the riprap above the ordinary high water level does not exceed three feet.

C. Connections to public waters. Excavations where the intended purpose is connection to a public water, such as boat slips, canals, lagoons, and harbors, must be controlled by local shoreland controls. Permission for excavations may be given only after the commissioner has approved the proposed connection to public waters.

**Subp. 5. Placement and design of roads, driveways, and parking areas.** Public and private roads, driveways, and parking areas must be designed to take advantage of natural vegetation and topography to achieve maximum screening from view from public waters. They must be designed and constructed to minimize and control erosion to public waters consistent with the field office technical guides of the local soil and water conservation district, or other applicable technical materials.

A. Roads, driveways, and parking areas must meet structure setbacks and must not be placed within bluff and shore impact zones, when other reasonable and feasible placement alternatives exist. If no alternatives exist, they may be placed within these areas, and must be designed to minimize adverse impacts.

B. Public and private watercraft access ramps, approach roads, and access-related parking areas may be placed within shore impact zones provided the vegetative screening and erosion control conditions of this subpart are met. For private facilities, the grading and filling provisions of subpart 4, item B, must also be met.

Subp. 6. [Repealed, 13 SR 3029]

**Subp. 7. Agricultural use standards.** The agricultural use standards for shoreland areas are contained in items A, B, C, and D.

A. The shore impact zone for parcels with permitted agricultural land uses is equal to a line parallel to and 50 feet from the ordinary high water level.

B. General cultivation farming, grazing, nurseries, horticulture, truck farming, sod farming, and wild crop harvesting are permitted uses if steep slopes and shore and bluff impact zones are maintained in permanent vegetation or operated under an approved conservation plan (Resource Management Systems) consistent with the field office technical guides of the local soil and water conservation districts or the United States Soil Conservation Service.

# MINNESOTA RULES 1993

417

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.3300

C. Animal feedlots as defined by the Minnesota Pollution Control Agency, where allowed by zoning district designations, must be reviewed as conditional uses and must meet the following standards:

(1) New feedlots must not be located in the shoreland of watercourses or in bluff impact zones and must meet a minimum setback of 300 feet from the ordinary high water level of all public waters basins.

(2) Modifications or expansions to existing feedlots that are located within 300 feet of the ordinary high water level or within a bluff impact zone are allowed if they do not further encroach into the existing ordinary high water level setback or encroach on bluff impact zones.

(3) A certificate of compliance, interim permit, or animal feedlot permit, when required by parts 7020.0100 to 7020.1900, must be obtained by the owner or operator of an animal feedlot.

D. Use of fertilizer, pesticides, or animal wastes within shorelands must be done in such a way as to minimize impact on the shore impact zone or public water by proper application or use of earth or vegetation.

**Subp. 8. Forest management standards.** The harvesting of timber and associated reforestation or conversion of forested use to a nonforested use must be conducted consistent with the following standards:

A. Timber harvesting and associated reforestation must be conducted consistent with the provisions of the Minnesota Nonpoint Source Pollution Assessment–Forestry and the provisions of Water Quality in Forest Management “Best Management Practices in Minnesota.”

B. If allowed by local governments, forest land conversion to another use requires issuance of a conditional use permit and adherence to the following standards:

(1) shore and bluff impact zones must not be intensively cleared of vegetation; and

(2) an erosion and sediment control plan is developed and approved by the local soil and water conservation district before issuance of a conditional use permit for the conversion.

C. Use of fertilizer, pesticides, or animal wastes within shorelands must be done in such a way as to minimize impact on the shore impact zone or public water by proper application or use of earth or vegetation.

**Subp. 9. Extractive use standards.** Processing machinery must be located consistent with setback standards for structures from ordinary high water levels of public waters and from bluffs.

An extractive use site development and restoration plan must be developed, approved by the local government, and followed over the course of operation of the site. The plan must address dust, noise, possible pollutant discharges, hours and duration of operation, and anticipated vegetation and topographic alterations. It must also identify actions to be taken during operation to mitigate adverse environmental impacts, particularly erosion, and must clearly explain how the site will be rehabilitated after extractive activities end.

**Subp. 10. Standards for commercial, industrial, public, and semipublic uses.** Surface water-oriented commercial uses and industrial, public, or semipublic uses with similar needs to have access to and use of public waters may be located on parcels or lots with frontage on public waters. Uses without water-oriented needs must be located on lots or parcels without public waters frontage, or, if located on lots or parcels with public waters frontage, must either be set back double the normal ordinary high water level setback or be substantially screened from view from the water by vegetation or topography, assuming summer, leaf-on conditions. Those with water-oriented needs must meet the following standards:

A. In addition to meeting impervious coverage limits, setbacks, and other zoning standards presented elsewhere in parts 6120.2500 to 6120.3900, the uses must be designed to incorporate topographic and vegetative screening of parking areas and structures.

B. Uses that require short-term watercraft mooring for patrons must centralize these facilities and design them to avoid obstructions of navigation and to be the minimum size necessary to meet the need.

C. Uses that depend on patrons arriving by watercraft may use signs and lighting to convey needed information to the public, subject to the following general standards:

(1) No advertising signs or supporting facilities for signs may be placed in or upon public waters. Signs conveying information or safety messages may be placed in or on public waters by a public authority or under a permit issued by the county sheriff.

(2) Signs may be placed, when necessary, within the shore impact zone if they are designed and sized to be the minimum necessary to convey needed information. They must only convey the location and name of the establishment and the general types of goods or services available. The signs must not contain other detailed information such as product brands and prices, must not be located higher than ten feet above the ground, and must not exceed 32 square feet in size. If illuminated by artificial lights, the lights must be shielded or directed to prevent illumination out across public waters.

(3) Other outside lighting may be located within the shore impact zone or over public waters if it is used primarily to illuminate potential safety hazards and is shielded or otherwise directed to prevent direct illumination out across public waters. This does not preclude use of navigational lights.

Subp. 11. **Stormwater management.** Local governments must consider proper stormwater management in all reviews, approvals, and permit issuances under shoreland management controls adopted under parts 6120.2500 to 6120.3900. The following general and specific standards must be incorporated into local government shoreland management controls and their administration.

A. The following are general standards:

(1) When possible, existing natural drainageways, wetlands, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters.

(2) Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized and protected as soon as possible and facilities or methods used to retain sediment on the site.

(3) When development density, topographic features, and soil and vegetation conditions are not sufficient to adequately handle stormwater runoff using natural features and vegetation, various types of constructed facilities such as diversions, settling basins, skimming devices, dikes, waterways, and ponds may be used. Preference must be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and human-made materials and facilities.

B. The following are specific standards:

(1) Impervious surface coverage of lots must not exceed 25 percent of the lot area.

(2) When constructed facilities are used for stormwater management, they must be designed and installed consistent with the field office technical guide of the local soil and water conservation districts.

(3) New constructed stormwater outfalls to public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.

Subp. 12. **Mining of metallic minerals and peat, as defined by Minnesota Statutes, sections 93.44 to 93.51.** Mining of metallic minerals and peat shall be a permitted use provided the provisions of Minnesota Statutes, sections 93.44 to 93.51, are satisfied.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029; 17 SR 1279*

## 6120.3400 SANITARY PROVISIONS.

Subpart 1. [Repealed, 13 SR 3029]

Subp. 2. **Water supply.** Any public or private supply of water for domestic purposes must meet or exceed standards for water quality of the Minnesota Department of Health and the Minnesota Pollution Control Agency.

# MINNESOTA RULES 1993

419

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.3500

Private wells must be located, constructed, maintained, and sealed in accordance with or in a more thorough manner than the Water Well Construction Code of the Minnesota Department of Health.

Subp. 3. **Sewage treatment.** Any premises used for human occupancy must be provided with an adequate method of sewage treatment.

A. Publicly-owned sewer systems must be used where available.

B. All private sewage treatment systems must meet or exceed applicable rules of the Minnesota Department of Health, the Minnesota Pollution Control Agency, specifically chapter 7080 for individual sewage treatment systems, and any applicable local government standards.

C. On-site sewage treatment systems must be set back from the ordinary high water level in accordance with the following table:

Sewage Treatment System Setback Standards	
Class	Setback from ordinary high water level (feet)
Natural environment	150
Recreational development	75
General development	50
Remote river segments	150
Forested river segments	100
Transition river segments	100
Agricultural river segments	75
Urban and tributary river segments	75

D. Local governments must develop and implement programs to identify and upgrade sewage treatment systems that are inconsistent with the sewage treatment system design criteria identified in item B, exclusive of the appropriate setback from the ordinary high water level in item C. These programs must require reconstruction of existing nonconforming sewage systems whenever a permit or variance of any type is required for any improvement on, or use of, the property, and must include at least one of the following approaches:

(1) a systematic review of existing records to determine which systems in the jurisdiction are nonconforming and requiring reconstruction when practicable;

(2) a systematic on-site inspection program including all properties where adequate record of conformances does not exist, identifying nonconforming or illegal systems and requiring reconstruction when appropriate;

(3) a notification or education program that is oriented toward convincing substantial numbers of property owners to evaluate their sewage systems and voluntarily upgrade the sewage treatment system, if nonconforming; or

(4) other programs found to be acceptable to the commissioner.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

### 6120.3500 SUBDIVISION PROVISIONS.

Subpart 1. **Land suitability.** Each lot created through subdivision must be suitable in its natural state for the proposed use with minimal alteration. Suitability analysis by the local unit of government shall consider susceptibility to flooding, existence of wetlands, soil and rock formations with severe limitations for development, severe erosion potential, steep topography, inadequate water supply or sewage treatment capabilities, near-shore aquatic conditions unsuitable for water-based recreation, important fish and wildlife habitat, presence of significant historic sites, or any other feature of the natural land likely to be harmful to the health, safety, or welfare of future residents of the proposed subdivision or of the community.

Subp. 2. **Platting.** All subdivisions that create five or more lots or parcels that are 2-1/2 acres or less in size must be processed by local governments as plats in accordance with Minnesota Statutes, chapter 505. Local governments must not record parcels or issue building or sewage permits for lots created after enactment of official controls under parts 6120.2500 to 6120.3900 that are not part of officially approved subdivisions.

Subp. 3. **Consistency with other controls.** Subdivisions must conform to all other official controls adopted by local governments under parts 6120.2500 to 6120.3900. Local governments must not approve subdivisions that are designed so variances from one or more standards in official controls would be needed to use the lots for their intended purpose. In areas not served by publicly owned sewer and water systems, subdivisions must not be approved by local governments unless domestic water supply is available and soil absorption sewage treatment can be provided for every lot. A lot shall meet the minimum lot size in part 6120.3300, subparts 2a and 2b, including at least a minimum contiguous lawn area, that is free of limiting factors (location and type of water supply, soil type, depth to groundwater or impervious layer, slope, flooding potential, and other limiting factors), sufficient for the construction of two standard soil treatment systems. Lots that would require use of holding tanks must not be approved.

Subp. 4. **Information requirements.** Subdivision controls must require submission of adequate information to make a determination of land suitability under subpart 1. The information shall include at least the following:

A. topographic contours at ten-foot intervals or less from United States Geological Survey maps or more accurate sources, showing limiting site characteristics;

B. the surface water features required in Minnesota Statutes, section 505.02, subdivision 1, to be shown on plats, obtained from United States Geological Survey quadrangle topographic maps or more accurate sources;

C. adequate soils information to determine suitability for building and on-site sewage treatment capabilities for every lot from the most current existing sources or from field investigations such as soil borings, percolation tests, or other methods;

D. information regarding adequacy of domestic water supply; extent of anticipated vegetation and topographic alterations; near-shore aquatic conditions, including depths, types of bottom sediments, and aquatic vegetation; and proposed methods for controlling stormwater runoff and erosion, both during and after construction activities; and

E. location of 100-year flood plain areas from existing maps or data.

Subp. 5. **Dedications.** If local governments require land or easement dedications, they must provide easements over natural drainage or ponding areas for management of stormwater and significant wetlands.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

**6120.3600** [Repealed, 13 SR 3029]

**6120.3700** [Repealed, 13 SR 3029]

### **6120.3800 PLANNED UNIT DEVELOPMENT.**

Subpart 1. **Scope of planned unit development provisions.** Local governments must consider incorporating, with approval of the commissioner, provisions into shoreland management controls to allow planned unit developments. The provisions may allow planned unit developments for new projects on undeveloped land, redevelopment of previously built sites, or conversions of existing buildings and land. The provisions must be consistent with standards in this part. During the period between adoption of parts 6120.2500 to 6120.3900 and adoption of local government official controls meeting the planned unit development standards in part 6120.3800, preliminary plans for each planned unit development must be reviewed for consistency with part 6120.3800 and approved by the commissioner before final local government approval.

Subp. 2. **Land use district designation.** If local governments allow planned unit developments, the land use districts in which they are an allowable conditional use must be identified in their official controls and on a zoning map. Designation of the districts must be based on consideration of the criteria in part 6120.3200 and the following criteria:

A. existing recreational use of the surface waters and likely increases in use associated with planned unit developments;

B. physical and aesthetic impacts of increased density;

C. suitability of lands for the planned unit development approach;



# MINNESOTA RULES 1993

421

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.3800

- D. level of current development in the area; and
- E. amounts and types of ownership of undeveloped lands.

Expansions to existing commercial planned unit developments involving up to six dwelling units or sites, unless the density determined under subpart 6, item A is exceeded, may be allowed as permitted uses under standards developed by local units of government. The date of effect of official controls adopted by each local government under this part must be the base date for determination of expansions. Expansions exceeding these limits must be processed as conditional uses and meet the standards in this part.

**Subp. 3. Information requirements.** Provisions for submission of adequate information by project proponents must be included in official controls. The provisions must include at least the following:

A. a site plan for the project showing property boundaries, surface water features, existing and proposed structures, sewage treatment systems, topographic contours at ten-foot intervals or less, and other facilities; and

B. documents that explain how the project is designed and will function. These ordinarily include covenants that require membership in a property owners association, various easements, a concept statement describing the project, floor plans for structures, and various other drawings or plans.

**Subp. 4. Dwelling unit or site density evaluation.** Proposed new or expansions to existing planned unit developments must be evaluated using the following procedures and standards:

A. The project parcel must be divided into tiers by locating one or more lines approximately parallel to a line that identifies the ordinary high water level at the following intervals, proceeding landward:

### Shoreland Tier Dimensions

	Unsewered (feet)	Sewered (feet)
General development lakes – first tier	200	200
General development lakes – second and additional tiers	267	200
Recreational development lakes	267	267
Natural environment lakes	400	320
All river classes	300	300

B. The area within each tier is next calculated, excluding all wetlands, bluffs, or land below the ordinary high water level of public waters. This area is then subjected to either the residential (subpart 5) or commercial (subpart 6) planned unit development density evaluation steps to arrive at an allowable number of dwelling units or sites.

**Subp. 5. Residential planned unit development density evaluation steps and design criteria.** The density evaluation steps and design criteria for residential planned unit developments are contained in items A to D.

A. The area within each tier is divided by the single residential lot size standard for lakes or, for rivers, the single residential lot width standard times the tier depth unless the local unit of government has specified an alternative minimum lot size for rivers which shall then be used to yield a base density of dwelling units or sites for each tier. Proposed locations and numbers of dwelling units or sites for the residential planned unit development are then compared with these data and map of the evaluation. Local governments may allow some dwelling unit or site density increases for residential planned unit developments above the densities determined in the evaluation if all dimensional standards in part 6120.3300 are met or exceeded. Maximum density increases may only be allowed if all design criteria in subpart 5, item B, are also met or exceeded. Increases in dwelling unit or site densities must not exceed the maximums in the following table. Allowable densities may be transferred from any tier to any other tier further from the shoreland water body or watercourse, but must not be transferred to any other tier closer.

Maximum Allowable Dwelling Unit Or Site Density Increases For Residential Planned Unit Developments

Density evaluation tiers	Maximum density increase within each tier (percent)
First	50
Second	100
Third	200
Fourth	200
Fifth	200

B. The design criteria are:

(1) All residential planned unit developments must contain at least five dwelling units or sites.

(2) Residential planned unit developments must contain open space meeting all of the following criteria:

(a) At least 50 percent of the total project area must be preserved as open space.

(b) Dwelling units or sites, road rights-of-way, or land covered by road surfaces, parking areas, or structures, except water-oriented accessory structures or facilities, are developed areas and should not be included in the computation of minimum open space.

(c) Open space must include areas with physical characteristics unsuitable for development in their natural state, and areas containing significant historic sites or unplatted cemeteries.

(d) Open space may include outdoor recreational facilities for use by owners of the dwelling units or sites, or the public.

(e) The shore impact zone, based on normal structure setbacks, must be included as open space. At least 50 percent of the shore impact zone area of existing developments or at least 70 percent of the shore impact zone area of new developments must be preserved in their natural or existing state.

(f) Open space must not include commercial facilities or uses, but may contain water-oriented accessory structures or facilities.

(g) The appearance of open space areas, including topography, vegetation, and allowable uses, must be preserved by use of restrictive deed covenants, permanent easements, public dedication and acceptance, or other equally effective and permanent means.

(h) Open space may include subsurface sewage treatment systems if the use of the space is restricted to avoid adverse impacts on the systems.

(3) Centralization and design of facilities and structures must be done according to the following standards:

(a) Residential planned unit developments must be connected to publicly owned water supply and sewer systems, if available. On-site water supply and sewage treatment systems must be centralized and designed and installed to meet or exceed applicable standards or rules of the Minnesota Department of Health and the Minnesota Pollution Control Agency. On-site sewage treatment systems must be located on the most suitable areas of the development, and sufficient lawn area free of limiting factors must be provided for a replacement soil treatment system for each sewage system.

(b) Dwelling units or sites must be clustered into one or more groups and located on suitable areas of the development. They must be designed and located to meet or exceed the following dimensional standards for the relevant shoreland classification: setback from the ordinary high water level, elevation above the surface water features, and maximum height. Setbacks from the ordinary high water level must be increased for developments with density increases. Maximum density increases may only be allowed if structure setbacks from the ordinary high water level are increased to at least 50 percent greater than the minimum setback, or the impact on the waterbody is reduced an equivalent amount

# MINNESOTA RULES 1993

423

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.3800

through vegetative management, topography, or additional means acceptable to the local unit of government and the setback is at least 25 percent greater than the minimum setback.

(c) Shore recreation facilities, including but not limited to swimming areas, docks, and watercraft mooring areas and launching ramps must be centralized and located in areas suitable for them. Evaluation of suitability must include consideration of land slope, water depth, vegetation, soils, depth to groundwater and bedrock, or other relevant factors. The number of spaces provided for continuous beaching, mooring, or docking of watercraft must not exceed one for each allowable dwelling unit or site in the first tier. Launching ramp facilities, including a small dock for loading and unloading equipment, may be provided for use by occupants of dwelling units or sites located in other tiers.

(d) Structures, parking areas, and other facilities must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of government, assuming summer, leaf-on conditions.

(e) Water-oriented accessory structures and facilities may be allowed if they meet or exceed design standards contained in part 6120.3300, subpart 3, item H, and are centralized.

(f) Accessory structures and facilities may be allowed if they meet or exceed standards in part 6120.3300, subpart 3, item H, and are centralized.

(4) Erosion control and stormwater management for residential planned unit developments must:

(a) Be designed, and their construction managed, to minimize the likelihood of serious erosion occurring either during or after construction. This must be accomplished by limiting the amount and length of time of bare ground exposure. Temporary ground covers, sediment entrapment facilities, vegetated buffer strips, or other appropriate techniques must be used to minimize erosion impacts on surface water features. Erosion control plans approved by a soil and water conservation district may be required if project size and site physical characteristics warrant.

(b) Be designed and constructed to effectively manage reasonably expected quantities and qualities of stormwater runoff.

C. Administration and maintenance requirements. Before final approval of all residential planned unit developments, local governments must ensure adequate provisions have been developed for preservation and maintenance in perpetuity of open spaces and for the continued existence and functioning of the development as a community.

(1) Open space preservation. Deed restrictions, covenants, permanent easements, public dedication and acceptance, or other equally effective and permanent means must be provided to ensure long-term preservation and maintenance of open space. The instruments must include all of the following protections:

(a) commercial uses prohibited;

(b) vegetation and topographic alterations other than routine maintenance prohibited;

(c) construction of additional buildings or storage of vehicles and other materials prohibited; and

(d) uncontrolled beaching prohibited.

(2) Development organization and functioning. Unless an equally effective alternative community framework is established, when applicable, all residential planned unit developments must use an owners association with the following features:

(a) Membership must be mandatory for each dwelling unit or site purchaser and any successive purchasers.

(b) Each member must pay a pro rata share of the association's expenses, and unpaid assessments can become liens on units or sites.

(c) Assessments must be adjustable to accommodate changing conditions.

(d) The association must be responsible for insurance, taxes, and maintenance of all commonly owned property and facilities.

D. Conversions. Local governments may allow existing resorts or other land uses and facilities to be converted to residential planned unit developments if all of the following standards are met:

(1) Proposed conversions must be initially evaluated using the same procedures and standards presented in this part for developments involving all new construction. Inconsistencies between existing features of the development and these standards must be identified.

(2) Deficiencies involving water supply and sewage treatment, structure color, impervious coverage, open space, and shore recreation facilities must be corrected as part of the conversion or as specified in the conditional use permit.

(3) Shore and bluff impact zone deficiencies must be evaluated and reasonable improvements made as part of the conversion. These improvements must include, where applicable, the following:

(a) removal of extraneous buildings, docks, or other facilities that no longer need to be located in shore or bluff impact zones;

(b) remedial measures to correct erosion sites and improve vegetative cover and screening of buildings and other facilities as viewed from the water; and

(c) if existing dwelling units are located in shore or bluff impact zones, conditions are attached to approvals of conversions that preclude exterior expansions in any dimension or substantial alterations. The conditions must also provide for future relocation of dwelling units, where feasible, to other locations, meeting all setback and elevation requirements when they are rebuilt or replaced.

(4) Existing dwelling unit or dwelling site densities that exceed standards in this part may be allowed to continue but must not be allowed to be increased, either at the time of conversion or in the future. Efforts must be made during the conversion to limit impacts of high densities by requiring seasonal use, improving vegetative screening, centralizing shore recreation facilities, installing new sewage treatment systems, or other means.

**Subp. 6. Commercial planned unit development density evaluation steps and design criteria.** The density evaluation steps and design criteria for commercial planned unit developments are contained in items A and B:

A. Density evaluation steps:

(1) Determine the average inside living area size of dwelling units or sites within each tier, including both existing and proposed units and sites. Computation of inside living area sizes need not include decks, patios, stoops, steps, garages, or porches and basements, unless they are habitable space.

(2) Select the appropriate floor area ratio from the following table:

Average unit floor area (sq. ft.)	Commercial Planned Unit Development Floor Area Ratios*		
	Public waters classes		Natural environment lakes; remote river segments
	Sewered general development lakes; first tier on unsewered general development lakes; urban, agricultural, tributary river segments	Second and additional tiers on unsewered general development lakes; recreational development lakes; transition and forested river segments	
200	.040	.020	.010
300	.048	.024	.012
400	.056	.028	.014
500	.065	.032	.016

# MINNESOTA RULES 1993

600	.072	.038	.019
700	.082	.042	.021
800	.091	.046	.023
900	.099	.050	.025
1,000	.108	.054	.027
1,100	.116	.058	.029
1,200	.125	.064	.032
1,300	.133	.068	.034
1,400	.142	.072	.036
1,500	.150	.075	.038

\*For average unit floor areas less than shown, use the floor area ratios listed for 200 square feet. For areas greater than shown, use the ratios listed for 1,500 square feet. For recreational camping areas, use the ratios listed at 400 square feet. Manufactured home sites in recreational camping areas shall use a ratio equal to the size of the manufactured home, or if unknown, the ratio listed for 1,000 square feet.

(3) Multiply the useable area within each tier by the floor area ratio to yield total floor area for each tier allowed to be used for dwelling units or sites.

(4) Divide the area computed in subitem (3) by the average determined in subitem (1). This yields a base number of dwelling units and sites for each tier.

(5) Determine whether the project is eligible for any additional density increases. To be eligible, projects must meet all of the design standards in item B, and exceed one or more of them. The local unit of government may decide how much, if any, increase in density to allow for each tier, but must not exceed the maximum allowable density increases listed in the following table:

Maximum Allowable Dwelling Unit Or Site Density Increases For Commercial Planned Unit Developments

Tier	Maximum density increase within each tier (percent)
First	50
Second	100
Third	200
Fourth	200
Fifth	200

(6) Allowable densities may be transferred from any tier to any other tier further from the shoreland lake or river, but must not be transferred to any other tier closer.

**B. The design criteria are:**

(1) Open space. Commercial planned unit developments must contain open space meeting all of the following criteria:

(a) At least 50 percent of the total project area must be preserved as open space.

(b) Dwelling units or sites, road rights-of-way, or land covered by road surfaces, or parking areas, except water-oriented accessory structures or facilities, are developed areas and should not be included in the computation of open space.

(c) Open space must include areas with physical characteristics unsuitable for development in their natural state, and areas containing significant historic sites or unplatted cemeteries.

(d) All shore impact zones within commercial planned unit developments must be included as open space, and at least 50 percent of these areas must be preserved in their natural or existing state.

(e) Open space may include outdoor recreation facilities for use by guests staying in dwelling units or sites, or the public.

(f) Open space may include subsurface sewage treatment systems if use of the space is restricted to avoid adverse impacts on the systems.

(2) Design of structures and facilities must be done according to the following standards:

(a) Commercial planned unit developments must be connected to publicly owned water supply and sewer systems, if available. On-site water supply and sewage treatment systems must be designed and installed to meet or exceed applicable rules of the Minnesota Department of Health and the Minnesota Pollution Control Agency. On-site sewage treatment systems must be located on the most suitable areas of the development, and sufficient lawn area free of limiting factors must be provided for a replacement soil treatment system for each sewage system.

(b) Dwelling units or sites must be located on suitable areas of the development. They must be designed and located to meet or exceed the following dimensional standards for the relevant shoreland classification: setback from the ordinary high water level, elevation above surface water features, and maximum height. Maximum density increases may only be allowed if structure setbacks from the ordinary high water level are increased to at least 50 percent greater than the minimum setback, or the impact on the waterbody is reduced an equivalent amount through vegetative management, topography, or other means acceptable to the local unit of government and the setback is at least 25 percent greater than the minimum setback.

(c) Structures, parking areas, and other facilities must be designed and located in a manner that minimizes their visibility from surface water features, assuming summer, leaf-on conditions. The structure, dwelling unit, accessory structure, or parking area must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of government assuming summer, leaf-on conditions. Vegetative and topographic screening must be preserved, if existing, or may be required to be provided.

(d) Water-oriented accessory structures and facilities may be located within shore impact zones if they meet or exceed design standards contained in part 6120.3300, subpart 3, item H.

(e) Shore recreation facilities, including but not limited to swimming areas, docks, and watercraft mooring areas and launching ramps, must be centralized and located in areas suitable for them. Evaluation of suitability must include consideration of land slope, water depth, vegetation, soils, depth to groundwater and bedrock, or other relevant factors. The number of watercraft allowed to be continuously beached, moored, or docked must not exceed one for each allowable dwelling unit or site in the first tier, notwithstanding existing mooring sites in an existing harbor. Launching ramp facilities, including a small dock for loading and unloading equipment, may be provided for use by occupants of dwelling units or sites located in other tiers.

(3) Erosion control and stormwater management for commercial planned unit developments must:

(a) Be designed, and their construction managed, to minimize the likelihood of serious erosion occurring either during or after construction. This must be accomplished by limiting the amount and length of time of bare ground exposure. Temporary ground covers, sediment entrapment facilities, vegetated buffer strips, or other appropriate techniques must be used to minimize erosion impacts on surface water features. Erosion control plans approved by a soil and water conservation district may be required if project size and site physical characteristics warrant.

(b) Be designed and constructed to effectively manage reasonably expected quantities and qualities of stormwater runoff. Impervious surface coverage within any tier must not exceed 25 percent of the tier area, except 35 percent impervious surface coverage may be allowed in the first tier of general development lakes with an approved stormwater management plan and consistency with part 6120.3300, subpart 4.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

### 6120.3900 ADMINISTRATION.

Subpart 1. **Administration and enforcement.** Local governments must provide for the administration and enforcement of their shoreland management controls by establishing per-

mit procedures for building construction, installation of sewage treatment systems, and grading and filling.

Subp. 2. [Repealed, 13 SR 3029]

Subp. 3. **Variations.** Variations may only be granted in accordance with Minnesota Statutes, chapters 394 or 462, as applicable. They may not circumvent the general purposes and intent of the official controls. No variation 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 variations to ensure compliance and to protect adjacent properties and the public interest. In considering variation requests, boards of adjustment must also consider whether property owners have reasonable use of the lands without the variations, whether existing sewage treatment systems on the properties need upgrading before additional development is approved, whether the properties are used seasonally or year-round, whether variations are being requested solely on the basis of economic considerations, and the characteristics of development on adjacent properties.

Subp. 3a. **Conditional uses.** In addition to any existing standards local governments may have for reviewing conditional uses, the following standards must be incorporated into local controls and used for reviewing conditional uses located in shoreland areas:

A. a thorough evaluation of the topographic, vegetation, and soils conditions on the site to ensure:

(1) prevention of soil erosion or other possible pollution of public waters, both during and after construction;

(2) limiting visibility of structures and other facilities as viewed from public waters; and

(3) adequacy of the site for water supply and on-site sewage treatment; and

B. an assessment of the types, uses, and numbers of watercraft that the project will generate in relation to the suitability of public waters to safely accommodate these watercraft.

Local governments may impose conditions when granting conditional use permits that specify: increased setbacks from public waters; vegetation allowed to be removed or required to be established; sewage treatment system location, design, or use; location, design, and use requirements for watercraft launching or docking, and for vehicular parking; structure or other facility design, use, and location; phasing of construction; and other conditions considered necessary by the local unit of government.

Subp. 4. **Nonconformities.**

A. Local governments must require upgrading or replacement of any existing, on-site sewage treatment system identified as a nonconformity under a program established under part 6120.3400. Systems installed according to all applicable local shoreland management standards adopted under Minnesota Statutes, section 105.485, in effect at the time of installation may be considered as conforming unless they are determined to be failing, except that systems using cesspools, leaching pits, seepage pits, or other deep disposal methods, or systems with less soil treatment area separation above groundwater than required by chapter 7080, shall be considered nonconforming.

B. All nonconformities other than on-site sewage treatment systems must be managed according to applicable state statutes and local government official controls.

Subp. 4a. **Shoreland management by townships.** Townships may adopt shoreland management controls under authority of Minnesota Statutes, section 394.33, subdivision 1, if the controls are not inconsistent with or less restrictive than the controls adopted by the county in which the township is located.

A. For the purposes of parts 6120.2500 to 6120.3900, shoreland management controls adopted by townships will only be considered to be consistent with county controls if they cover the same full range of shoreland management provisions covered by the county controls, contain dimensional standards at least as restrictive as those in the county controls, and do not allow land uses in particular areas that are not allowed under the county's official controls.

B. The township must demonstrate to the county board that their proposed ordinance and administration is at least as restrictive as the county's prior to final adoption by the

township. Townships must provide for administration and enforcement of shoreland management controls at least as effective as county implementation. Townships that adopt adequate shoreland controls must follow all of the notification procedures in subpart 6. After adequate shoreland management controls are adopted by a township, property owners must only obtain necessary permits and approvals as required in the township shoreland management controls. Property owners do not have to obtain similar permits or approvals under the county's shoreland controls.

**Subp. 5. Joint exercise of powers.** To facilitate more logical, consistent, and efficient administration of shoreland management controls, local governments are encouraged to enter into joint powers agreements with adjacent or otherwise similarly situated local units of government to jointly administer shoreland management controls pursuant to the procedures and authority of Minnesota Statutes, sections 394.32 and 471.59.

**Subp. 6. Notification procedures.**

A. Copies of all notices of any public hearings to consider variances, amendments, or conditional uses under local shoreland management controls must be sent to the commissioner or the commissioner's designated representative and postmarked at least ten days before the hearings. Notices of hearings to consider proposed plats must include copies of the plats.

B. A copy of approved amendments and plats, and final decisions granting variances or conditional uses under local shoreland management controls must be sent to the commissioner or the commissioner's designated representative and postmarked within ten days of final action.

C. Townships with shoreland management controls adopted under subpart 4a must also provide these materials to the zoning official of the county.

**Statutory Authority:** *MS s 105.485*

**History:** *13 SR 3029*

## 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.

**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



# MINNESOTA RULES 1993

429

## SHORELAND AND FLOODPLAIN MANAGEMENT 6120.5000

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 human-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*

**History:** *17 SR 1279*

#### 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 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 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 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*

**History:** *17 SR 1279*

#### 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.

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 levels.** 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.

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 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.

(2) Emergency plans and procedures established consistent with item B, sub-item (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:

(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 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*