### ARTICLE 11--SHORELAND DISTRICT STANDARDS

### 11.1 PURPOSE AND INTENT

The purpose of this district is to preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, protect drinking water sources, and provide for the wise use of water and related land resources. The primary use within this district is seasonal and year-round single family residential. Compatible commercial or water-oriented commercial uses may be allowed as permitted or conditional uses.

### 11.2 PUBLIC WATERS CLASSIFICATION SYSTEM

- **A.** Lake classification system. The Public Waters lakes of Crow Wing County, Minnesota are hereby classified into the following categories:
- 1. Natural environment lakes (NE). 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 and unsuitable soils. These lakes, particularly in rural areas, usually do not have much existing development or recreational use.
- 2. Natural environment special shallow lakes (NE-SS). This is a subclass of the natural environment lake class. These lakes are generally large, shallow lakes with critical wildlife habitat and a history of highly valued traditional outdoor recreational uses. The lakes usually do not have much existing development.
- **3.** Recreational development lakes (RD). These 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. At the time of the original classification, they were characterized by moderate levels of recreational use and existing development consisting mainly of seasonal and year-round residences and recreationally oriented commercial uses.
- **4. General development lakes (GD).** These lakes are generally large, deep lakes or lakes of varying sizes and depths with high levels and mixes of existing development at the time of the original classification. These lakes often are extensively used for recreation.
- **B. River classification system.** The Public Waters rivers of Crow Wing County, Minnesota are hereby classified into the following categories:
  - 1. **Cold Water Rivers (CWR).** This river class included trout streams designated in Crow Wing County under Minnesota Rules, Chapter 6264.0050.
  - 2. **Natural Environment Rivers (NER)**. This river class includes previously classified remote, forested, transitional, and tributary river segments that flow into natural environment lakes. The types and intensities of recreational uses within this class vary widely.
  - 3. **General Development Rivers (GDR).** This river class includes previously classified agricultural and urban river segments and those tributary river segments that do not flow into natural environment lakes. This class has a wide variety of existing land and recreational use characteristics.

**C.** A complete list of Crow Wing County protected waters is included in Appendix A of this ordinance.

# 11.3 LOT AREA, BUILDABLE AREA, AND WIDTH STANDARDS

After the effective date of this ordinance, all new lots in a Shoreland District created by plat, minor subdivision, or metes and bounds as described in Article 33 of this Ordinance, shall meet the minimum lot area, buildable area, and lot width requirements in the tables below. Only land above the ordinary high water level of public waters can be used to meet lot area and buildable area standards.

TABLE 11.1 Lot Area, Buildable Area, and Lot Width Requirements for the Shoreland District

SINGLE FAMILY RESIDENTIAL DUPLEX RESIDENTIAL LOT

Lake Classification	Min. Lot Area (ft²)	Min. Lot Width	Min. Buildable Area (ft²)	Min. Lot Area (ft²)	Min. Lot Width	Min. Buildable Area (ft²)
General Development -Riparian	30,000	100	12,000	40,000	200	27,000
General Development -Non-Riparian	40,000	150	20,000	60,000	265	40,000
Recreational Development- Riparian	40,000	150	16,000	60,000	225	30,000
Recreational Development-Non-Riparian	60,000	150	25,000	80,000	265	40,000
Natural Environment-Riparian	80,000	200	40,000	120,000	400	60,000
Natural Environment-Non-Riparian	120,000	200	60,000	160,000	400	80,000
Natural Environment—Special Shallow Riparian	100,000	250	50,000	*	*	*
Natural Environment—Special Shallow Non-riparian	140,000	265	70,000	*	*	*
Sensitive Shoreland Districts-Riparian- all lake classes	80,000	200	40,000	120,000	300	60,000
Sensitive Shoreland Districts-Non- riparianall lake classes	80,000	200	40,000	160,000	400	80,000

<sup>\*--</sup> Duplex lots are not allowed within natural environment - special shallow lake shorelands.

SINGLE FAMILY RESIDENTIAL DUPLEX RESIDENTIAL

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	Min.	Min.	Min.	Min.	Min.	Min. Buildable
River Classification	Lot	Lot	Buildable	Lot	Lot	Area (ft²)**
	Area (ft <sup>2</sup> )	Width	Area (ft <sup>2</sup> )	Area (ft²)	Width	
Cold Water-Riparian	90,000	300	45,000	135,000	450	65,000
Cold Water -Non-Riparian	120,000	300	60,000	175,000	450	80,000
Natural Environment -Riparian	80,000	200	40,000	120,000	400	60,000
Natural Environment -Non-Riparian	120,000	200	60,000	160,000	400	80,000
General Development -Riparian	30,000	100	12,000	40,000	200	20,000
General Development -Non-Riparian	40,000	150	20,000	60,000	265	30,000

# 11.4 SETBACKS AND PLACEMENT OF STRUCTURES

- A. Structures shall meet all required setbacks.
- **B.** Measurement. All setbacks shall be measured as the shortest horizontal distance between the structure and the feature from which the setback is required. All setbacks shall be measured to the vertical side of the structure. No part of the structure, such as eaves, can overhang or reduce such setback by more than three feet.
- C. Lake and River Setbacks

TABLE 11.2 Structure and SSTS setbacks from Public Waters in feet from the OHWL

Class of Public Water	Standard Setback	Conservation Development Structure Setback	Conservation Development Density Incentive Structure Setback	SSTS Setback
Lakes:				
General Development (GD)	75	120	150	75
Recreational Development (RD)	100 100	160	200	
Natural Environment (NE)	150 150	200	250	
Natural Environment-Special Shallow (NE-SS) Sensitive Shoreland Districts (SS)	180	200	250	150
All Lake Classes	150	200	250	150
Rivers:				
Cold Water	200	200	250	150
Natural Environment	150	200	250	150
General Development	100	200	200	100

**D. Additional structure setbacks**. The following additional structure setbacks apply, regardless of public water classification:

**TABLE 11.3 Additional Structure Setbacks** 

Setback from:	Setback (in feet)
Bluff (top, bottom, or sides)	30
Significant Cultural or Historic Site	50
Unplatted Cemetery	50
County, State, or Federal road right-of-way	35
Township road, dedicated public road, or other public roads not classified	35
Private Road or Road easement	10
Property Line	10
Publicly-owned Recreational Trail (not easements)	10
Subsurface Sewage Treatment SystemSeptic Tank (to dwelling unit)	10
Subsurface Sewage Treatment SystemDrainfield (to dwelling unit)	20
Minnesota Department of Natural Resources permitted harbors	One-half $(1/2)$ of the lake setback for
•	the respective class of public water
Wetland	15

# E. High Water Elevations

- 1. For lakes, by placing the lowest livable floor at a level at least three feet above the highest known water level or three feet above the ordinary high water level (OHWL), whichever is higher
- 2. For rivers and streams, by placing the lowest livable floor at least three feet above the flood of record, if data are available. If data are not available, by placing the lowest livable floor at least three feet above the ordinary high water level.
- 3. <u>All buildings hereafter erected in the flood plain shall not be constructed unless in compliance with Article 21 of this ordinance.</u>

#### 11.5 SHORELAND DISTRICT PERFORMANCE STANDARDS

- **A.** The following performance standards shall be required in conjunction with the issuance of any permit in the Shoreland Protection Zone:
  - 1. Analysis of existing shoreland vegetation according to the Crow Wing Shoreline Rapid Assessment Model and development of a shoreland vegetation restoration plan, if applicable, as set forth in Article 27.
  - 2. Footing placement inspection by Department staff as define in Article 46.
  - **3.** Analysis of stormwater runoff –BMP's , plan, or engineered plan according to the standards in Article 41.
  - **4.** Evidence of subsurface sewage treatment system (SSTS) compliance and assessment as provided in Article 37. 10 C and Minnesota Rules Chapter 7080.2450, Subpart 2.
  - **5.** Calculation of total impervious coverage meeting the standards set forth in Article 41.
- **B.** The following performance standards shall be required in conjunction with the issuance of any permit in the Shoreland Buffer Zone:
  - **1.** Analysis of stormwater runoff BMP's,-according to the standards in Article 41 of this ordinance.
  - **2.** Evidence of subsurface sewage treatment system (SSTS) compliance and assessment as provided in Article 37.10 C and Minnesota Rules Chapter 7080.2450 Subpart 2.
  - **3.** Calculation of total impervious coverage meeting the standards set forth in Article 41.

## 11.6 HEIGHT OF STRUCTURES

Unless otherwise specified, structures in the shoreland district shall not exceed 35 feet in height.

# **11.7 DECKS**

Construction on new decks or replacement of existing decks shall require permits and comply with the following standards:

**A.** Decks adjacent to dwellings shall meet structure setbacks in Tables 11.2 and 11.3 of this Article except as provided under Minnesota Rules Chapter 6120.3300 Subpart 3 J.

- **B.** A 4 foot walkway, for access purposes, may be added without a variance lakeward and located closer than the required structure setback from the ordinary high water level. A permit shall not be necessary for a 4 foot walkway.
- C. Deck construction shall comply with all provisions of Articles 28 and 41 of this ordinance
- **D.** Decks should be constructed as to be pervious, allowing water to reach a pervious surface below the deck. Decks not meeting this requirement shall be considered impervious surfaces.

## 11.8 PATIOS

Patios placed within the structure setback require a shoreland alteration permit.

- **A.** Patios within the structure setback shall comply with the following standards:
  - 1. Not be located in shore impact zone 1;
  - **2.** Be free standing;
  - **3.** Have no railings;
  - **4.** Be a maximum of 180 square feet in size;
  - 5. Not be more than one foot below or above natural ground level; and;
  - **6.** Construction complies with all provisions of Articles 28 and 41 of this ordinance
  - 7. The maximum impervious surface limits for the lot shall not be exceeded.
- **B.** Patios are allowed behind the structure setback without a permit provided that all setbacks are met and the property does not exceed the maximum allowable impervious surface standards.

# 11.9 STAIRWAYS, LIFTS, AND LANDINGS

Stairways, lifts and landings for public water access shall require shoreland alteration permits and comply with the following standards:

- **A.** Preferred to topographic changes. Stairways and lifts are the preferred alternative to major topographic alterations for achieving access up and down bluffs and steep slopes to shore areas.
- **B.** Maximum width. Stairways and lifts shall not exceed four feet in width on residential lots. Up to eight foot wide stairways may be permitted on water-oriented commercial lots.
- C. Construction complies with all provisions of Articles 28 and 41 of this Ordinance
- **D.** The maximum impervious surface limits for the lot shall not be exceeded.
- **E.** Landings. Landings for stairways and lifts on residential lots must not exceed 32 square feet in area and be integral to the function of the stairway and not constitute a deck. Landings for

stairways and lifts on water-oriented commercial lots must not exceed 64 square feet in area and be integral to the function of the stairway and not constitute a deck.

- **F.** Roofs. Canopies or roofs are not allowed on stairways, lifts or landings.
- **G.** Design. 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.
- **H.** Location. 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.
- **I.** Facilities such as ramps or mobility paths for handicapped access to shoreline areas may be allowed, provided that:
  - 1. The department determines that there is no other reasonable way to achieve access, and;
  - 2. The dimensional and performance standards of this section are met, and;
  - 3. The requirements of Minnesota Rules, Chapters 1307 and 134 are met.

### 11.10 GUEST COTTAGES

A guest cottage may be permitted on a residential lot in the Shoreland District provided that:

- **A.** It meets all required setbacks.
- **B.** The maximum impervious surface limits for the lot shall not be exceeded.
- **C.** The maximum building footprint does not exceed 700 square feet.
- **D.** Construction complies with all provisions of Articles 28 and 41 of this ordinance.
- **E.** It does not exceed 15 feet in building height.
- **F.** It is located or designed to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks or color, assuming summer leaf-on conditions.

## 11.11 DUPLEX DWELLINGS

A duplex dwelling may be permitted on a residential lot in the Shoreland District provided it meets the following standards:

- **A.** The lot meets the duplex lot standards in Table 11.1
- **B.** Each building shall have a conforming sewage treatment and water systems.
- **C.** Watercraft docking facilities shall be centralized in one location and serve both dwelling units in the building.
- **D.** The maximum impervious surface limits for the lot are not exceeded.
- E. Construction complies with all provisions of Articles 28 and 41 of this ordinance.

## 11.12 ACCESSORY STRUCTURES - RESIDENTIAL

**A.** The total cumulative area that all residential accessory structures may occupy on a lot and maximum building height shall be as follows:

**Table 11.4 Accessory Structure Dimensions for Riparian Lots** 

Lot Size (In acres)	Maximum Building Area**	<b>Maximum Building Height</b>
049	900 Square Feet	24 Feet
.599	1,200 Square Feet	24 Feet
1 - 1.49	1,500 Square Feet	24 Feet
1.5-1.99	1,800 Square Feet	24 Feet
2-4.99	2,400 Square Feet	24 Feet
5.0 or greater	Unlimited	24 Feet

<sup>\*\*--</sup>The maximum building area of the accessory structure may be increased by 33% if the structure is located at twice all the required minimum setback and subject to impervious coverage limits in Article 41.

**Table 11.5 Accessory Structure Dimensions for Non-Riparian Lots** 

Lot Size (In acres)	Maximum Building Area**	Maximum Building Height
049	1,200 Square Feet	30 Feet
.599	1,500 Square Feet	30 Feet
1 –1.49	1,800 Square Feet	30 Feet
1.5-1.99	2,400 Square Feet	30 Feet
2.0 or greater	Unlimited	30 Feet

<sup>\*\*--</sup>The maximum building area of the accessory structure may be increased by 33% if the structure is located at twice all the required minimum setbacks and subject to impervious coverage limits in Article 41.

- **B.** A permit shall not be required for up to two accessory structures totaling no more than 160 square feet.
- **C.** No accessory structure shall be used for human habitation.
- **D.** All setback and building height requirements shall be met.
- **E.** The maximum impervious surface limits for the lot are not exceeded
- **F.** Construction complies with all provisions of Articles 28 and 41 of this Ordinance.
- **G.** Semi-trailers, cargo containers, railroad cars, manufactured houses, or similar structures shall not be used for storage.

## 11.13 WATER-ORIENTED ACCESSORY STRUCTURES

- **A.** Water-Oriented Accessory Structures on Water-Oriented Commercial Lots. One water oriented accessory structure not meeting the structure setbacks in Table 11.2 of this ordinance may be placed with a permit on a water-oriented commercial lot provided the following standards are met:
  - 1. The structure or facility shall not exceed 15 feet in height and cannot occupy an area greater than 250 square feet;

- 2. The minimum setback of the structure or facility from the OHWL level shall be 20 feet, and/or 10 feet from a DNR permitted harbor;
- 3. The structure or facility is treated to reduce visibility as viewed from Public waters and adjacent shorelands by vegetation, topography, increased setbacks or color, assuming summer, leaf-on conditions;
- **4.** The structure shall not be used for human habitation.
- **5.** The structure shall not be located within a bluff impact zone.
- **6.** Construction complies with all provisions of Articles 28 and 41 of this Ordinance.
- 7. The maximum impervious surface limits for the lot are not exceeded.
- **B.** Water-Oriented Accessory Structures on Riparian Residential Lots. One water oriented accessory structure not meeting the structure setbacks in Table 11.2 of this ordinance may be placed with a shoreland alteration permit on a riparian residential lot provided the following standards are met:
  - 1. The structure or facility must not exceed 12 feet in height and cannot occupy an area greater than 120 square feet.
  - 2. The setback of the structure or facility from the ordinary high water level must be at least 20 feet.
  - **3.** The structure 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 Department, assuming summer, leaf-on conditions
  - **4.** Construction complies with all provisions of Articles 28 and 41 of this ordinance.
  - **5.** The maximum impervious surface limits for the lot are not exceeded.
  - **6.** The structure shall not be located within a bluff impact zone.
  - 7. The structure shall not be used for human habitation.
  - **8.** The structure shall not include bathroom facilities.

## C. Boathouses

- 1. New boathouses and boat storage structures that do not meet the setback requirements in Tables 11-2 and 11-3 of this ordinance are prohibited.
- **2.** Existing boathouses and boat storage structures may be repaired or replaced pursuant to Minn. Stat. § 394.36, subd. 4.

#### 11.14 RETAINING WALLS

**A.** A retaining wall may be installed with a shoreland alteration permit in shore impact zones 1 or 2 provided the following standards are met:

- 1. The Department determines that there is no other alternative to control erosion.
- **2.** No tier of the retaining wall shall exceed four feet in height without a plan signed by a Minnesota-licensed professional engineer.
- 3. Construction complies with all provisions of Articles 28 and 41 of this ordinance.
- **B.** A retaining wall may be installed without a permit behind the structure setback provided that:
  - 1. It do not significantly alter the character of the property or does not create runoff or erosion problems..
  - 2. Construction complies with all provisions of Articles 28 and 41 of this Ordinance.

#### 11.15 BOARDWALKS

- **A.** A boardwalk used for lake access over wetlands within the structure setback area shall require a shoreland alteration permit and meet the following standards:
  - 1. Shall not exceed six feet in width on residential properties or eight feet for water-oriented commercial properties;
  - 2. May be placed on temporary or permanent supports;
  - **3.** May have railings attached;
  - **4.** Shall meet property line setbacks.

### 11.16 WATERCRAFT ACCESS RAMPS

Watercraft access ramps, approach roads, and access related parking areas require shoreland alteration permits and shall comply with the following standards:

- **A** Are permitted for private residential lots only on lakes without Public Accesses.
- **B** May be permitted for Conservation Development lake access, if authorized, or water-oriented commercial uses on any lake classified General Development or Recreational Development.
- C Shall not include asphalt in the shore impact zone 1.
- **D** Shall not exceed 15 feet in width from the lake to the structure setback line.
- **E** Shall not include filling of wetlands.
- **F** Construction complies with all provisions of Articles 28 and 41 of this Ordinance.
- **G** The maximum impervious surface limits for the lot are not exceeded.

# 11.17 CONTROLLED AND ALTERATIVE ACCESS LOTS

**A.** Controlled access lots, or any lot, tract, or parcel of land, however designated or described, intended to be used to provide accesses to public waters for owners of non-riparian lots within new minor subdivisions or plats, are prohibited.

**B.** Alternative access lots, or parcels of land that provide access to public waters for owners of riparian lots within subdivisions, shall be used where the Planning Commission/Board of Adjustment determines that direct riparian access is not feasible due to the presence of protected vegetation, wetlands, or other critical fish or wildlife habitat.

### 11.18 USE OF FERTILIZER

The Use of fertilizer, pesticides, or animal wastes in shoreland districts must conform to Minnesota Statutes, chapters 18B, 18C, 18D, and 103H, and be consistent with the latest best management practices developed for such use by the Minnesota Department of Agriculture and Pollution Control Agency.

# 11.19 REQUIREMENTS FOR STRUCTURES IN FLOODPLAINS

Structures in Shoreland Districts that are also located within floodplains shall meet the standards in Article 21 of this ordinance.