

Blue Model Ord.  
Green Exist.

DIVISION 1 STATUTORY AUTHORIZATION, FINDINGS OF FACT AND PURPOSE

1.1  
78-1101

**78-1101 Statutory Authorization:** The legislature of the State of Minnesota has, in Minnesota Statutes Chapter 103F and Chapter 462 delegated the responsibility to local government units to adopt regulations designed to minimize flood losses. Therefore, the City Council of Orono, Minnesota, does ordain as follows.

**78-1102 Purpose:**

1.21  
1102(a)

(1) This ordinance regulates development in the flood hazard areas areas are subject to periodic inundation, which may result in loss hazards, disruption of commerce and governmental services, ex protection and relief, and impairment of the tax base. It is the p public health, safety, and general welfare by minimizing these l

1.22  
1102(c)

(2) National Flood Insurance Program Compliance. This ordinance i regulations of the National Flood Insurance Program codified a 78, as amended, so as to maintain the community's eligibility ir

1.23  
1103

(3) This ordinance is also intended to preserve the natural character floodplains in order to moderate flood and stormwater impact erosion, protect aquatic and riparian habitat, provide recreatio and enhance community and economic development.

DNR  
analysis

DIVISION 2.0 GENERAL PROVISIONS

2.1

**78-1103 How to Use This Ordinance:** This ordinance adopts the floodplain maps applicable to the city and includes three floodplain districts: Floodway, Flood Fringe, and General Floodplain.

2.11

(1) Where Floodway and Flood Fringe districts are delineated on the floodplain maps, the standards in Divisions 4 or 5 will apply, depending on the location of a property.

2.12

(2) Locations where Floodway and Flood Fringe districts are not delineated on the floodplain maps are considered to fall within the General Floodplain district. Within the General Floodplain district, the Floodway District standards in Division 4 apply unless the floodway boundary is determined, according to the process outlined in Division 6. Once the floodway boundary is determined, the Flood Fringe District standards in Division 5 may apply outside the floodway.

78-1115

(3) The use shall be permitted within the floodway district to the extent that they are not prohibited by any other provision of this Code and provided all permits or authorizations are received as may be required by other provisions of this Code or regulation of other governmental agencies having jurisdiction, including without limitation, the Minnesota Department of Natural Resources, the Minnehaha Creek Watershed District, and the Lake Minnetonka Conservation District.

2.2  
1104

**78-1104 Lands to Which Ordinance Applies:** This ordinance applies to all lands within the jurisdiction of Orono shown on the Official Zoning Map and/or the attachments to the map as being located within the boundaries of the Floodway, Flood Fringe, or General Floodplain Districts.

2.21

(1) The Floodway, Flood Fringe and General Floodplain Districts are overlay districts that are superimposed on all existing zoning districts. The standards imposed in the overlay districts are in addition to any other requirements in this ordinance. In case of a conflict, the more restrictive standards will apply.

2.3

**78-1105 Incorporation of Maps by Reference:** The following maps together with all attached material are hereby adopted by reference and declared to be a part of the Official Zoning Map and this ordinance. The attached material includes the Flood Insurance Study for Hennepin County, Minnesota, and Incorporated Areas, dated

November 4, 2016 and the Flood Insurance Rate Map panels enumerated below, dated November 4, 2016, all prepared by the Federal Emergency Management Agency. These materials are on file in the City Clerk's office.

Effective Flood Insurance Rate Map panels:

10.1

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27053C0144F ✓  
27053C0165F ✓  
27053C0284F ✓  
27053C0285F ✓

27053C0292F ✓  
27053C0301F ✓  
27053C0302F ✓  
27053C0303F ✓

27053C0304F ✓  
27053C0306F ✓  
27053C0307F ✓  
27053C0308F ✓

27053C0311F ✓  
27053C0312F ✓  
27053C0316F ✓

1

2 **2.4** 78-1106 **Regulatory Flood Protection Elevation:** The regulatory flood protection elevation (RFPE) is an elevation no  
3 lower than one foot above the elevation of the regional flood plus any increases in flood elevation caused by  
4 encroachments on the floodplain that result from designation of a floodway.

5 **2.5** 78-1107 **Interpretation:** The boundaries of the zoning districts are determined by scaling distances on the Flood  
6 Insurance Rate Map.  
*1107*  
*To change*  
**2.51**

7 (1) Where a conflict exists between the floodplain limits illustrated on the official zoning map and actual field  
8 conditions, the flood elevations shall be the governing factor. The City Administrator must interpret the  
9 boundary location based on the ground elevations that existed on the site on the date of the first National  
10 Flood Insurance Program map showing the area within the regulatory floodplain, and other available  
11 technical data.

12 **2.52** (2) Persons contesting the location of the district boundaries will be given a reasonable opportunity to present  
13 their appeal to the Planning Commission and to submit technical evidence.

14 **2.6** 78-1108 **Abrogation and Greater Restrictions:** It is not intended by this ordinance to repeal, abrogate, or impair  
15 any existing easements, covenants, or other private agreements. However, where this ordinance imposes greater  
16 restrictions, the provisions of this ordinance prevail. All other ordinances inconsistent with this ordinance are  
17 hereby repealed to the extent of the inconsistency only.  
*1108*

18 **2.7** 78-1109 **Warning and Disclaimer of Liability:** This ordinance does not imply that areas outside the floodplain  
19 districts or land uses permitted within such districts will be free from flooding or flood damages. This ordinance  
20 does not create liability on the part of the City of Orono or its officers or employees for any flood damages that  
21 result from reliance on this ordinance or any administrative decision lawfully made hereunder.  
*1109*

22 **2.8** 78-1110 **Severability:** If any Division, clause, provision, or portion of this ordinance is adjudged unconstitutional or  
23 invalid by a court of law, the remainder of this ordinance shall not be affected and shall remain in full force.  
*1110*

24 **2.9** 78-1111 **Definitions:** Unless specifically defined below, words or phrases used in this ordinance must be  
25 interpreted according to common usage and so as to give this ordinance its' most reasonable application.  
*1111*

26 Accessory Use or Structure – a use or structure on the same lot with, and of a nature customarily incidental and  
27 subordinate to, the principal use or structure.

28 Base Flood Elevation – The elevation of the “regional flood.” The term “base flood elevation” is used in the flood  
29 insurance survey.

30 Basement – any area of a structure, including crawl spaces, having its floor or base subgrade (below ground level)  
31 on all four sides, regardless of the depth of excavation below ground level.

32 Conditional Use – a specific type of structure or land use listed in the official control that may be allowed but only  
33 after an in-depth review procedure and with appropriate conditions or restrictions as provided in the official zoning  
34 controls or building codes and upon a finding that:

35 (a) Certain conditions as detailed in the zoning ordinance exist.

36 (b) The structure and/or land use conform to the comprehensive land use plan if one exists and are  
37 compatible with the existing neighborhood.

38 Critical Facilities – facilities necessary to a community’s public health and safety, those that store or produce highly  
39 volatile, toxic or water-reactive materials, and those that house occupants that may be insufficiently mobile to  
40 avoid loss of life or injury. Examples of critical facilities include hospitals, correctional facilities, schools, daycare

1 facilities, nursing homes, fire and police stations, wastewater treatment facilities, public electric utilities, water  
2 plants, fuel storage facilities, and waste handling and storage facilities.

3 Development – any manmade change to improved or unimproved real estate, including buildings or other  
4 structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or  
5 materials.

6 Equal Degree of Encroachment – a method of determining the location of floodway boundaries so that floodplain  
7 lands on both sides of a stream are capable of conveying a proportionate share of flood flows.

8 Farm Fence – A fence as defined by Minn. Statutes Section 344.02, Subd. 1(a)-(d). An open type fence of posts and  
9 wire is not considered to be a structure under this ordinance. Fences that have the potential to obstruct flood flows,  
10 such as chain link fences and rigid walls, are regulated as structures under this ordinance.

11 Flood – a temporary increase in the flow or stage of a stream or in the stage of a wetland or lake that results in the  
12 inundation of normally dry areas.

13 Flood Frequency – the frequency for which it is expected that a specific flood stage or discharge may be equaled or  
14 exceeded.

15 Flood Fringe – the portion of the Special Flood Hazard Area (one percent annual chance flood) located outside of  
16 the floodway. Flood fringe is synonymous with the term “floodway fringe” used in the Flood Insurance Study for  
17 Hennepin County, Minnesota.

18 Flood Prone Area – any land susceptible to being inundated by water from any source (see “Flood”).

19 Floodplain – the beds proper and the areas adjoining a wetland, lake or watercourse which have been or hereafter  
20 may be covered by the regional flood.

21 Floodproofing – a combination of structural provisions, changes, or adjustments to properties and structures  
22 subject to flooding, primarily for the reduction or elimination of flood damages.

23 Floodway – the bed of a wetland or lake and the channel of a watercourse and those portions of the adjoining  
24 floodplain which are reasonably required to carry or store the regional flood discharge.

25 *Lake Minnetonka* means the naturally occurring lake shown on all the official maps referenced in this chapter,  
26 including all bays, channels, inlets, lagoons, marshland and other water-connected portions, whether  
27 naturally occurring or artificially created.

28 a. Defined ordinary high water elevation, 929 4 feet MSL.

29 b. Defined floodplain boundary, 100-year flood, 931 5 feet MSL as established by the Minnehaha  
30 Creek Watershed District (MCWD).

31 Lowest Floor – the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant  
32 enclosure, used solely for parking of vehicles, building access, or storage in an area other than a basement area, is  
33 not considered a building’s lowest floor; provided, that such enclosure is not built so as to render the structure in  
34 violation of the applicable non-elevation design requirements of 44 Code of Federal Regulations, Part 60.3.

35 Manufactured Home – a structure, transportable in one or more sections, which is built on a permanent chassis and  
36 is designed for use with or without a permanent foundation when attached to the required utilities. The term  
37 “manufactured home” does not include the term “recreational vehicle.”

38 New Construction - Structures, including additions and improvements, and placement of manufactured homes, for  
39 which the start of construction commenced on or after the effective date of this ordinance.

40 Obstruction – any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel  
41 modification, culvert, building, wire, fence, stockpile, refuse, fill, structure, or matter in, along, across, or projecting  
42 into any channel, watercourse, or regulatory floodplain which may impede, retard, or change the direction of the  
43 flow of water, either in itself or by catching or collecting debris carried by such water.

44 One Hundred Year Floodplain – lands inundated by the “Regional Flood” (see definition).

- 1 Principal Use or Structure – all uses or structures that are not accessory uses or structures.
- 2 Reach – a hydraulic engineering term to describe a longitudinal segment of a stream or river influenced by a natural  
3 or man-made obstruction. In an urban area, the segment of a stream or river between two consecutive bridge  
4 crossings would most typically constitute a reach.
- 5 Recreational Vehicle – a vehicle that is built on a single chassis, is 400 square feet or less when measured at the  
6 largest horizontal projection, is designed to be self-propelled or permanently towable by a light duty truck, and is  
7 designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping,  
8 travel, or seasonal use. For the purposes of this ordinance, the term recreational vehicle is synonymous with the  
9 term “travel trailer/travel vehicle.”
- 10 Regional Flood – a flood which is representative of large floods known to have occurred generally in Minnesota and  
11 reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 1%  
12 chance or 100-year recurrence interval. Regional flood is synonymous with the term “base flood” used in a flood  
13 insurance study.
- 14 Regulatory Flood Protection Elevation (RFPE) - an elevation not less than one foot above the elevation of the  
15 regional flood plus any increases in flood elevation caused by encroachments on the floodplain that result from  
16 designation of a floodway.
- 17 a. The regulatory flood protection elevation within the floodway and flood fringe districts,  
18 except for Lake Minnetonka, shall be established by adding 1.0 foot to the base flood water  
19 surface elevations within floodway listed in the floodway data table contained in the flood  
20 insurance study. Regulatory flood protection elevations between cross sections shall be  
21 interpolated.
- 22 b. The regulatory flood protection elevation for Lake Minnetonka shall be 932.5 MSL.
- 23 c. The regulatory flood protection elevation within the general floodplain district shall be  
24 calculated by a qualified registered professional engineer in accordance with procedures set forth  
25 in this article.
- 26 Repetitive Loss: Flood related damages sustained by a structure on two separate occasions during a ten year period  
27 for which the cost of repairs at the time of each such flood event on the average equals or exceeds 25% of the  
28 market value of the structure before the damage occurred.
- 29 Special Flood Hazard Area – a term used for flood insurance purposes synonymous with “One Hundred Year  
30 Floodplain.”
- 31 Start of Construction – includes substantial improvement, and means the actual start of construction, repair,  
32 reconstruction, rehabilitation, addition, placement or other improvement that occurred before the permit’s  
33 expiration date. The actual start is either the first placement of permanent construction of a structure on a site,  
34 such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond  
35 the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does  
36 not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets  
37 and/or walkways; nor does it include excavation for a basement, footings, piers, foundations, or the erection of  
38 temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or  
39 sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual  
40 start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building,  
41 whether or not that alteration affects the external dimensions of the building.
- 42 Structure - anything constructed or erected on the ground or attached to the ground or on-site utilities, including,  
43 but not limited to, buildings, factories, sheds, detached garages, cabins, manufactured homes, recreational vehicles  
44 not meeting the exemption criteria specified in Section 78-1137 (2) of this ordinance and other similar items.

1 Substantial Damage - means damage of any origin sustained by a structure where the cost of restoring the structure  
2 to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the  
3 damage occurred.

4 Substantial Improvement - within any consecutive 365-day period, any reconstruction, rehabilitation (including  
5 normal maintenance and repair), repair after damage, addition, or other improvement of a structure, the cost of  
6 which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the  
7 improvement. This term includes structures that have incurred "substantial damage," regardless of the actual repair  
8 work performed. The term does not, however, include either:

9 (a) Any project for improvement of a structure to correct existing violations of state or local health,  
10 sanitary, or safety code specifications which have been identified by the local code enforcement official  
11 and which are the minimum necessary to assure safe living conditions.

12 (b) Any alteration of a "historic structure," provided that the alteration will not preclude the  
13 structure's continued designation as a "historic structure." For the purpose of this ordinance, "historic  
14 structure" is as defined in 44 Code of Federal Regulations, Part 59.1.

15 **2.10 78-1112 Annexations:** The Flood Insurance Rate Map panels adopted by reference into Section 78-1105 above may  
16 include floodplain areas that lie outside of the corporate boundaries of the City of Orono at the time of adoption of  
17 this ordinance. If any of these floodplain land areas are annexed into the City of Orono after the date of adoption  
18 of this ordinance, the newly annexed floodplain lands will be subject to the provisions of this ordinance  
19 immediately upon the date of annexation.

20 **2.11 78-1113 Detachments.** The Flood Insurance Rate Map panels adopted by reference into Section 78-1105 above will  
21 include floodplain areas that lie inside the corporate boundaries of municipalities at the time of adoption of this  
22 ordinance. If any of these floodplain land areas are detached from a municipality and come under the jurisdiction  
23 of Orono after the date of adoption of this ordinance, the newly detached floodplain lands will be subject to the  
24 provisions of this ordinance immediately upon the date of detachment.

### 25 **DIVISION 3 ESTABLISHMENT OF ZONING DISTRICTS**

#### 26 **3.1 78-1114 Districts:**

27 **1112 3.11** (1) Floodway District. The Floodway District includes those areas within Zones AE that have a floodway  
28 delineated as shown on the Flood Insurance Rate Map adopted in Section 78-1105, as well as portions of  
29 other lakes, wetlands, and basins within Zones AE (that do not have a floodway delineated) that are  
30 located at or below the ordinary high water level as defined in Minnesota Statutes, Section 103G.005,  
31 subdivision 14.

32 **3.12 1112 b** (2) Flood Fringe District. The Flood Fringe District includes areas within Zones AE that have a floodway  
33 delineated on the Flood Insurance Rate Map adopted in Section 78-1105, but are located outside of the  
34 floodway. For other lakes, wetlands and other basins within Zones AE that do not have a floodway  
35 delineated, the Flood Fringe District also includes those areas below the 1% annual chance (100-year) flood  
36 elevation but above the ordinary high water level as defined in Minnesota Statutes, Section 103G.005,  
37 subdivision 14.

38 **3.13 1112 c** (3) General Floodplain District. The General Floodplain District includes those areas within Zones A and AE  
39 that do not have a delineated floodway as shown on the Flood Insurance Rate Map adopted in Section 78-  
40 1105.

41 **3.2 78-1115 Applicability:** Within the floodplain districts established in this ordinance, the use, size, type and location  
42 of development must comply with the terms of this ordinance and other applicable regulations. In no cases shall  
43 floodplain development adversely affect the efficiency or unduly restrict the capacity of the channels or floodways  
44 of any tributaries to the main stream, drainage ditches, or any other drainage facilities or systems. All uses not  
45 listed as permitted uses or conditional uses in Divisions 4, 5 and 6 are prohibited. In addition, critical facilities, as  
46 defined in Section 78-1111, are prohibited in all floodplain districts.

1 **DIVISION 4 FLOODWAY DISTRICT (FW)**

2 **4.1 78-1116** **Permitted Uses:** The following uses, subject to the standards set forth in Section 78-1117, are permitted  
3 **1114** uses if otherwise allowed in the underlying zoning district or any applicable overlay district:

- 4 **4.11 a** (1) General farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod  
5 farming, and wild crop harvesting.
- 6 **4.12** (2) Industrial-commercial loading areas, parking areas, and airport landing strips.
- 7 **4.13 b** (3) Open space uses, including but not limited to private and public golf courses, tennis courts, driving ranges,  
8 archery ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature  
9 preserves, game farms, fish hatcheries, shooting preserves, hunting and fishing areas, and single or  
10 multiple purpose recreational trails.
- 11 **4.14 c** (4) Residential lawns, gardens, parking areas, and play areas.
- 12 **4.15** (5) Railroads, streets, bridges, utility transmission lines and pipelines, provided that the Department of Natural  
13 Resources' Area Hydrologist is notified at least ten days prior to issuance of any permit.

14 **4.2 78-1117** **Standards for Floodway Permitted Uses:**

- 15 **4.21 a** (1) The use must have a low flood damage potential.
- 16 **4.22 c** (2) The use must not obstruct flood flows or cause any increase in flood elevations and must not involve  
17 structures, obstructions, or storage of materials or equipment.
- 18 **4.23** (3) Any facility that will be used by employees or the general public must be designed with a flood warning  
19 system that provides adequate time for evacuation if the area is inundated to a depth and velocity such  
20 that the depth (in feet) multiplied by the velocity (in feet per second) would exceed a product of four upon  
21 occurrence of the regional (1% chance) flood.

22 **4.3 78-1118** **Conditional Uses:** The following uses may be allowed as conditional uses following the standards and  
23 **1116** procedures set forth in Section 78-1148 of this ordinance and further subject to the standards set forth in Section  
24 78-1119, if otherwise allowed in the underlying zoning district or any applicable overlay district.

- 25 **4.31** (1) Structures accessory to the uses listed in 78-1116 (1)- (5) above and the uses listed below.
- 26 **4.32 1** (2) Extraction and storage of sand, gravel, and other materials.
- 27 **4.33 2** (3) Marinas, boat rentals, docks, piers, wharves, and water control structures.
- 28 **4.34 4** (4) Storage yards for equipment, machinery, or materials.
- 29 **4.35 5** (5) Placement of fill or construction of fences that obstruct flood flows. Farm fences, as defined in section 78-  
30 1111, are permitted uses.
- 31 **4.36** (6) Travel-ready recreational vehicles meeting the exception standards in section 78-1144.
- 32 **4.37 6** (7) Levees or dikes intended to protect agricultural crops for a frequency flood event equal to or less than the  
33 10-year frequency flood event.
- 34 **7** (8) All forms of shoreline protection, including wood, metal, mortared stone or concrete seawalls.

35 **4.4 78-1119** **Standards for Floodway Conditional Uses:**

- 36 **4.41 a** (1) All Uses. A conditional use must not cause any increase in the stage of the 1% chance or regional flood or  
37 cause an increase in flood damages in the reach or reaches affected.
- 38 **4.42** (2) Fill; Storage of Materials and Equipment:
- 39 **4.42 a** (a) The storage or processing of materials that are, in time of flooding, flammable, explosive, or potentially  
40 injurious to human, animal, or plant life is prohibited.

- 1 4.42b (b) Fill, dredge spoil, and other similar materials deposited or stored in the floodplain must be protected
- 2 1117 d 1 from erosion by vegetative cover, mulching, riprap or other acceptable method. Permanent sand and
- 3 gravel operations and similar uses must be covered by a long-term site development plan.
- 4 4.42c (c) Temporary placement of fill, other materials, or equipment which would cause an increase to the stage
- 5 1117 d 3 of the 1% percent chance or regional flood may only be allowed if the City Council has approved a plan
- 6 that assures removal of the materials from the floodway based upon the flood warning time available.
- 7 4.43 (3) Accessory Structures. Accessory structures, as identified in Section 78-1118 (1), may be permitted,
- 8 provided that:
- 9 e.1 (a) structures are not intended for human habitation;
- 10 (b) structures will have a low flood damage potential;
- 11 (c) structures will be constructed and placed so as to offer a minimal obstruction to the flow of flood waters;
- 12 (d) Service utilities, such as electrical and heating equipment, within these structures must be elevated to
- 13 or above the regulatory flood protection elevation or properly floodproofed;
- 14 3 (e) Structures must be elevated on fill or structurally dry floodproofed in accordance with the FP1 or FP2
- 15 floodproofing classifications in the State Building Code. All floodproofed structures must be adequately
- 16 anchored to prevent flotation, collapse or lateral movement and designed to equalize hydrostatic flood
- 17 forces on exterior walls.
- 18 3 (f) As an alternative, an accessory structure may be internally/wet floodproofed to the FP3 or FP4
- 19 floodproofing classifications in the State Building Code, provided the accessory structure constitutes a
- 20 minimal investment and does not exceed 576 square feet in size. Designs for meeting this requirement
- 21 must either be certified by a registered professional engineer or meet or exceed the following criteria:
- 22 3 c (1) To allow for the equalization of hydrostatic pressure, there must be a minimum of two "automatic"
- 23 openings in the outside walls of the structure, with a total net area of not less than one square inch
- 24 for every square foot of enclosed area subject to flooding; and
- 25 3 c (2) There must be openings on at least two sides of the structure and the bottom of all openings must
- 26 be no higher than one foot above the lowest adjacent grade to the structure. Using human
- 27 intervention to open a garage door prior to flooding will not satisfy this requirement for automatic
- 28 openings.
- 29 4.44 (4) Structural works for flood control that will change the course, current or cross section of protected
- 30 wetlands or public waters are subject to the provisions of Minnesota Statutes, Section 103G.245.
- 31 4.45 (5) A levee, dike or floodwall constructed in the floodway must not cause an increase to the 1% chance or
- 32 regional flood. The technical analysis must assume equal conveyance or storage loss on both sides of a
- 33 stream.
- 34 4.46 (6) Floodway developments must not adversely affect the hydraulic capacity of the channel and adjoining
- 35 floodplain of any tributary watercourse or drainage system.

36 Section 78-1120 through 78-1123 RESERVED

37 DIVISION 5 FLOOD FRINGE DISTRICT (FF)

38 5.1 78-1124 Permitted Uses: Permitted uses are those uses of land or structures allowed in the underlying zoning

39 a district(s) that comply with the standards in Section 78-1125. If no pre-existing, underlying zoning districts exist,

40 then any residential or nonresidential structure or use of a structure or land is a permitted use provided it does not

41 constitute a public nuisance.

42 5.2 78-1125 Standards for Flood Fringe Permitted Uses:



- 1 5.21 (1) All structures, including accessory structures, must be elevated on fill so that the lowest floor, as defined, is  
2 a at or above the regulatory flood protection elevation. The finished fill elevation for structures must be no  
3 lower than one foot below the regulatory flood protection elevation and the fill must extend at the same  
4 elevation at least 15 feet beyond the outside limits of the structure. [Comment: Some of the lots adjacent  
5 to the lake are 50 feet in width or less, leaving 20 feet for a house, which often triggers a need for a  
6 variance. How can this be amended to avoid creating unnecessary processes/ burdens for our residents?]
- 7 5.22 (2) Accessory Structures. As an alternative to the fill requirements of section 78-1125 (1), structures accessory  
8 b to the uses identified in Section 78-1124 may be permitted to be internally/wet floodproofed to the FP3 or  
9 FP4 floodproofing classifications in the State Building Code, provided that:
- 10 (a) the accessory structure constitutes a minimal investment, does not exceed 576 square feet in size, and  
11 is only used for parking and storage.
- 12 (b) All portions of floodproofed accessory structures below the Regulatory Flood Protection Elevation must  
13 1121 a be: (i) adequately anchored to prevent flotation, collapse or lateral movement and designed to equalize  
14 hydrostatic flood forces on exterior walls, (ii) be constructed with materials resistant to flood damage,  
15 and (iii) must have all service utilities be water-tight or elevated to above the regulatory flood  
16 protection elevation
- 17 (c) Designs for meeting this requirement must either be certified by a registered professional engineer or  
18 78-1121 b meet or exceed the following criteria:
- 19 (1) To allow for the equalization of hydrostatic pressure, there must be a minimum of two "automatic"  
20 openings in the outside walls of the structure, with a total net area of not less than one square inch  
21 for every square foot of enclosed area subject to flooding; and
- 22 (2) There must be openings on at least two sides of the structure and the bottom of all openings must  
23 be no higher than one foot above the lowest adjacent grade to the structure. Using human  
24 intervention to open a garage door prior to flooding will not satisfy this requirement for automatic  
25 openings.
- 26 5.23 (3) The cumulative placement of fill or similar material on a parcel must not exceed 1,000 cubic yards, unless  
27 1119 c the fill is specifically intended to elevate a structure in accordance with Section 78-1125 (1) of this  
28 ordinance, or if allowed as a conditional use under Section 78-1126 (3) below.
- 29 5.24 (4) The storage of any materials or equipment must be elevated on fill to the regulatory flood protection  
30 1119 d elevation.
- 31 5.25 (5) All service utilities, including ductwork, must be elevated or water-tight to prevent infiltration of  
32 1121 floodwaters.
- 33 5.26 (6) The storage or processing of materials that are, in time of flooding, flammable, explosive, or potentially  
34 1121(5) injurious to human, animal, or plant life is prohibited.
- 35 5.27 (7) All fill must be properly compacted and the slopes must be properly protected by the use of riprap,  
36 vegetative cover or other acceptable method.
- 37 5.28 (8) All new principal structures must have vehicular access at or above an elevation not more than two feet  
38 1122 below the regulatory flood protection elevation, or must have a flood warning /emergency evacuation plan  
39 acceptable to the City of Orono.
- 40 5.29 (9) Accessory uses such as yards, railroad tracks, and parking lots may be at an elevation lower than the  
41 regulatory flood protection elevation. However, any facilities used by employees or the general public must  
42 1122 b be designed with a flood warning system that provides adequate time for evacuation if the area is  
43 inundated to a depth and velocity such that the depth (in feet) multiplied by the velocity (in feet per  
44 second) would exceed a product of four upon occurrence of the regional (1% chance) flood.

- 1 5.30 (10) Interference with normal manufacturing/industrial plant operations must be minimized, especially along  
2 1122 (C) streams having protracted flood durations. In considering permit applications, due consideration must be  
3 given to the needs of industries with operations that require a floodplain location.
- 4 5.31 (11) Manufactured homes and recreational vehicles must meet the standards of Division 9 of this ordinance.  
5 1122 (G)  
6 5.3 78-1126 **Conditional Uses:** The following uses and activities may be allowed as conditional uses, if allowed in the  
7 1120 underlying zoning district(s) or any applicable overlay district, following the procedures in Section 78-1148 of this  
8 ordinance.
- 8 5.31 (1) Any structure that is not elevated on fill or floodproofed in accordance with Sections 78-1125 (1) and (2) of  
9 1120 this ordinance.
- 10 5.32 (2) Storage of any material or equipment below the regulatory flood protection elevation.
- 11 5.33 (3) The cumulative placement of more than 1,000 cubic yards of fill when the fill is not being used to elevate a  
12 1121 (4) structure in accordance with Section 78-1125 (1) of this ordinance.
- 13 5.34 (4) The use of methods to elevate structures above the regulatory flood protection elevation, including stilts,  
14 1121 (1) pilings, parallel walls, or above-grade, enclosed areas such as crawl spaces or tuck under garages, shall  
15 meet the standards in Section 78-1127 (6).
- 16 5.4 78-1127 **Standards for Flood Fringe Conditional Uses:**
- 17 5.41 (1) The standards listed in Sections 78-1125 (4) through (10) to all conditional uses.
- 18 5.42 (2) Basements, as defined by Section 78-1118 of this ordinance, are subject to the following:  
19 1121 (2)
- 20 (a) Residential basement construction is not allowed below the regulatory flood protection elevation.  
21 (b) Non-residential basements may be allowed below the regulatory flood protection elevation provided  
22 the basement is structurally dry floodproofed in accordance with Section 78-1127 (3) of this ordinance.
- 22 5.43 (3) All areas of nonresidential structures, including basements, to be placed below the regulatory flood  
23 1121 (3) protection elevation must be floodproofed in accordance with the structurally dry floodproofing  
24 classifications in the State Building Code. Structurally dry floodproofing must meet the FP1 or FP2  
25 floodproofing classification in the State Building Code, which requires making the structure watertight with  
26 the walls substantially impermeable to the passage of water and with structural components capable of  
27 resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
- 28 5.44 (4) The placement of more than 1,000 cubic yards of fill or other similar material on a parcel (other than for  
29 1121 (4) the purpose of elevating a structure to the regulatory flood protection elevation) must comply with an  
30 approved erosion/sedimentation control plan.
- 31 (a) The plan must clearly specify methods to be used to stabilize the fill on site for a flood event at a  
32 minimum of the regional (1% chance) flood event.
- 33 (b) The plan must be prepared and certified by a registered professional engineer or other qualified  
34 individual acceptable to the City of Orono.
- 35 (c) The plan may incorporate alternative procedures for removal of the material from the floodplain if  
36 adequate flood warning time exists.
- 37 5.45 (5) Storage of materials and equipment below the regulatory flood protection elevation must comply with an  
38 1121 (5) approved emergency plan providing for removal of such materials within the time available after a flood  
39 warning.
- 40 5.46 (6) Alternative elevation methods other than the use of fill may be utilized to elevate a structure's lowest floor  
41 1121 (4) above the regulatory flood protection elevation. The base or floor of an enclosed area shall be considered  
42 above-grade and not a structure's basement or lowest floor if: 1) the enclosed area is above-grade on at  
43 least one side of the structure; 2) it is designed to internally flood and is constructed with flood resistant

1 materials, and 3) it is used solely for parking of vehicles, building access or storage. The above-noted  
2 alternative elevation methods are subject to the following additional standards:

3 1121 (1)a (a) Design and Certification - The structure's design and as-built condition must be certified by a registered  
4 professional engineer as being in compliance with the general design standards of the State Building  
5 Code and, specifically, that all electrical, heating, ventilation, plumbing and air conditioning equipment  
6 and other service facilities must be at or above the regulatory flood protection elevation or be designed  
7 to prevent flood water from entering or accumulating within these components during times of  
8 flooding.

9 1121 (1)b (b) Specific Standards for Above-grade, Enclosed Areas - Above-grade, fully enclosed areas such as crawl  
10 spaces or tuck under garages must be designed to internally flood and the design plans must stipulate:

11 1121 (1)b.1 (i) The minimum area of openings in the walls where internal flooding is to be used as a floodproofing  
12 technique. There shall be a minimum of two openings on at least two sides of the structure and the  
13 bottom of all openings shall be no higher than one foot above grade. The automatic openings shall  
14 have a minimum net area of not less than one square inch for every square foot of enclosed area  
15 subject to flooding unless a registered professional engineer or architect certifies that a smaller net  
16 area would suffice. The automatic openings may be equipped with screens, louvers, valves, or other  
17 coverings or devices provided that they permit the automatic entry and exit of flood waters without  
18 any form of human intervention; and

19 1121 (1)b.2 (ii) That the enclosed area will be designed of flood resistant materials in accordance with the FP3 or  
20 FP4 classifications in the State Building Code and shall be used solely for building access, parking of  
21 vehicles or storage.

## 22 ~~A~~ DIVISION 6 GENERAL FLOODPLAIN DISTRICT (GF)

### 23 6.1 78-1128 Permitted Uses:

24 1123 6.11 a (1) The uses listed in Section 78-1116 of this ordinance, Floodway District Permitted Uses, are permitted uses.

25 6.12 b (2) All other uses are subject to the floodway/flood fringe evaluation criteria specified in Section 78-1129  
26 below. Division 4 applies if the proposed use is determined to be in the Floodway District. Division 5  
27 applies if the proposed use is determined to be in the Flood Fringe District.

### 28 6.2 78-1129 Procedures for Floodway and Flood Fringe Determinations:

29 1124 6.21 a (1) Upon receipt of an application for a permit or other approval within the General Floodplain District, the  
30 City Administrator must obtain, review and reasonably utilize any regional flood elevation and floodway  
31 data available from a federal, state, or other source.

32 6.22 (2) If regional flood elevation and floodway data are not readily available, the applicant must furnish additional  
33 information, as needed, to determine the regulatory flood protection elevation and whether the proposed  
34 use would fall within the Floodway or Flood Fringe District. Information must be consistent with accepted  
35 hydrological and hydraulic engineering standards and the standards in Section 78-1129 (3) below.

36 6.23 (3) The determination of floodway and flood fringe must include the following components, as applicable:

37 (b) 1 (a) Estimate the peak discharge of the regional (1% chance) flood.

38 (b) 2 (b) Calculate the water surface profile of the regional flood based upon a hydraulic analysis of the stream,  
39 channel and overbank areas.

40 (b) 3 (c) Compute the floodway necessary to convey or store the regional flood without increasing flood stages  
41 more than one-half (0.5) foot. A lesser stage increase than 0.5 foot is required if, as a result of the stage  
42 increase, increased flood damages would result. An equal degree of encroachment on both sides of the  
43 stream within the reach must be assumed in computing floodway boundaries.

1 **b** (d)The applicant shall be responsible to submit one copy of the above information to a designated  
2 engineer or other expert person or agency for technical assistance in determining whether the  
3 proposed use is in the floodway or flood fringe district and to determine the regulatory flood  
4 protection elevation. Procedures consistent with Minnesota Regulations 1983, Parts 6120 5000—  
5 6120 6200 and 44 Code of Federal Regulations Part 65 shall be followed in this expert evaluation. The  
6 designated engineer or expert is strongly encouraged to discuss the proposed technical evaluation  
7 methodology with the respective department of natural resources' area hydrologist prior to  
8 commencing the analysis.

9 **a 1** (i) A typical valley cross-section(s) showing the channel of the stream, elevation of land areas  
10 adjoining each side of the channel, cross-sectional areas to be occupied by the proposed  
11 development, and high water information.

12 **a 2** (ii) Plan (surface view) showing elevations or contours of the ground, pertinent structure, fill,  
13 or storage elevations, the size, location, and spatial arrangement of all proposed and  
14 existing structures on the site, and the location and elevations of streets.

15 **a 3** (iii) Photographs showing existing land uses, vegetation upstream and downstream, and soil  
16 types.

17 **a 4** (iv) Profile showing the slope of the bottom of the channel or flow line of the stream for at  
18 least 500 feet in either direction from the proposed development [UB1].

19 **6.24** (4) The City Administrator will review the submitted information and assess the technical evaluation and the  
20 recommended Floodway and/or Flood Fringe District boundary. The assessment must include the  
21 cumulative effects of previous floodway encroachments. The City Administrator may seek technical  
22 assistance from a designated engineer or other expert person or agency, including the Department of  
23 Natural Resources. Based on this assessment, the City Administrator may approve or deny the application.

24 **6.25** (5) Once the Floodway and Flood Fringe District boundaries have been determined, the City Administrator  
25 must process the permit application consistent with the applicable provisions of Division 4.0 and 5.0 of this  
26 ordinance.

27 **DIVISION 7 LAND DEVELOPMENT STANDARDS**

28 **7.1 78-1130** **In General:** Recognizing that flood prone areas may exist outside of the designated floodplain districts, the  
29 requirements of this section apply to all land within the City of Orono.

30 **7.2 78-1131** **Subdivisions:** No land may be subdivided which is unsuitable for reasons of flooding or inadequate  
31 drainage, water supply or sewage treatment facilities. Manufactured home parks and recreational vehicle parks or  
32 campgrounds are considered subdivisions under this ordinance.

33 **7.21** (1) All lots within the floodplain districts must be able to contain a building site outside of the Floodway  
34 **1125** District at or above the regulatory flood protection elevation.

35 **7.22** (2) All subdivisions must have road access both to the subdivision and to the individual building sites no lower  
36 than two feet below the regulatory flood protection elevation, unless a flood warning emergency plan for  
37 the safe evacuation of all vehicles and people during the regional (1% chance) flood has been approved by  
38 the City of Orono. The plan must be prepared by a registered engineer or other qualified individual, and  
39 must demonstrate that adequate time and personnel exist to carry out the evacuation.

1 7.23 (3) For all subdivisions in the floodplain, the Floodway and Flood Fringe District boundaries, the regulatory  
2 flood protection elevation and the required elevation of all access roads must be clearly labeled on all  
3 required subdivision drawings and platting documents.

4 7.24 (4) In the General Floodplain District, applicants must provide the information required in Section 78-1129 of  
5 1126 this ordinance to determine the regional flood elevation, the Floodway and Flood Fringe District  
6 boundaries and the regulatory flood protection elevation for the subdivision site.

7 7.25 (5) If a subdivision proposal or other proposed new development is in a flood prone area, any such proposal  
8 must be reviewed to assure that:  
9 1127 (a) All such proposals are consistent with the need to minimize flood damage within the flood prone area,  
10 1128 (b) All public utilities and facilities, such as sewer, gas, electrical, and water systems are located and  
11 constructed to minimize or eliminate flood damage, and  
12 (c) Adequate drainage is provided to reduce exposure of flood hazard.

13 7.3 78-1132 **Building Sites.** If a proposed building site is in a flood prone area, all new construction and substantial  
14 improvements (including the placement of manufactured homes) must be:  
15 (1) Designed (or modified) and adequately anchored to prevent floatation, collapse, or lateral movement of the  
16 structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;  
17 (2) Constructed with materials and utility equipment resistant to flood damage;  
18 (3) Constructed by methods and practices that minimize flood damage; and  
19 (4) Constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service  
20 facilities that are designed and/or located so as to prevent water from entering or accumulating within the  
21 components during conditions of flooding.

22 Sections 78-1133 through 78-1139 Reserved

23 **DIVISION 8 PUBLIC UTILITIES, RAILROADS, ROADS, AND BRIDGES**

24 8.1 78-1140 **Public Utilities:** All public utilities and facilities such as gas, electrical, sewer, and water supply systems to  
25 1128 be located in the floodplain must be floodproofed in accordance with the State Building Code or elevated to the  
26 regulatory flood protection elevation.

27 8.2 78-1141 **Public Transportation Facilities:** Railroad tracks, roads, and bridges to be located within the floodplain  
28 1129 must comply with Divisions 4.0 and 5.0 of this ordinance. These transportation facilities must be elevated to the  
29 regulatory flood protection elevation where failure or interruption of these facilities would result in danger to the  
30 public health or safety or where such facilities are essential to the orderly functioning of the area. Minor or  
31 auxiliary roads or railroads may be constructed at a lower elevation where failure or interruption of transportation  
32 services would not endanger the public health or safety.

33 8.3 78-1142 **On-site Water Supply and Sewage Treatment Systems:** Where public utilities are not provided: 1) On-site  
34 1130 water supply systems must be designed to minimize or eliminate infiltration of flood waters into the systems and  
35 are subject to the provisions in Minnesota Rules Chapter 4725.4350, as amended; and 2) New or replacement on-  
36 site sewage treatment systems must be designed to minimize or eliminate infiltration of flood waters into the  
37 systems and discharges from the systems into flood waters, they must not be subject to impairment or  
38 contamination during times of flooding, and are subject to the provisions in Minnesota Rules Chapter 7080.2270,  
39 as amended.

40 **DIVISION 9 MANUFACTURED HOMES, MANUFACTURED HOME PARKS, AND RECREATIONAL VEHICLES.**

41 9.1 78-1143 **Manufactured Homes:** New manufactured home parks and expansions to existing manufactured home  
42 parks are prohibited in any floodplain district. For existing manufactured home parks or lots of record, the  
43 following requirements apply:

- 1 9.11 (1) Placement or replacement of manufactured home units is prohibited in the Floodway District.
- 2 9.12 (2) If allowed in the Flood Fringe District, placement or replacement of manufactured home units is subject to
- 3 the requirements of Division 5 of this ordinance and the following standards.
- 4 (a) New and replacement manufactured homes must be elevated in compliance with Division 5 of this
- 5 ordinance and must be securely anchored to an adequately anchored foundation system that resists
- 6 flotation, collapse and lateral movement. Methods of anchoring may include, but are not limited to, use
- 7 of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state or
- 8 local anchoring requirements for resisting wind forces.
- 9 (b) New or replacement manufactured homes in existing manufactured home parks must meet the
- 10 vehicular access requirements for subdivisions in section 78-1131 (2).

11 9.2 78-1144 **Recreational Vehicles:** New recreational vehicle parks or campgrounds and expansions to existing  
 12 recreational vehicle parks or campgrounds are prohibited in any floodplain district. Placement of recreational  
 13 vehicles in existing recreational vehicle parks or campgrounds in the floodplain must meet the exemption criteria  
 14 below or be treated as new structures meeting the requirements of this ordinance.

- 15 9.21 (1) Recreational vehicles are exempt from the provisions of this ordinance if they are placed in any of the
- 16 following areas and meet the criteria listed in Section 78-1144 (2):
- 17 (2a) (a) Individual lots or parcels of record.
- 18 (2)b (b) Existing commercial recreational vehicle parks or campgrounds.
- 19 (2)c (c) Existing condominium-type associations.

- 20 9.22 (2) Criteria for Exempt Recreational Vehicles:
- 21 (1) a (a) The vehicle must have a current license required for highway use.
- 22 (1) b (b) The vehicle must be highway ready, meaning on wheels or the internal jacking system, attached to the
- 23 site only by quick disconnect type utilities commonly used in campgrounds and recreational vehicle
- 24 parks.
- 25 (1)3 (c) No permanent structural type additions may be attached to the vehicle.
- 26 (d) The vehicle and associated use must be permissible in any pre-existing, underlying zoning district.
- 27 (1) c (e) Accessory structures are not permitted within the Floodway District. Any accessory structure in the
- 28 Flood Fringe District must be constructed of flood-resistant materials and be securely anchored,
- 29 meeting the requirements applicable to manufactured homes in Section 78-1144 (2).
- 30 (f) An accessory structure must constitute a minimal investment

- 31 9.23 (3) Recreational vehicles that are exempt in Section 78-1144 (2) lose this exemption when development occurs
- 32 on the site that exceeds a minimal investment for an accessory structure such as a garage or storage
- 33 1131 (3) building. The recreational vehicle and all accessory structures will then be treated as new structures
- 34 subject to the elevation and floodproofing requirements of Division 5.0 of this ordinance. No development
- 35 or improvement on the parcel or attachment to the recreational vehicle is allowed that would hinder the
- 36 removal of the vehicle should flooding occur.

37 **DIVISION 10 ADMINISTRATION**

38 10.1 78-1145 **City Administrator:** The City Administrator or other official designated by the Administrator must

39 1132 administer and enforce this ordinance. *Planning director*

40 10.2 78-1146 **Permit Requirements:**

- 41 1133 a (1) Permit Required. A permit must be obtained from the City Administrator prior to conducting the following
- 42 activities:

- 1 (a) The erection, addition, modification, rehabilitation, or alteration of any building, structure, or portion  
 2 thereof. Normal maintenance and repair also requires a permit if such work, separately or in  
 3 conjunction with other planned work, constitutes a substantial improvement as defined in this  
 4 ordinance. **1133 a**
- 5 (b) The use or change of use of a building, structure, or land. **a**
- 6 (c) The construction of a dam, fence, or on-site septic system, although a permit is not required for a farm  
 7 fence as defined in this ordinance. **a**
- 8 (d) The change or extension of a nonconforming use. **a**
- 9 (e) The repair of a structure that has been damaged by flood, fire, tornado, or any other source. **a**
- 10 (f) The placement of fill, excavation of materials, or the storage of materials or equipment within the  
 11 floodplain. **a**
- 12 (g) Relocation or alteration of a watercourse (including new or replacement culverts and bridges), unless a  
 13 public waters work permit has been applied for.
- 14 (h) Any other type of "development" as defined in this ordinance.
- 15 **10.22** (2) Application for Permit. Permit applications must be submitted to the City Administrator on forms provided  
 16 by the City Administrator. The permit application must include the following as applicable: **1133 b**
- 17 (a) A site plan showing all pertinent dimensions, existing or proposed buildings, structures, and significant  
 18 natural features having an influence on the permit. **b**
- 19 (b) Location of fill or storage of materials in relation to the stream channel. **b**
- 20 (c) Copies of any required municipal, county, state or federal permits or approvals. **c**
- 21 (d) Other relevant information requested by the City Administrator as necessary to properly evaluate the  
 22 permit application.
- 23 **10.23** (3) Certificate of City Compliance for a New, Altered, or Nonconforming Use. No building, land or structure  
 24 may be occupied or used in any manner until a certificate of zoning compliance has been issued by the City  
 25 Administrator stating that the use of the building or land conforms to the requirements of this ordinance. **1133 d**
- 26 **10.24** (4) Certification. The applicant is required to submit certification by a registered professional engineer,  
 27 registered architect, or registered land surveyor that the finished fill and building elevations were  
 28 accomplished in compliance with the provisions of this ordinance. Floodproofing measures must be  
 29 certified by a registered professional engineer or registered architect. **f**
- 30 **10.25** (5) Record of First Floor Elevation. The City Administrator must maintain a record of the elevation of the  
 31 lowest floor (including basement) of all new structures and alterations or additions to existing structures in  
 32 the floodplain. The City Administrator must also maintain a record of the elevation to which structures and  
 33 alterations or additions to structures are floodproofed. **g**
- 34 **10.26** (6) Notifications for Watercourse Alterations. Before authorizing any alteration or relocation of a river or  
 35 stream, the City Administrator must notify adjacent communities. If the applicant has applied for a permit  
 36 to work in public waters pursuant to Minnesota Statutes, Section 103G.245, this will suffice as adequate  
 37 notice. A copy of the notification must also be submitted to the Chicago Regional Office of the Federal  
 38 Emergency Management Agency (FEMA). **h**
- 39 **10.27** (7) Notification to FEMA When Physical Changes Increase or Decrease Base Flood Elevations. As soon as is  
 40 practicable, but not later than six months after the date such supporting information becomes available,  
 41 the City Administrator must notify the Chicago Regional Office of FEMA of the changes by submitting a  
 42 copy of the relevant technical or scientific data. **i**

**78-1147 Variances and appeals:** The city council may authorize upon appeal in specific cases such relief or variance from the terms of this article as will not be contrary to the public interest and only when practical difficulties exist, as provided for in the respective enabling legislation for planning and zoning for cities or counties as appropriate. In the granting of such variance, the city council shall clearly identify in writing the specific conditions that existed consistent with the criteria specified in this article, any other zoning regulations in the community, and in the respective enabling legislation that justified the granting of the variance. No variance shall have the effect of allowing in any district uses prohibited in that district, permit a lower degree of flood protection than the regulatory flood protection elevation for the particular area, or permit standards lower than those required by state law. The following additional variance criteria of the Federal Emergency Management Agency must be satisfied:

- (C) 1. Variances shall not be issued by a community within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
- (C) 2. Variances shall only be issued by a community upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (C) 3. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

10.31 (1) Variance Applications. An application for a variance to the provisions of this ordinance will be processed and reviewed in accordance with applicable state statutes and Title IV, Article II, Division 3 of this Ordinance.

10.32 (2) Adherence to State Floodplain Management Standards. A variance must not allow a use that is not allowed in that district, permit a lower degree of flood protection than the regulatory flood protection elevation for the particular area, or permit standards lower than those required by state law.

10.33 (3) Additional Variance Criteria. The following additional variance criteria of the Federal Emergency Management Agency must be satisfied:

- (a) Variances must not be issued by a community within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
- (b) Variances may only be issued by a community upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (c) Variances may only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

10.34 (4) Flood Insurance Notice. The City Administrator must notify the applicant for a variance that: 1) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage; and 2) Such construction below the base or regional flood level increases risks to life and property. Such notification must be maintained with a record of all variance actions.

10.35 (5) General Considerations. The community may consider the following factors in granting variances and imposing conditions on variances and conditional uses in floodplains:

- (a) The potential danger to life and property due to increased flood heights or velocities caused by encroachments;
- (b) The danger that materials may be swept onto other lands or downstream to the injury of others;
- (c) The proposed water supply and sanitation systems, if any, and the ability of these systems to minimize the potential for disease, contamination and unsanitary conditions;



- 1 (d) The susceptibility of any proposed use and its contents to flood damage and the effect of such damage
- 2 on the individual owner;
- 3 (e) The importance of the services to be provided by the proposed use to the community;
- 4 (f) The requirements of the facility for a waterfront location;
- 5 (g) The availability of viable alternative locations for the proposed use that are not subject to flooding;
- 6 (h) The compatibility of the proposed use with existing development and development anticipated in the
- 7 foreseeable future;
- 8 (i) The relationship of the proposed use to the Comprehensive Land Use Plan and flood plain management
- 9 program for the area;
- 10 (j) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- 11 (k) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters
- 12 expected at the site.

13 10.36 (6) Submittal of Hearing Notices to the Department of Natural Resources (DNR). The City Administrator or  
14 (a) designee shall submit hearing notices for proposed variances to the DNR sufficiently in advance to provide  
15 at least ten days' notice of the hearing. The notice may be sent by electronic mail or U.S. Mail to the  
16 respective DNR area hydrologist.

17 10.37 (7) Submittal of Final Decisions to the DNR. A copy of all decisions granting variances must be forwarded to  
18 (c) the DNR within ten days of such action. The notice may be sent by electronic mail or U.S. Mail to the  
19 respective DNR area hydrologist.

20 10.38 (8) Record-Keeping. The City Administrator must maintain a record of all variance actions, including  
21 justification for their issuance, and must report such variances in an annual or biennial report to the  
22 Administrator of the National Flood Insurance Program, when requested by the Federal Emergency  
23 Management Agency.

24 1133 (f) (9) Appeals The city council shall hear and decide appeals where it is alleged there is error in any order,  
25 requirement, decision, or determination made by an administrative official in the enforcement or  
26 administration of this article.  
27

28 10.4 78-1148 Conditional Uses:

29 10.41 (1) Administrative Review. An application for a conditional use permit under the provisions of this ordinance  
30 will be processed and reviewed in accordance with Title IV, Article V of this Ordinance..

31 10.42 (2) Factors Used in Decision-Making. In passing upon conditional use applications, the City Council must  
32 1135 (f) consider all relevant factors specified in other sections of this ordinance, and those factors identified in  
33 Section 10.35 of this ordinance.

34 10.43 (3) Conditions Attached to Conditional Use Permits. The City Council may attach such conditions to the  
35 1135 (f) granting of conditional use permits as it deems necessary to fulfill the purposes of this ordinance. Such  
36 conditions may include, but are not limited to, the following:

- 37 (a) Modification of waste treatment and water supply facilities.
- 38 (b) Limitations on period of use, occupancy, and operation.
- 39 (c) Imposition of operational controls, sureties, and deed restrictions.
- 40 (d) Requirements for construction of channel modifications, compensatory storage, dikes, levees, and
- 41 other protective measures.

1 (e) Floodproofing measures, in accordance with the State Building Code and this ordinance. The applicant  
2 must submit a plan or document certified by a registered professional engineer or architect that the  
3 floodproofing measures are consistent with the regulatory flood protection elevation and associated  
4 flood factors for the particular area.

5 10.44 (4) Submittal of Hearing Notices to the Department of Natural Resources (DNR). The city administrator or  
6 designee must submit hearing notices for proposed conditional uses to the DNR sufficiently in advance to  
7 provide at least ten days' notice of the hearing. The notice may be sent by electronic mail or U.S. Mail to  
8 the respective DNR area hydrologist.

9 10.45 (5) Submittal of Final Decisions to the DNR. A copy of all decisions granting conditional uses must be  
10 forwarded to the DNR within ten days of such action. The notice may be sent by electronic mail or U.S. Mail  
11 to the respective DNR area hydrologist.

12 **DIVISION 11 NONCONFORMITIES**

13 11.1 78-1149 Continuation of Nonconformities: A use, structure, or occupancy of land which was lawful before the passage  
14 or amendment of this ordinance but which is not in conformity with the provisions of this ordinance may be  
15 continued subject to the following conditions. Historic structures, as defined in Section 78-1111 of this ordinance,  
16 are subject to the provisions of paragraphs (1) – (6) of this section.

17 11.11 (1) A nonconforming use, structure, or occupancy must not be expanded, changed, enlarged, or altered in a  
18 way that increases its flood damage potential or degree of obstruction to flood flows except as provided in  
19 SAection 78-1149 (12) below. Expansion or enlargement of uses, structures or occupancies within the  
20 Floodway District is prohibited.

21 11.12 (2) Any addition or structural alteration to a nonconforming structure or nonconforming use that would result  
22 in increasing its flood damage potential must be protected to the regulatory flood protection elevation in  
23 accordance with any of the elevation on fill or floodproofing techniques (i.e., FP1 thru FP4 floodproofing  
24 classifications) allowable in the State Building Code, except as further restricted in (3) and (7) below.

25 11.13 (3) If the cost of all previous and proposed alterations and additions exceeds 50 percent of the market value of  
26 any nonconforming structure, that shall be considered substantial improvement, and the entire structure  
27 must meet the standards of Division 4 or 5 of this ordinance for new structures, depending upon whether  
28 the structure is in the Floodway or Flood Fringe District, respectively. The cost of all structural alterations  
29 and additions must include all costs such as construction materials and a reasonable cost placed on all  
30 manpower or labor.

31 11.14 (4) If any nonconforming use, or any use of a nonconforming structure, is discontinued for more than one  
32 year, any future use of the premises must conform to this ordinance. The Assessor must notify the City  
33 Administrator in writing of instances of nonconformities that have been discontinued for a period of more  
34 than one year.

35 11.15 (5) If any nonconformity is substantially damaged, as defined in Section 78-1111 of this ordinance, it may not  
36 be reconstructed except in conformity with the provisions of this ordinance. The applicable provisions for  
37 establishing new uses or new structures in Divisions 4 or 5 will apply depending upon whether the use or  
38 structure is in the Floodway or Flood Fringe, respectively.

39 11.16 (6) If any nonconforming use or structure experiences a repetitive loss, as defined in 78-1111 of this  
40 ordinance, it must not be reconstructed except in conformity with the provisions of this ordinance.

41 11.17 (7) Any substantial improvement, as defined in Section 78-1111 of this ordinance, to a nonconforming structure  
42 requires that the existing structure and any additions must meet the requirements of Division 4.0 or 5.0 of  
43 this ordinance for new structures, depending upon whether the structure is in the Floodway or Flood  
44 Fringe District.

45 **DIVISION 12.0 PENALTIES AND ENFORCEMENT**

- 1 12.1 78-1150 **Violation Constitutes a Misdemeanor:** Violation of the provisions of this ordinance or failure to comply  
2 1137 with any of its requirements (including violations of conditions and safeguards established in connection with  
3 grants of variances or conditional uses) constitute a misdemeanor and will be punishable as defined by law.
- 4 12.2 78-1151 **Other Lawful Action:** Nothing in this ordinance restricts the City of Orono from taking such other lawful  
5 1138 action as is necessary to prevent or remedy any violation. If the responsible party does not appropriately respond  
6 to the City Administrator within the specified period of time, each additional day that lapses will constitute an  
7 additional violation of this ordinance and will be prosecuted accordingly.
- 8 12.3 78-1152 **Enforcement:** In responding to a suspected ordinance violation, the City may utilize the full array of  
9 enforcement actions available to it including but not limited to prosecution and fines, injunctions, after-the-fact  
10 1138 (1) permits, orders for corrective measures or a request to the National Flood Insurance Program for denial of flood  
11 insurance availability to the guilty party. The City of Orono must act in good faith to enforce these official controls  
12 and to correct ordinance violations to the extent possible so as not to jeopardize its eligibility in the National Flood  
13 Insurance Program.
- 14 **DIVISION 13.0 AMENDMENTS**
- 15 13.1 78-1153 **Floodplain Designation – Restrictions on Removal:** The floodplain designation on the Official Zoning Map  
16 1139 must not be removed from floodplain areas unless it can be shown that the designation is in error or that the area  
17 has been filled to or above the elevation of the regulatory flood protection elevation and is contiguous to lands  
18 outside the floodplain. Special exceptions to this rule may be permitted by the Commissioner of the Department of  
19 Natural Resources (DNR) if the Commissioner determines that, through other measures, lands are adequately  
20 protected for the intended use.
- 21 13.2 78-1154 **Amendments Require DNR Approval:** All amendments to this ordinance must be submitted to and  
22 1140 approved by the Commissioner of the Department of Natural Resources (DNR) prior to adoption. The  
23 Commissioner must approve the amendment prior to community approval.
- 24 13.3 78-1155 **Map Revisions Require Ordinance Amendments.** The floodplain district regulations must be amended to  
25 incorporate any revisions by the Federal Emergency Management Agency to the floodplain maps adopted in  
26 Section 78-1105 of this ordinance.  
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