

**AMENDMENTS TO BAYFIELD COUNTY ZONING ORDINANCE**

Sec. 13-1-34 is created to read as follows:

**Sec. 13-1-34 Lake Superior Shoreland Lot Development Requirements.**

**Introduction.** Much of Bayfield County’s Lake Superior shoreline is bordered by steep bluffs with or without an adjacent beach, and is very susceptible to erosion. Rock slopes erode very slowly, but catastrophically when undercut by waves. Clay slopes may be stable for years then erode or slump very quickly. Stormwater is also a significant factor in shoreline recession and erosion. The Official Bayfield County Lake Superior Shoreline Segment Map—incorporated into this ordinance by Sec. 13-1-20(c)(5)—establishes numbered segments of the Lake Superior shoreline, which are subject to the setback requirements set forth below. The setback requirements in subsection (a) are based on historical and scientific calculations specific to each shoreline segment. If the Department determines by on-site inspection of a lot that the applicable setback listed in subsection (a) is inconsistent with the pertinent characteristics of the lot’s shoreline, the Department shall calculate the setback for the lot based on the observed characteristics, using the same formula and criteria used to calculate setback distances for the Lake Superior Safe Setback line.

- (a) **Lake Superior Shoreline Setback Table.** Except as otherwise provided in this section, the required setbacks from the ordinary high water mark for principal structures or any accessory structures greater than (>) 500 sq. ft. on lots with frontage on Lake Superior are shown for each point of the shoreline on the Bayfield County Lake Superior Shoreline Safe Setback Map. **Representative** setbacks for each shore segment are shown in the table below. Segments with an NA in the setback distance column shall be calculated by the Department on a lot-by-lot basis within the segment, using the same formula and criteria used to calculate setback distances for other segments in the table.

## Representative Lake Superior Shoreline Setbacks

Segment Number	Total Setback in feet	Segment Number	Total Setback in feet	Segment Number	Total Setback in feet	Segment Number	Total Setback in feet
1	282	40	NA	79	129	118	162
2	184	41	163	80	151	119	164
3	NA	42	242	81	142	120	113
4	260	43	149	82	175	121	160
5	205	44	269	83	260	122	181
6	NA	45	282	84	298	123	86
7	195	46	226	85	331	124	156
8	NA	47	233	86	NA	125	132
9	228	48	174	87	217	126	189
10	200	49	148	88	250	127	202
11	NA	50	169	89	178	128	170
12	140	51	191	90	164	129	NA
13	150	52	175	91	NA	130	152
14	130	53	402	92	170	131	142
15	148	54	353	93	242	132	160
16	200	55	216	94	206	133	100
17	140	56	129	95	132	134	NA
18	133	57	132	96	160	135	138
19	130	58	125	97	125	136	153
20	171	59	142	98	193	137	85
21	80	60	121	99	337	138	NA
22	116	61	180	100	82	139	NA
23	240	62	210	101	125	140	133
24	NA	63	198	102	214	141	NA
25	210	64	79	103	209	142	145
26	NA	65	80	104	154	143	NA
27	286	66	80	105	183	144	82
28	NA	67	312	106	180	NA	174
29	253	68	203	107	160	NA	140
30	NA	69	212	108	194	147	160
31	340	70	161	109	161	148	151
32	NA	71	155	110	178	149	116
33	328	72	200	111	113	150	127
34	354	73	195	112	147	151	193
35	NA	74	79	113	184	152	85
36	420	75	80	114	193	153	100
37	NA	76	80	115	80	154	83
38	547	77	159	116	160		
39	341	78	200	117	170		

NA = Contact Planning & Zoning Department for on-site determination.

*Note: These are representative numbers. Consult the Shoreline Safe Setback map for site specific setback distances.*

- (b) **Other Setbacks and Height Restrictions.** The provisions of Section 13-1-22, pertaining to setbacks and height restrictions, shall apply to lots with frontage on Lake Superior except for paragraphs (a)(1) and (2)a, b, and c thereof.
- (c) **Alternative Setback Requirements**

- (1) **Reduced Roadway, Rear Yard, and Shoreline Setbacks for Platted Lots.**
  - a. **Shoreland Setback Adjustment.** If a platted lot is not deep enough to accommodate required roadway or rear yard and shoreline setbacks and a thirty-foot deep building site, the roadway or rear yard setback may be reduced until a thirty foot (30) deep building site is established, provided that the resulting setback is not less than one-half the distance of the required setback. If the road or rear yard setback reduction does not provide a thirty foot (30) deep building site, the shoreline setback may then be reduced until a thirty foot (30) deep building site is established, provided that the resulting shoreline setback is not less than two-thirds of the distance of the required setback under subsection (a) and is at least 60 feet back from the edge of any discernible bluff.
  - b. **Mitigation.** A property owner shall comply with the mitigation requirements of Section 13-1-40(c)(5) in order to qualify for the setback reductions of this provision.
  - c. **Shore Protection Practices.** Shore protection practices under paragraph (2)b of this subsection may also be required to qualify for the setback reductions of this provision.
- (2) **Special Exceptions.** For lots that cannot meet the reduced setbacks provided above in paragraph (c)(1) but have at least ninety (90) feet from the top of the discernible bluff to the rear of the lot, the owner may apply to the Bayfield County Board of Adjustment for a special exception under Section 13-1-102(e)(4) authorizing a further reduced shoreline setback for a moveable structure meeting the requirements of subparagraph a. below. Shoreline protection practices subject to subparagraph b. below and/or shoreline protection structures subject to subparagraph c. below may also be required.
  - a. **Moveable Structure Requirements.**
    1. The property owner shall submit a report from a professional building moving contractor certifying that the structure can be feasibly moved at a cost not to exceed thirty (30) percent of the equalized value of the structure.
    2. The property owner must certify that the structure will be moved before any part of the structure is within fifty (50) feet of the receding edge of the bluff. The certification must be recorded with the Register of Deeds for Bayfield County.

The certification must also state that the last owner of record, as shown on the latest assessment roll, is responsible for removing the structure, its foundation, and all costs associated with the move.

- b. **Shore Protection Practices.** Shore protection practices include, but are not limited to natural coastline restoration by nourishing beaches; restoring and constructing dunes and beach ridges; creating or restoring coastal wetlands; shore armoring with riprap, seawalls, and groins. Any structures need to be designed and built by a trained professional familiar with the Great Lakes erosion processes.

Shore protection plans that include structures shall contain the following:

1. A site investigation of slope stability and coastal erosion.
2. A site investigation of near shore lakebed erosion.
3. Consideration for impact on neighboring or down current properties.
4. Access to site and structure for monitoring and maintenance.

- c. **Shore Protection Structures.** The following requirements apply to the construction, modification or restoration of shore protection structures:

1. All necessary permits must have been received and/or reviewed by the Wisconsin Department of Natural Resources, the U.S. Army Corps of Engineers and Bayfield County Land Conservation Department.
2. The structure must not be likely to cause a measurable increase in erosion, including lakebed erosion, at the development site or at other locations.
3. The structure must minimize and prevent adverse effects upon natural protective features, existing erosion-protection structures and natural resources, such as significant wildlife habitats. This includes the impact of the structure on the movement of sand along the shore.
4. All shore protection structures must be designed and constructed according to generally accepted engineering

principles. The design and construction shall be certified by a professional engineer as having a reasonable probability of controlling erosion on the immediate site for at least thirty (30) years.

5. All materials used in such structures must be durable and capable of withstanding inundation, wave impacts, weathering and other effects of storm conditions for a minimum of thirty (30) years. Individual component materials may have a working life of less than thirty (30) years only when a maintenance program ensures that they will be regularly maintained and replaced as necessary to attain the required thirty (30) years of erosion protection.
  6. A long-term maintenance program must be included. The maintenance programs must include specifications for normal maintenance of degradable materials including repairs necessary to maintain the integrity of the shore protection structure. To assure compliance with the proposed maintenance programs, a bond or other financial security may be required.
  7. There must be a minimum of seventy-five (75) feet from the shore protection structure to any permanent structure. If the bluff or dune is unstable due to height, slope, wind, erosion, or groundwater seepage, a greater setback may be required. There shall be sufficient access to permit the maintenance and repair of the shore protection structure.
  8. Excavating, grading, mining, or dredging which diminishes the erosion protection afforded by near shore area is prohibited, except construction or maintenance of navigation channels, bypassing sand around natural and man-made obstructions and artificial beach nourishment in accordance with the permit requirements of the Wisconsin Department of Natural Resources.
  9. Before approval by the Department of any shore protection structure, the applicant shall obtain a Class B special use permit from the county. Notice shall be sent to all riparian owners within three hundred (300) feet of the proposed shore protection structure.
- (3) **Variances.** If none of the above setback requirements can be met, then development of the subject parcel may only be permitted by a variance granted by the Bayfield County Board of Adjustment.

(d) **Site Planning.**

(1) **Site Plan Approval Standards.** Except as provided in paragraph (3) of this subsection, any lot on Lake Superior for which new development is proposed shall require a development site plan that meets the following standards, subject to the review by the County Planning & Zoning Department:

- a. The site plan must minimize disturbance natural habitat;
- b. The site plan must demonstrate that erosion and sedimentation shall be minimized,
- c. The site plan must demonstrate compliance with Section 13-1-23 (Shoreland-Upland Screening, Fencing, and Vegetative Management)

(2) **Site Plan Components and Site Plan Content.**

- a. Individual site plans must incorporate setbacks, bluff stability, past recession rates, and drainage patterns on a property.
- b. Plans must be prepared to scale or dimensions and include the following:
  1. All lake shorelines, streams, wetlands, groundwater seeps, springs, soil types, soil strata and groundwater table at the site; and all existing roads, driveways, structures, culverts, and other pertinent features on the site or within one hundred (100) feet of the area of site disturbance.
  2. Existing ground contour lines and proposed ground contour lines at five (5) foot intervals encompassing the area of site disturbance and in the immediate area of influence of the disturbed areas, e.g. within fifteen (15) feet.
  3. Structural dimensions and onsite materials used
  4. Location of the ordinary high water mark
  5. Bluff height and stability
  6. Rates of erosion and recession
  7. Shoreline erosion control plan or structures
  8. A grading or fill plan
  9. Potential building relocation plans

10. Location of nearby natural resources such as wetlands, bluffs, dunes
  11. On-site wastewater treatment facilities
  12. Stormwater management plan
  13. Plans for lake access
- (3) **Expansion of Existing Structures.** The requirements of this subsection shall not apply if the only proposed development is the expansion of an existing structure, except for the requirement of a storm water management plan
- (e) **Substandard Lots.** Section 13-1-26, pertaining to substandard lots of record, applies to substandard lots with frontage on Lake Superior.
- (f) **Nonconforming Structures and Uses.**
- (1) Structures and/or uses on lots with frontage on Lake Superior that were nonconforming prior to the adoption of this section on July 26, 2011 are subject to the provisions of Article I pertaining to nonconforming uses and structures, provided that in addition to meeting the requirements of that article, an owner applying for a permitted expansion of a structure that is nonconforming with respect to shoreline setback must submit a shore protection plan to the Department, including shore protection practices and/or shore protection structures, that the Department determines to be adequate to protect the structure from damage due to shoreline erosion for a period of 30 years, based on the composition of the shoreline, its estimated rate of recession, and other relevant factors.
  - (2) Structures on lots with frontage on Lake Superior that were conforming prior to the adoption of this section but do not meet the shoreline setback requirements of this section are not subject to the provisions of Article I, but an owner applying for an expansion of such a structure shall be required to submit and implement a storm water management plan incorporating best management practices and may be required by the Department to submit a shore protection plan that the Department determines to be adequate to protect the structure from damage due to shoreline erosion for at least 30 years, if there is a reasonable probability that the structure would be damaged by shoreline erosion within such time period without the implementation of a shore protection plan.
- (g) **Revision of Lake Superior Shoreline Segments and Setbacks.** Lake Superior shoreline segments and setbacks may be revised by amendment of the Lake Superior Shoreline Setback Table in 13-1-34 (a) pursuant to this provision and in accordance with Section 59.69(5)(e) Wis. Stats., containing the statutory

procedure for amending county zoning ordinances. The petitioner should be prepared to demonstrate to the Zoning Committee and County Board that an error does in fact exist with respect to the setback distances stated in the Lake Superior Shoreline Setback Table.

- (h) **Coastal Setback Calculator.** Calculator and explanatory materials used in determining Lake Superior shoreline setbacks are available at the County Planning & Zoning Department office.