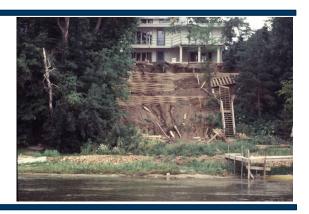
# DEPARTMENT OF NATURAL RESOURCES

# Bluffs Innovative Standards

Part of a series highlighting innovative local government standards intended to help encourage adoption of more protective shoreland standards.



## **Benefits**

- Protects investment in structures from bluff failure
- Provides greater space to allow vegetation and habitat in bluff areas
- Protects slopes from erosion and failure
- Reduces visual impact of structures from the water

# **Types of Approaches**

1.	Bluff Definitions	1
	Bluff Impact Zone	

The ordinance language used in these examples varies significantly depending on complexity of the issue and method of implementation. In straight forward cases, actual ordinance language is provided. In complex examples, the key provisions are summarized. Please contact the planning and zoning staff with the relevant community if you have questions about the specific ordinance provisions.

## 1. Bluff Definitions

#### **Beltrami County**

Defines the toe and top of the bluff to effectively increase the bluff area thus pushing the top of bluff and bluff line (from which setbacks are measured) further away from the slope.

Toe of the Bluff: The lower point of a fifty (50) foot bluff segment with an average slope in excess of eight (8) percent. (This compares to the minimum standards which is eighteen (18) percent)

Top of the Bluff: The higher point of a fifty (50) foot bluff segment with an average slope in excess of eight (8) percent. (This compares to the minimum standards which is eighteen (18) percent)

Ordinance Citation: Article I, Section 101.

#### Washington County

Defines a bluff as an 18% slope, instead of 30%, that rises 20 feet, instead of 25 feet thus enlarging the area of the bluff that is protected from development and pushes back the bluffline (from which setbacks are measured) further away from the slope.

Ordinance Citation: Chapter 6, Section 3.1 (2).

### 2. Bluff Impact Zone

#### **Douglas County**

No excavation for walkout basements shall be allowed within a bluff impact zone.

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Ordinance Citation: Section V. L.2.a.(3.)
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Other Communities with Similar Standards: Beltrami County (Section 504) and Blue Earth County (Section 24-304. (c).

#### **Blue Earth County**

Requires geotechnical evaluation of bluffs that are actively eroding. Results of the report are used to determine required structure setbacks from the bluff. Criteria used for determining if a geotechnical evaluate is required depends on the size of structure, amount of impervious surface, distance from the bluff, height of the bluff, historic rates of erosion, topography, and soils. The term "actively eroding bluffs" is defined in the zoning code.

Ordinance Citation: Section 24-304. (c) for geotechnical evaluation and Sec. 24-3 for definition.