## WATERSHED MANAGEMENT PLAN AMENDMENT

LOWER MINNESOTA RIVER WATERSHED DISTRICT

TAC Meeting — February 22, 2017

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### **OVERVIEW**

- 1. February 8, 2017 TAC Meeting Recap
- 2. Proposed Standards
  - ✓ Existing Municipal/Township Standards
  - ✓ Existing District Standard
  - ✓ Proposed Standard
- 3. Next Steps



## RECAP FROM FEB 8<sup>TH</sup> TAC MEETING

- Proposed Construction Erosion and Sediment Control Standards
  - General
    - NPDES Construction Stormwater Trigger and Requirements
  - High Resource Value Areas
    - Triggers
      - 5,000sf or more
      - Grading, excavating, filling or storing of more than 50 cubic yards of soil or earth material.
    - Grading/ Erosion Control Plan
    - SWPPP for site disturbing 1 acre or more
    - Maintenance and Inspection

## RECAP FROM FEB 8TH TAC MEETING

Existing District and Proposed Floodplain Management Standard

- Trigger
  - Any alteration or fill below the 100-year flood elevation
- Standard
  - 1. STORAGE: No filling is permitted in the floodplain without the provision of compensatory storage.
  - 2. ELEVATION: The lowest ground level of any structure must be <u>2 feet above</u> the 100-year level of the nearby surface waters or <u>1 foot above</u> emergency overflow level for stormwater improvements, whichever is greater, unless they have protection through flood proofing or by another approved construction technique.
  - 3. FLOODWAY: No permanent structure may be located within the floodway. (Proposed addition)

    Conditional uses for storage, Fill, Dredge material or other materials may be allowed.

# RECAP FROM I

## RECAP FROM FEB 8<sup>TH</sup> TAC MEETING

Proposed Stormwater Management Standard - General Areas

- Trigger
  - 1.0 Ac new Impervious Surface
- Standard
  - Rate 1 or 2, 10 and 100 year meet predevelopment conditions
  - Volume will meet NPDES Construction Stormwater abstraction requirements
  - Water Quality No net increase in Total phosphorus (TP) and total suspended solids (TSS).

## RECAP FROM FEB 8TH TAC MEETING

Proposed Stormwater Management Standard - High Resource Value Areas

#### **Triggers**

• Development, redevelopment, and drainage alterations (including roads) creating new impervious areas greater than 10,000 square feet (sq. ft.).

#### Standard

- Rate meet predevelopment conditions for the 2, 10 and 100-year 24 hour events using atlas-14
- Volume
  - 1.1 inches of runoff retained for new and re development projects
  - transportation projects shall capture and retain the larger of the following: 0.55 inches from new or reconstructed surface or 1.1 inches of runoff from the net increase in impervious area
- Water Quality
  - New Development shall have 60% annual removal of TP and 80% removal for TSS.
  - Redevelopment shall achieve a net decrease (on an average annual basis) of TP and TSS.

- Set Back Restrictions
  - Grading/Filling
  - New Structures
  - Excavation
- Percentage of Slope Restrictions
- Vegetation Management on slopes
  - Intensive vegetation clearing prohibited
  - Limited clearing allowed
- Stormwater Management on slopes
  - Impervious Surface Coverage

#### **Definitions**

"**Bluff**" – a topographical feature such as a hill, cliff, or embankment having all of the following characteristics (an area with an average slope of less than 18 percent over a distance for 50 feet or more shall not be considered part of the bluff):

- a. Part or all of the feature is located in a shoreland area;
- b. The slope rises at least 25 feet above the OHW level of the waterbody;
- c. The grade of the slope from the toe of the bluff to a point 25 feet or more above the ordinary high water level averages 30 percent or greater; and
- d. The slope must drain toward the waterbody.

(e.g. Eden Prairie, Eagan, Shakopee, Chanhassen, Carver, Jackson and Louisville Township)

"Bluff Impact Zone" – a bluff and land located within 20 feet beyond the top of the bluff. (e.g. Eden Prairie)

Bluff (or Bluff Impact Zone) is not specifically defined in every ordinance; however, regulations regarding steep slope and shoreline provide setback and development restrictions. (e.g. Chaska, Mendota Heights).

#### **Example Setback and Slope Restrictions:**

- Wooded land with **an eighteen (18) percent slope or greater** shall be preserved in its natural state for environmental value, particularly to deter soil erosion on the steep slopes/ravines and protect natural wildlife habitat areas. In addition, buildings (except for residential decks as regulated in Subsection 3.2j) and parking shall be set back at least fifty (50) feet from the edge of the eighteen (18) percent slope and a thirty (30) foot "no-grade/mow" zone provided for adjacent to the edge of the eighteen (18) percent slope for purposes of erosion control. (e.g. Chaska).
- No construction or grading on slopes steeper than 33% in grade (Mendota Heights, Savage).
- No Development on slopes over 12% and an elevation differences of 30 feet or more in a given parcel without a permit. (Eden Prairie).
- No development shall be permitted on slopes of 18% or more. Development may be allowed on land having slope between 12% and 18%. (Mendota Heights/Mendota/Bloomington) with restrictions.
- No new structures shall be placed on slopes over 25 feet in length which have a fall of 18% or greater (Lilydale).

#### **Setback Requirements**

Tier I – consists of entire bluff and a 25-ft buffer immediately encircling the entire bluff, and Tier II – consists of a 25-ft setback from the tier I buffer at the top of the bluff. "No earth movement or fill in Tier I bluff; and 2. 10 cubic yards of earth movement/fill in tier II areas permitted with approval (e.g. Carver)

Development and building setback requirements: Ranging from 30 to 50 feet (e.g. Chaska, Chanhassen, Eden Prairie) and 40 foot setback requirement along MN River bluffs. (Burnsville)

#### Percentage of Slope:

No development permitted on slopes of 18% or more (Mendota Heights, Mendota, Chaska, Carver, Lilydale)...

Development may be allowed on slope of 12% to 18% under certain condition (Mendota, Mendota Heights).s.

#### Fill and Excavation (Development):

Greater than 50 cubic yards of soil or activity requiring procurement of a building permit. (e.g. Eden Prairie)

#### **Vegetation Alteration/Management**

- Intensive vegetation clearing prohibited in shore and bluff impact zones. Limited clearing may be allowed with conditions. (e.g. Eden Prairie, Chaska, Carver etc.)
- Clearing shall be limited to a strip of 30% of lot width or 30 feet whichever is lesser, parallel to the shoreline and extending inward within the shore and bluff impact zones (Chanhassen).

#### **Stormwater Management**

- Impervious surface coverage of a shore area of lots shall not exceed 10% of said area. (Bloomington)
- The total area of all impervious surfaces on a lot shall not exceed 30% of the total lot area in shoreland management areas. (Eden Prairie)
- Impervious surfaces are prohibited within the "bluff setback" unless otherwise authorized: (Chanhassen)



### **BLUFF AND STEEP SLOPES**

### **EXISTING DISTRICT STANDARDS**

- Grading, cutting and vegetation removal prohibited in the Bluff impact zone and/or bluff face
- New structure Setback from Top of Bluff 30 ft. Minimum
- SSTS (Subsurface sewage treatment systems) and CSTS (community sewage treatment systems) setback from top of bluff – 50 ft. minimum
- All stormwater facilities setback from top of bluff 50 ft. minimum

LMRWD Watershed Plan Amendment Slides



### **BLUFF AND STEEP SLOPES**

#### **EXISTING DISTRICT STANDARDS**

Based on the following definitions

**Bluff** is a topographic feature such as a hill, cliff, or embankment having all of the following characteristics:

- A. Part or all of the feature is located in a shoreland area;
- B. The slope rises at least 25 feet above the ordinary high water level of the waterbody;
- C. The grade of the slope from the toe of the bluff to a point 25 feet or more above the ordinary high water level averages 30 percent or greater; and
- D. The slope must drain toward the waterbody.

Bluff impact zone is a bluff and land located within 20 feet from the top of a bluff.



### **BLUFF AND STEEP SLOPES**

#### PROPOSED STANDARDS

Department of Natural Resources Adopted Permanent Rules Relating to Mississippi River Corridor Critical Area: definitions and the following standards: General Development for Public Facilities, General Development for Private Facilities, Vegetation Management, and Land Alterations and Stormwater Management.

Information is attached and available using the link below

http://files.dnr.state.mn.us/waters/watermgmt\_section/critical\_area/mrcca\_rules.pdf

LMRWD Watershed Plan Amendment Slides



### **NEXT STEPS**

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- Technical Advisory Commission (TAC) and Stakeholders
  - March 8<sup>th</sup>
  - Another March meeting (?)
- Expect materials one week before each meeting
- Finalize draft Plan Amendment

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