Rule Guidance
Flow Charts

The charts and slides in this presentation provide guidance on the application and operation of the rules of the Riley Purgatory Bluff Creek Watershed District. Not all rule provisions are illustrated; the charts do not substitute for a careful reading of the rules. Please contact the District with any questions.

2/10/15
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Rule B: Floodplain

Does Project alter or fill land or alter surface flows below the 100-year flood elevation of a waterbody?

- No
  - No Rule B Permit Needed
- Yes
  - Full Compensatory Storage is Required
    - Low Floor Elevation \( \geq 2 \text{ feet above 100-year Flood level} \)
    - All Structures must be \( \geq 100 \text{ feet from watercourse centerline} \)
  - Triggers Rule D: Wetland, Lake and Creek Buffers
Rule C: Erosion & Sediment Control

Does Project
a) Place, alter or remove ≥ 50 cubic yards (cy) of earth or 
b) Alter or remove ≥ 5,000 square feet (sf) of land-surface area or vegetation?

Prepare Erosion and Sediment Control Plan

Retain native topsoil on site to the greatest extent possible

Pervious area soil surfaces disturbed or compacted must be decompacted

All disturbed areas must be stabilized within 7 calendar days after land-disturbing work has temporarily or permanently ceased on a property tributary to an impaired water, within 14 days elsewhere

Must inspect and maintain all erosion and sediment control facilities until final site stabilization
Rule D: Wetland, Lake and Creek Buffers

Does Project require a District permit under Rule B, E, F, G, or J?

- **No**

If non-native vegetation (e.g., turf grass), vegetate with natives, mark, and maintain

If disturbed or bare, vegetate with natives, mark, and maintain

Record Buffer with County Recorder

Buffer Width various based on waterbody type (see table for Average and Minimum)

Watercourse, Wetland = avg 20 ft, min 10 ft

Is Project on Existing Single Family Home Parcel?

- **Yes**

a) Is Project encompassing or adjacent to a public watercourse, public waters wetland or other protected wetland? or

b) Is Project encompassing or adjacent to any other watercourse within High-Risk Erosion Area?

- **No**

Permit Needed

- **No**
### Rule D: Wetland, Lake and Creek Buffers

<table>
<thead>
<tr>
<th>Waterbody Type</th>
<th>MnRAM Rating</th>
<th>Avg Width (ft)</th>
<th>Min Width (ft)</th>
</tr>
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<tbody>
<tr>
<td>Wetland</td>
<td>Exceptional</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Public Water Basin</td>
<td></td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>Public watercourse</td>
<td></td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>Watercourse or Water Basin in High-Risk Erosion Area</td>
<td></td>
<td>50</td>
<td>30</td>
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Above Widths above can be reduced for:
- a) slopes < 18%
- b) Soil Type

If buffer encompasses all or part of a slope ≥ 18%:
- Buffer Width is greater of:
  - a) Widths above or
  - b) Top of Slope
### Existing Single Family Parcel

#### Waterbody Type

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New Development
High Value wetland

Buffer = Top of Slope

Edge of High value Wetland

Slope ≥ 18%

Avg 60 ft
Rule E: Dredging & Sediment Removal

Does Project dredge or remove > 1 cy of sediment from any public water?

Yes

Are activities conducted pursuant to MnDNR permit?

No

Yes, triggers Rule D

Excavated sediment must be placed at a location
a) Above the OHW
b) Not in the floodplain, or
c) Not subject to erosion

Do not alter original alignment, slope, or cross section
Will not occur above the OHW or into adjacent upland
Will not enlarge natural watercourse for navigational purposes
Triggers Rule D: Wetland, Lake and Creek Buffers

No Rule E Permit Needed
Is the Project a Shoreline and Streambank Stabilization Project?

Yes

Is there a demonstrated need to prevent erosion or restore eroded shoreline?

Yes

Sequence Design Approach based on erosion intensity &/or shear stress
- a) Bioengineering
- b) Bioengineering plus RipRap
- c) RipRap

Retaining walls not below OHW except:
- a) Demonstrated need in Public Improvement Project
- b) Design certified by a PE

Sand Blankets: Not more than 2 attempts without DNR permit

No

Shoreline alteration not permitted

Check Rule G

Triggers Rule D: Wetland, Lake and Creek Buffers
Rule G: Waterbody Crossings & Structures

Does Project construct, improve, replace or remove a crossing in any waterbody, place or replace a structure (not PW), or conduct horizontal drilling under waterbody?

Yes

Are activities conducted pursuant to MnDNR permit?

No

No net increase in flood elevations, retain flow capacity

Preserved wildlife passage

No change to existing slope, or increase erosion or sedimentation

Banks must be stabilized immediately after completion and in compliance with Rule F

No

Yes, trigger Rule D

See MnDNR

No Rule G Permit Needed

Triggers Rule D: Wetland, Lake and Creek Buffers

Is there a demonstrated

a) Public benefit for projects affecting public waters or

b) Specific need for all other waterbodies?

Yes

No permit

No
Rule H: Appropriation of Public Surface Water

Appropriation of < 10,000 gallons/day and < 1,000,000 gallons/year of SURFACE water from
a) Public water basin
b) Public watercourse
c) Public Wetland?

- No
- Yes

Must provide method of appropriation
Must utilize water storage, reuse, and conservation practices
Must not alter hydrologic regime in a basin or watercourse
Must provide a written summary of how appropriated water was used and conservation utilized by March 1 of following year
Permit under this rule does not expire

See MnDNR
No Rule H Permit Needed
Rule I: Appropriation of Groundwater

Appropriation of
a) < 10,000 gallons/day and up to 1,000,000 gallons/year or
b) any amount for domestic use by < 25 persons of GROUNDWATER?

See MnDNR
No
No
Rule I Permit Needed

Yes

Must provide Groundwater appropriation plan
Must utilize water storage, reuse, and conservation practices
Must provide a written summary of how appropriated water was used and conservation utilized by March 1 of following year

Permit under this rule does not expire
Rule J: Stormwater Management

Does Project
a) Place, alter or remove ≥ 50 cubic yards (cy) of earth,
b) Alter or remove ≥ 5,000 square feet (sf) of land-surface area or vegetation?
c) Subdivide parcel into 3 or more Res. lots?

Is Project limited to
a) Single Family Home construction consistent with development plan subject to an unexpired District permit, or
b) Rehabilitation of paved surfaces, including mill and overlay, or
c) Trail or sidewalk ≤ 10 ft wide that is boarded downgradient by a pervious area at least 1/2 the trail width?

Is Construction/Reconstruction on Existing Single Family Home Parcel?

Is this a Linear Project?

See Existing Single Family Parcel Track

See Linear Project Track

See Development/Redevelopment Track
Rule J: Stormwater Management
Existing Single Family Parcel

Is Construction/Reconstruction on Existing Single Family Home Parcel?

No

See Development/Redevelopment or Linear Project Track

Yes

Is Existing Single Family Home Parcel
a) within 300’ of and tributary to Riley, Purgatory, Bluff Creek or
b) within 500’ of OHW of and tributary to other public water or wetland or
c) Below District 100-year flood elevation?

Yes

Submit site plans and designs providing for implementation of a stormwater-management BMP consistent with state guidance

No

No Rule J Permit Needed

See Rule D and Rule C
Single Family Home Parcel

Area Disturbed = <5000 sf
Vol < 50 cy

No District permit
Single Family Home Parcel

Area Disturbed > 5000 sf
Vol > 50 cy

No Rule J permit (not within distance to waterbody) but

Need Rule C permit

Adding 3000 sf of Imp. area
Adding 3000 sf of Imp. area

Area Disturbed > 5000 sf
Vol > 50 cy

Need Rule C permit
Need Rule D permit
Need Rule J permit

Buffer Area
(width = 20’ Avg 10’ min)
Rule J: Stormwater Management (Linear Project Track)

- Is this a Linear Project? Yes → See Develop./Redevelop Track → No Rule J Permit Needed
  - Does Project construct or fully reconstruct ≥ 5,000 square feet of impervious surface? No → Volume Control: Abstract larger of
    - a) 0.55 inches of runoff from the new & fully reconstructed imp surfaces; or
    - b) 1.1 inches of runoff from the net increase in imp area
  - Does Project create ≥ 1 acre of new and/or fully reconstructed imp surface? No → Volume Control: Abstract 1.1 inches of runoff from net increase in imp area
    - Plus Rate, WQ, Low Floor, Buffer Trigger

  Yes → Rate Control: Use Atlas 14 Post project peak 2, 10, & 100-year flows leaving the site must ≤ Pre-project
  - Water Quality: Annual TP Removal ≥ 60% and Annual TSS Removal ≥ 90% from site runoff
  - Low Floor Elev. ≥ 2’ above 100-yr
  - Triggers Rule D and Rule C
Adding a 300’ long, 16’ wide turn lane
Disturbing > 5000 sf
New + Recon. Imp area = 4,800 sf < 5000 sf
=> Rule J does not apply but Rule C applies
Linear Project

Adding a 300’ long, 16’ wide turn lane and fully reconstructing 600’x16’ of existing roadway
Disturbing > 5000 sf
New + Reconst. Imp area = 14,400 sf > 5000 sf
⇒ Rule J applies => abstract 1.1” from New Imp area
⇒ Rule C applies
Linear Project

Adding a 16’ wide lane and fully reconstructing 600’x16’ of existing roadway
Disturbing > 5000 sf
New + Reconst. Imp area = 72,960 sf = 1.67 ac > 1 ac
⇒ Rule J applies
⇒ Larger of:
  ⇒ 0.55” * (New + Reconst ) = (0.55”*1.67 ac = 0.92 “ac)
  , or
  ⇒ 1.1” * New Imp = (1.1”*1.45ac=1.6”ac)
⇒ Rule C applies
Adding a 600’ long, 16’ wide turn lane, Reconstructing ¾ mile of roadway, and Mill & Overlay
Disturbing > 5000 sf
New + Reconst. Imp area = 9,600 sf + 126,720 = 3.1 ac > 1 ac
⇒ Rule J applies
⇒ Larger of:
  ⇒ 0.55” * (New + Reconst) = (0.55”*3.1 ac = 1.71 “ac) , or
  ⇒ 1.1” * New Imp = (1.1”*.22ac=0.24”ac)
⇒ Rule C applies
Rule J: Stormwater Management (Development/ Redevelopment Track)

Is Project a Redevelopment?

Yes

Does Project
a) Disturb > 50% of Ex. Imp. or
b) Increasing parcel Imp by > 50%?

Yes: Criteria apply to entire parcel

NO: Criteria apply to disturbed area and additional Imperviousness

Rate Control:
Use Atlas 14 Post project peak 2, 10, & 100-year flows leaving the site must < Pre-project

Volume Control:
Abstract 1.1 inches of runoff from impervious surfaces

Water Quality:
Annual TP Removal ≥ 60% and Annual TSS Removal ≥ 90% from site runoff

Low Floor Elev. > 2’ above 100-yr

Triggers Rule D and Rule C