



Brown's Creek WD – 2017 Rule Revisions

December 13, 2017

BCWD 2017 Rule Revision Process

- Application of existing rules identified a number of areas that needed clarification
- Meeting with development community during Watershed Management Plan Update identified additional issues and concerns that the District wanted to evaluate
- Initiated Rule Revision Process Spring of 2017 – potential revision areas:
 - Housekeeping and clarification of definitions
 - Application of stormwater standards to redevelopment
 - Linear projects trigger from MIDS
 - Evaluate options for addressing stormwater management during construction
 - Revision of variance standard to “practical difficulties”



BCWD 2017 Rule Revision Process

- Reviewed possible revisions with member communities at the BCWD's Annual Meeting held on March 15, 2017
- Held a series of workshops for Board of Managers to discuss District policies and rule revisions
- Submitted revised rules and draft SONAR to the Board in October 2017
- Distributed for statutorily required review, October 18-December 4, 2017
- Public Hearing December 13, 2017



Policies Supported by BCWD Rules

- The BCWD is committed to **improving the quality of stormwater runoff** in order to reduce pollutant loadings to downstream waterbodies.
- The BCWD is committed to ensuring that activities within the watershed provide for **groundwater recharge**, provide **thermal protection** to Brown's Creek, and **reduce volume related impacts** to the District's water bodies.
- Protect the District's waterbodies from the impacts of **sedimentation**, excessive **streambank and shoreline erosion**, and adjacent **upland erosion**.
- The BCWD requires erosion and sediment controls in areas disturbed by development and construction related activities.



Policies Supported by BCWD Rules

- The BCWD is committed to the improvement of the **water quality** and **ecological integrity** of Brown's Creek and its tributaries, including maintaining a viable cold-water fishery.
- The BCWD strives to maintain the **hydrology** and **geomorphology** of Brown's Creek and its tributaries required for stream equilibrium and health.
- The BCWD is committed to the **restoration of water quality** in degraded lakes and to the **protection of water quality** in lakes that meet state water quality standards.
- The BCWD is committed to maintaining the **functions and values of high quality wetlands** and improving the functions and values of degraded and drained wetlands in the watershed.



Policies Supported by BCWD Rules

- The BCWD desires to minimize the **risks of flooding** associated with land alterations adjacent to landlocked basins.
- The BCWD supports the **protection of groundwater quality**.
- The BCWD is committed to **sustaining the quantity of groundwater** within the watershed.
- The BCWD is committed to sustaining and improving the **function & value** of groundwater dependent natural resources.
- The BCWD is committed to ensuring that the **rate of stormwater runoff** is controlled in order to reduce impacts to the watershed's water bodies.
- The BCWD will focus on keeping rules clear and up to date with revisions as needed.



Impairments of Concern

Watershed District	Affected Use / WQ Impairment
Brown's Creek North Branch	AQR, AQL
Brown's Creek Main Branch	AQR, AQL
Long Lake Tributary	AQR
Benz Lake	AQR
Long Lake	AQR
Lynch Lake	AQR
Plaisted Lake	AQR
South School Section Lake	AQR
Unnamed (Goggins)	AQR
McKusick Lake (<i>located outside of BCWD</i>)	AQR (nutrients)
St. Croix River (<i>located downstream of BCWD</i>)	Phosphorous



Strategies for Addressing Impairments

- Regulatory Program
- Education and Outreach
- Capital Improvement Program
 - Water Quality Improvement Projects
 - Retrofit Projects
- Incentive Programs
- Land Conservation



Governor Dayton's Water Quality Goal

- To accelerate the pace of progress towards clean water
- “25 by 25” or improve 25% of surface water resources by 2025
- Without additional action, the quality of Minnesota's waters is expected to improve only 6 to 9 percent





BCWD 2017 Rule Revisions

Statement of Need and Reasonableness (SONAR)

- Minnesota Statutes chapter 14 (Administrative Procedure Act) specifies the process and contents for rulemaking by state agencies. The APA does not apply to watershed district rulemaking, but the managers may direct staff to prepare additional information consistent with APA requirements.



Land Use Change in the BCWD

- New Development (infill)
- Redevelopment
 - Menard's Expansion
 - Herberger's (2nd Pizza Ranch site)
 - Cub Holiday Station
- Linear Projects
 - Road Reconstruction
 - Trail / paved connections (e.g. Neal Avenue)



Watershed District	Redevelopment Trigger
Brown's Creek Watershed District <i>(BCWD) - Proposed Rules</i>	10,000 SF of impervious cover
Brown's Creek Watershed District <i>(BCWD) – 2007 Rules - Current</i>	(5% of a 5 acre site = 10,890 SF) Disturb 50% of existing impervious
Rice Creek Watershed District <i>(RCWD)</i>	10,000 SF of impervious area
Capitol Region Watershed District <i>(CRWD)</i>	1 Acre of disturbance or 10,000 SF if adjacent to a Public Water
Minimal Impact Design Standard <i>(MIDS)</i>	1 Acre of disturbance or 10,000 SF if adjacent to a Special Water or Impaired Resource
Valley Branch Watershed District <i>(VBWD)</i>	6,000 SF of impervious cover
Middle St. Croix Watershed Management Organization <i>MSCWMO</i>	6,000 SF of impervious cover or 10,000 SF of disturbance
Carnelian Marine St. Croix Watershed District <i>(CMSCWD)</i>	5,000 SF of disturbance or no threshold for variance from impervious surface limit
Comfort Lake Forest Lake Watershed District <i>(CLFLWD) – Proposed Rules</i>	5,000 SF of impervious (new or reconstructed)
Nine Mile Creek Watershed District <i>(9MCWD)</i>	50 cubic yards or 5,000 SF of land disturbance
Riley Purgatory Bluff Creek Watershed District <i>(RPBCWD)</i>	50 cubic yards or 5,000 SF of land disturbance



Example Communities in Washington County, MN

- The following communities adopted a Stormwater Management threshold of **6,000 SF of impervious**.
 - Bayport
 - Bayport Township
 - Lakeland
 - Lakeland Shores
 - Lake St. Croix Beach
 - Stillwater (in MSCWMO)
 - St. Mary's Point
 - West Lakeland Township





BCWD Rule Revision Process

Definitions

Watershed District	Soil Group	Curve Number
Brown's Creek Watershed District <i>(BCWD) - "Pre-settlement"</i>	A Soil	30
	B Soil	57
	C Soil	70
	D Soil	77
Carnelian Marine St. Croix Watershed District <i>(CMSCWD) - "Pre-development"</i>	A Soil	30
	B Soil	58
	C Soil	71
	D Soil	78
Comfort Lake Forest Lake Watershed District <i>(CLFLWD) - "Pre-development"</i>	A Soil	30
	B Soil	58
	C Soil	71
	D Soil	78
Rice Creek Watershed District <i>(RCWD) - "Existing Condition"</i> <small>* Curve numbers from NRCS Technical Release #55 (TR-55).</small>	A Soil	39
	B Soil	61
	C Soil	74
	D Soil	80
Browns Creek Watershed District <i>(BCWD, 2000-2007 Rules) - "Pre-development"</i>	A Soil	39
	B Soil	61
	C Soil	74
	D Soil	80



Scope of Application

Watershed District	Application of rules to redevelopment activity
Brown's Creek Watershed District <i>(BCWD)</i>	<p>"If the proposed activity will disturb more than 50 percent of existing impervious surface, [stormwater management] will apply to all impervious surface on the project site. Otherwise, the criteria will apply only to net additional impervious surface. Notwithstanding, for road and other linear projects, only net additional surface will be considered."</p>
Carnelian Marine St. Croix Watershed District <i>(CMSCWD)</i>	<p>"If the proposed activity disturbs more than 50 percent of the existing impervious surface and results in a net increase in impervious surface, the criteria of section 2.4 will apply to all impervious surface on the project site. Otherwise, the criteria will apply only to the new and reconstructed impervious surface. Notwithstanding, for road and other linear projects, only net additional surface will be considered."</p>
Comfort Lake Forest Lake Watershed District <i>(CLFLWD)</i>	<p>"The criteria of section 2.4 will apply to all existing and new impervious surface on the project site."</p>
Rice Creek Watershed District <i>(RCWD)</i>	<p>"A permit is required for development, other than Public Linear Projects, that creates or reconstructs 10,000 square feet or more of impervious surface. This threshold is cumulative of all impervious surface created or reconstructed through multiple phases or connected actions of a single complete project, as defined by the District, on a single parcel or contiguous parcels of land under common ownership, development or use."</p>
Browns Creek Watershed District <i>(BCWD, 2000-2007 Rules)</i>	<p>Match pre-development conditions for rate, volume and water quality.</p>



Redevelopment Sites that met BCWD Rules

- **McDonalds:**
 - Lot size: 2.34 acres
 - Final impervious coverage: 1.28 acres (55% imp coverage)
 - Exceeded rule requirements – BCWD, NPDES
 - Met with subsurface infiltration system including pretreatment
- **Brackey 4th Addition:**
 - Lot size: 8.9 acres
 - Designed for 85% impervious coverage
 - Rule requirements – BCWD (difference between 2000 & 2007)
 - Met using evapotranspiration (via tree trenches along portions of the perimeter and in parking lot islands) and the creation of a filtration basin





BCWD Rule Revision Process

Definition of Reconstruction

- “Reconstruction” means alteration of existing surfaces in a manner or to extent that exposes underlying soils. Mill, overlay and other resurfacing projects are not considered to be reconstruction.



Existing Regulatory Agreements

- **BCWD has two agreements**
 - Project to Manage Stormwater and Protect Water Quality in the BCWD, Washington County, MN (*TSMP Agreement*)
 - Kern Center Pond, Oak Park Heights
- **Proposed rule revisions do not impact existing agreements**



Design Standards

- 2.7 Required Exhibits. The following items, submitted in duplicate and certified by a professional engineer registered in the State of Minnesota, registered land surveyor, or other appropriate professional must accompany all permit applications submitted to the District pursuant to Rule 2.0:
 - 2.7.1 Designs and construction plans for stormwater management BMPs prepared in accordance with the most recently amended editions of the following:
 - (a) Minnesota Pollution Control Agency, Stormwater Manual.
 - (b) Minnesota Pollution Control Agency, Protecting Water Quality in Urban Areas Manual.
 - (c) Minnesota Department of Transportation, Erosion Control Handbook II.
- Process issue and not a standards issue that benefits the applicants



Variance Standard

- **Multiple discussions with the Board of Managers on the variance language**
- **“Practical difficulties” more difficult for District Staff to apply**
- **Undue Hardship factors more suited to watershed regulatory framework**

