



RAMSEY-WASHINGTON
METRO WATERSHED DISTRICT

Permit Guidance and Information Handbook

Updated 4/27/21

The information in this handbook should be used in conjunction with the Ramsey-Washington Metro Watershed District Rules, not as a stand-alone item. The full rules, additional guidance, and permitting resources are available at www.rwmwd.org/permits.



When is a permit required?

A permit is required from the Ramsey-Washington Metro Watershed District (hereby referred to as 'District') when one or more of the following conditions are met. Potential applicants are encouraged to call District staff with any questions:

Nicole Soderholm, Permit Coordinator

(651) 792-7976

nicole.soderholm@rwmwd.org

Rule C: Stormwater Management

Any land disturbing activity greater than one acre.

Rule D: Flood Control

Any land disturbing activity greater than one acre that increases impervious area, **or** any land disturbing activity of any size that involves alteration or fill of land below the 100-year flood elevation of a water body.

Rule E: Wetland Management

Any activity that may fill, drain, excavate, or otherwise impact the character of a wetland, either permanently or temporarily (requires Wetland Conservation Act application), unless specifically exempted by Rule E. Developments permitted under other District rules may need to comply with wetland buffer requirements.

Rule F: Erosion and Sediment Control

Any land disturbing activity greater than one acre, **or** activity greater than 1,000 square feet **and** adjacent to a water body.

Rule G: Illicit Discharge and Connection

Any direct connections, replacement of existing connections, or significant changes to hydrology entering the District's Beltline Interceptor storm sewer or other components of the District's Municipal Separate Storm Sewer System (MS4), related to developed or undeveloped lands of any size.

Permit applications may be completed and submitted at www.rwmwd.org/permits.



Rule C: Stormwater Management Guidance

What am I required to do for stormwater management?

Applicants are required to meet three major standards pertaining to stormwater management on their site.

1. Rate Control– Proposed runoff rates shall not exceed existing runoff rates for the 2, 10, and 100-year critical storm events using Atlas 14 rainfall depths and MSE3 rainfall distributions.
2. Volume Reduction– Stormwater runoff volume reduction shall be achieved onsite in the amount of 1.1 inches of rainfall off new **and** reconstructed impervious surfaces. To achieve the most effective treatment, stormwater Best Management Practices (BMPs) may retain a maximum of 2.5” of runoff over their tributary impervious surfaces.
3. Water Quality– Developments must incorporate BMPs that achieve 90% total suspended solids (TSS) removal from the disturbed area of the project on an annual basis. If applicants have sufficiently addressed the above Volume Reduction Requirement, then TSS removal requirements are generally considered met without additional documentation —however, additional water quality calculations and/or water quality modeling may be requested.

The following computer modeling programs will be accepted: HydroCAD, XP SWMMM, and TR-20. Other programs will be accepted as approved by the District.

What if I am not able to infiltrate on my site?

See Table 1 in Rule C for site conditions that may make it impossible or undesirable to infiltrate stormwater. Refer to the Minnesota Stormwater Manual for additional information on infiltration within Drinking Water Supply Management Areas (DWSMAs) and on sites with contamination concerns. If limitations exist on the proposed site, the applicant must submit documentation to that effect. The applicant should follow the alternative compliance sequencing outlined in Rule C in order to determine the best way to meet the volume reduction standard.

What is alternative compliance sequencing?

The alternative compliance sequencing process includes three steps that must be followed in order to meet the volume reduction standard*:

*This applies to the volume reduction portion of Rule C only. Onsite rate control requirements shall be fully met onsite.

1. First, the applicant shall comply or partially comply with the volume reduction standard to the fullest extent practicable onsite through infiltration, stormwater reuse, or alternative volume reduction methods.
2. The applicant shall meet the volume reduction standard at an offsite location or through the use of qualified banking credits.
3. As a last alternative, the applicant shall pay into the District's Stormwater Impact Fund to cover the cost of implementing volume reduction projects elsewhere in the watershed.

What are some examples of alternative volume reduction Best Management Practices (BMPs)?

If infiltration is not feasible on the site, there are other techniques to reduce volume that are eligible alternatives. Below is a list of possible alternative volume reduction BMPs. This list is not meant to be all-inclusive. These techniques and design guidance can be found in the MN Stormwater Manual.

The District will consider credits towards the volume reduction standard as follows:

- Filtration practices shall be credited at 55%. For filtration, only the storage volume provided below the outlet of the BMP will be credited towards the volume reduction requirement. Perforated drain pipes for filtration will not be considered the low overflow outlet. For above-ground filtration practices with a soil or sand medium, void space will not be credited towards the volume reduction requirement.
- Iron-enhanced filtration systems shall be credited at 80%. Other enhanced systems may be allowed and credited as approved by the District.

Applicants are encouraged to use Low Impact Design techniques to reduce and/or disconnect impervious surfaces. Areas that meet the MN Stormwater Manual's criteria for disconnected impervious may be considered in rate control modeling.

How do I determine if the pretreatment provided is adequate?

Infiltration and filtration BMPs require varying degrees of pretreatment of stormwater runoff in order to remove solids and maintain the long-term performance of the systems. The degree of pretreatment needed depends largely on the area draining to the BMP. The applicant should use the MN Stormwater Manual for guidance or provide documentation that justifies the pretreatment design, sizing, and method(s) selected. Multiple BMPs for removal and settling of sediment are recommended.

What is required for long-term BMP maintenance?

All stormwater management BMPs require maintenance to assure that the systems function as designed. Rule C requires that a maintenance agreement between the District and the responsible party be executed with the property. The legal agreement is considered a component of the overall BMP Operations & Maintenance Plan (template and checklist available at www.rwmwd.org/permits). A draft, site-specific stormwater O&M Plan shall be submitted before the permit is issued. Prior to permit closure, a final as-built O&M Plan shall be submitted. Stormwater BMPs installed by public entities may be covered under a Memorandum of Agreement.

Can I provide additional stormwater treatment on my site?

Stormwater treatment above and beyond the permit requirements may be eligible for cost-share opportunities with the District, up to 100% coverage. For more information, contact:

Paige Ahlborg, Watershed Project Manager

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To achieve the most effective treatment, stormwater BMPs may retain a maximum of 2.5" of runoff over the impervious surfaces of a development. For applicants with future development in mind, projects may "bank" additional volume reduction credits in the form of cubic feet to apply to future projects or phases of development. Oversized or additional BMPs for credit banking are not eligible for cost-share assistance.



Rule D: Flood Control

Guidance

What is required if I want to fill or build in a floodplain?

No placement of fill within the 100-year floodplain is allowed unless compensatory storage is provided onsite or immediately adjacent to the proposed development. Compensatory storage shall result in the creation of floodplain storage to fully offset the loss of storage resulting from the placement of fill.

What is the definition of a floodplain?

A floodplain is the area adjoining a watercourse or natural or man-made water body, including the area around lakes, marshes, and lowlands that are inundated during a 100-year flood.

Are there freeboard requirements that need to be met?

Yes. Reference Table 2 in Rule D for more information on the freeboard requirements for different structures.

Are there any other requirements?

Rule D also requires that emergency overflow swales or structures be constructed to convey the 100-year peak discharge away from buildings and other structures.



Rule E: Wetland Management Guidance

How do I know if I have a wetland on my property?

Wetlands may exist on your site even if you do not see standing water. Staff have identified the location of most wetlands in the District through a wetland inventory. A link to the District's wetland inventory map can be found at www.rwmwd.org/permits.

Although most wetlands in the District have been identified and classified, most have not been delineated. It is the permit applicant's responsibility to complete a certified wetland delineation for approval if applicable. It is also important to check different agency resources to determine whether or not wetlands may exist on your site:

MN Department of Natural Resources Public Waters Inventory (PWI)
www.dnr.state.mn.us/waters

U.S. Fish & Wildlife Service National Wetlands Inventory (NWI)
www.fws.gov/wetlands

What if I want to impact a wetland on my site?

The Wetland Conservation Act (WCA) requires project applicants to complete a sequencing analysis before proposing to drain, fill, or excavate wetlands by completing the following steps:

1. Attempt to **avoid** direct or indirect impacts to wetland(s);
2. **Minimize** impacts to wetland(s) by limiting the degree or magnitude of wetland activity;
3. **Rectify** temporary impacts by repairing, rehabilitating, or restoring the affected wetland(s);
4. **Reduce** or eliminate impacts over time by preserving wetland areas through proper maintenance, management, and operation of the project;
5. **Replace** unavoidable wetland impacts by creating a new wetland of the same classification at a minimum 2:1 ratio.

The District is the WCA Local Government Unit (LGU) for all city areas within its boundaries except the City of St. Paul and within MnDOT Right-of-Way. A separate application form and process is required for projects proposing to impact a wetland. District staff should be contacted as early as possible to start the permitting process. Additional WCA information and materials including the permit application form can be found on the Minnesota Board of Water and Soil Resources (BWSR) website:

www.bwsr.state.mn.us/wetlands

Wetland buffers must be preserved in all developments greater than 1 acre that are adjacent to a wetland, even if the wetland is not located on the same parcel as the proposed development. Buffers are enforced according to the District's wetland management classifications and are based on the quality of the wetland in question. For developments less than 1 acre, project applicants must comply with city buffer requirements, if applicable.

Am I able to grade or otherwise disturb the land in the buffer areas?

The required buffers are not to be disturbed. Generally, buffers may not be graded or contain stormwater BMPs. In areas where buffer preservation is not feasible, grading may be allowed as long as the required buffer width is achieved post construction with restoration of a native buffer. Temporary buffer impacts may require approval with the District Board of Managers through a variance request.



Rule F: Erosion and Sediment Control Guidance

What is required for erosion and sediment control?

The District requires an applicant to submit an erosion and sediment control plan that complies with the following general criteria:

1. At minimum, plans shall comply with the standards of the Minnesota Pollution Control Agency's (MPCA) NPDES Phase 2 Construction Permit.
2. Natural site topography and soil conditions shall be used to control runoff and reduce erosion.
3. Construction activity shall be phased when possible to minimize disturbed areas at any given time.
4. All construction waste shall be properly managed and disposed of to avoid adverse impacts to water quality.
5. All erosion and sediment control measures shall be installed before commencing land disturbing activity and shall not be removed without District approval or until the District has closed the construction permit. Applicants may phase installation of erosion and sediment control measures provided the phasing plan is included in the approved plans set.
6. The applicant shall be responsible for proper operation, maintenance, and regular inspection of all erosion and sediment control measures until the site is fully restored.
7. The approved erosion and sediment control measures are to be considered the minimum requirements. Additional practices may be required by District inspection staff during the course of construction.
8. The applicant must submit a Stormwater Pollution Prevention Plan (SWPPP) that meets MPCA criteria and provide contact information for the trained erosion control coordinator responsible for implementing the SWPPP.



Rule G: Illicit Discharge and Connection

What is required to connect to the Beltline Interceptor or other parts of the District's MS4?

New direct connections and replacement of existing connections require a permit from the District. Connections must be done according to approved District methods. Peak flow rate must be managed so as not to cause new water conveyance problems or exacerbate existing problems in the District's MS4. Enlargement of existing connections is considered a new connection.