

Excerpts from December 2024 proposed revisions version of the Requirements Document to show proposed revisions regarding linear project standards, chloride management plan standards, and stream and wetland buffer standards.

This document assumes December 2024 proposed revisions to Requirements document are accepted as-is; additional proposed changes are shown as tracked changes.

2.0 Types of Projects to be Submitted for Review

2.2 Rate Control

Proposed new, **nonlinear** development projects that create one or more acres of new **impervious surface** or **nonlinear redevelopment projects** that create one or more acres of new and/or fully reconstructed **impervious surface** must be submitted to the **BCWMC** for **rate control** review. Proposed **linear projects** that create one or more acres of ~~net-new~~ and/or fully reconstructed **impervious surface** must be submitted to the **BCWMC** for **rate control** review. Requirements for **rate control** are described in Section 5.0.

2.3 Water Quality

Proposed new, **nonlinear** development projects that create one or more acres of new **impervious surface** or **nonlinear redevelopment projects** that create one or more acres of new and/or fully reconstructed **impervious surface** must be submitted to the **BCWMC** for water quality review. Proposed **linear projects** that create one or more acres of ~~net-new~~ and/or fully reconstructed **impervious surface** must be submitted to the municipality for water quality review and permitting. Proposed linear projects that create five or more acres of new and/or fully reconstructed impervious surface must be submitted to the **BCWMC** for water quality review. Requirements for water quality treatment are described in Section 6.0.

3.0 Review Process

3.1 Procedure for BCWMC Review

- 3.0 Some proposed projects require board approval at a **BCWMC** meeting. Except as noted, all submittals impacting **floodplains** (as defined in Section 2.1), lakes, streams, or wetlands, or involving the Bassett Creek **trunk system**, variances, linear construction or reconstruction projects with ~~disturbing~~ 5 acres ~~acres~~ or more of new and/or fully reconstructed impervious surfaces, or alternative **BMPs** not included in the most current version of the Minnesota Stormwater Manual require board approval at a **BCWMC** meeting.

5.0 Rate Control Requirements

Proposed, **nonlinear** projects creating one or more acres of new and/or fully reconstructed **impervious surfaces** must manage stormwater runoff such that peak flow rates leaving the site are equal to or less than the existing rate leaving the site for the 2-, 10-, and 100-year events based on Atlas 14 precipitation amounts and using a nested 24-hour rainfall distribution. Documentation of existing and proposed discharge rates for the 2-, 10-, and 100-year events must be provided to the **BCWMC** for review.

Proposed **linear projects** containing one or more acres of ~~net-new~~ and/or fully reconstructed **impervious surfaces** must manage stormwater runoff such that peak flow rates leaving the site are equal to or less than the existing rate leaving the site for the 2-, 10-, and 100-year events based on Atlas 14 precipitation amounts and using a nested 24-hour rainfall distribution. Documentation of existing and proposed discharge rates for the 2-, 10-, and 100-year events must be provided to the **BCWMC** for review.

Recognizing that linear projects can present challenges to meeting rate control requirements at the project scale, if rate control cannot be achieved at this scale, project proposers can follow an alternative rate control standard where they must show that proposed rate increases do not:

- exceed the capacity of downstream conveyance systems,
- contribute to downstream local flooding,
- increase flooding in the downstream BCWMC trunk system (i.e., meet “no rise” requirement) if the trunk system is the first downstream conveyance or water body, or
- negatively impact downstream local water resource values (e.g., wetland functions and values).

Disconnected trails, disconnected sidewalks, and miscellaneous disconnected **impervious surfaces** (concrete/bituminous pads, etc.) are exempt from **BCWMC rate control** policies.

6.0 Water Quality Requirements

6.1 Performance Goal

6.1.2 Linear Projects

Linear projects on sites without **restrictions** that create one or more acres of ~~net-new~~ and/or fully reconstructed **impervious surfaces** must capture and retain onsite the larger of: 1.04 inches of runoff from the net increase in impervious surface – or 0.5 inches of runoff from the net-new and/or fully reconstructed impervious surfaces.

If the performance goal is not feasible and/or is not allowed for a proposed project, then the project proposer must implement the flexible treatment options, as shown in the **BCWMC** Design Sequence Flow Chart in Appendix A. ~~Net-New and/or fully reconstructed~~ **new impervious surface** calculations will be based on the street surface from back of curb to back of curb; disconnected trails/sidewalks (as noted in Section 6.0) and driveways are not included in the ~~net-new~~ and/or fully reconstructed **impervious surface** calculations.

For **linear projects** that create one (1) or more acres, but less than five (5) acres of new and/or fully reconstructed **impervious surfaces**, the municipality must complete the BCWMC linear project review checklist [to be developed] or other documentation and include in annual reporting back to the BCWMC at the end of each year or provide to the BCWMC at the time of project permitting/design. For **linear projects** that create five (5) or more acres of new and/or fully reconstructed **impervious surfaces**, the applicant must complete the BCWMC linear project review checklist [to be developed] or other documentation and include with BCWMC application submittal.

6.2 Flexible Treatment Options

If an applicant is unable to achieve the performance goals due to site **restrictions**, flexible treatment options must be implemented following the **BCWMC** design sequence flow chart (see Appendix A). The presence of low-infiltrating soils, shallow bedrock, and karst topography are examples of locations that are not conducive to infiltration as a stormwater management approach. Other **restrictions** include but are not limited to sites that have contaminated soil or shallow groundwater, existing building or utility conflicts, or other site constraints such as zoning requirements that create difficulties in providing volume reduction.

Using the flow chart, project proposers are taken through a step-by-step approach to document site **restrictions** and how they have attempted to meet the 1.04-inch or 0.5-inch performance goal. If the performance goal is shown to be infeasible, a 0.55-inch performance and a 75 percent annual total phosphorus removal goal is explored, followed by a maximum extent practicable volume reduction and a 60 percent annual total phosphorus removal goal, and then a final option to meet the 1.04-inch volume reduction goal at an off-site location.

6.4 Maintenance *[new section per Dec 2024 proposed revisions]*

6.4.2 Chloride Management Plan

For sites that require a stormwater maintenance agreement with the municipality, the applicant must prepare and implement a Chloride Management Plan addressing the use of chloride on the site. These plans, at a minimum, must include:

- Contact information for responsible party for overseeing winter maintenance activities at the site;
- Site address;
- Nearest downstream receiving waterbody (lake or stream);
- List of personnel responsible for conducting winter maintenance activities and their certification and certification expiration date(s);
- Types of deicers to be used and expected rates of application; and
- A map and narrative indicating snow storage and deicer storage locations, and sensitive areas to avoid application.

The chloride management plan shall be annually reviewed, and updated as necessary.

In all other situations, The BCWMC encourages property owners to develop and implement a winter maintenance plan addressing the proper storage and use of chloride and other deicers and chloride management plan to reduce environmental, structural, and landscaping degradation caused by the overuse of salt.

More information is available at <https://www.bassettcreekwmo.org/developer/winter-maintenance>.

7.0 Erosion and Sediment Control Requirements

1. For proposed **nonlinear** projects that will result in 200 cubic yards or more of cut or fill, or 10,000 square feet or more of **land disturbance**, and proposed **linear** projects that result in one or more acres ~~of land disturbance~~ ~~of net new impervious surface~~, an **erosion and sediment control** plan must be prepared that meets the requirements listed below. It is recommended that applicants follow the standards given in the NPDES Permit for Construction Activity (MPCA) and Minnesota Stormwater Manual. Individual single family home sites are exempt from this requirement. For maintenance dredging projects, the cut/fill and land disturbance trigger calculations do not include work below the normal water level of the water body to be dredged.

Appendix B

Buffer Requirements

From latest version of Buffer Requirements, revised 2017

Buffer Requirements

The **BCWMC** requires that ~~member cities~~ municipalities maintain and enforce:

- Wetland buffer requirements for proposed projects that will result in 200 cubic yards or more of cut or fill, or 10,000 square feet or more of land disturbance. For individual single family home lots, the wetland buffer trigger only applies if the proposed activity is immediately adjacent to a wetland.
- ~~containing more than one acre of new or fully redeveloped impervious area and~~ **Priority stream** buffer requirements for proposed projects that will result in ~~more than~~ 200 yards or more of cut or fill, or ~~more than~~ 10,000 square feet or more of **land disturbance**. **Priority streams** in the Bassett Creek watershed include the Main Stem of Bassett Creek, the North Branch of Bassett Creek, the Sweeney Lake Branch of Bassett Creek, and Plymouth Creek. A map of the priority streams can be found in Figure 2-8 of the Plan.

Buffer requirements will vary depending on the type of water body and classification of the water body. Buffers areas are areas of vegetative cover that are upland of the delineated wetland edge or the ordinary high water level of the stream (determined as the average top of bank elevation consistent with MDNR guidance [MDNR, 1993]) edge, and that occur in a natural condition or through restoration. Buffer areas consist of shrubbery and trees, and native grasses or forbs or both that are typically not mowed, fertilized or manicured in any manner. These strips of land surrounding water bodies protect their shorelines from erosion, while serving to filter sediment, chemicals and other nutrients before stormwater discharges into the water body. Buffer strips are also beneficial in providing habitat for wildlife.

As noted, the **BCWMC** does not specifically review buffers for proposed projects. The following sections include the minimum buffer requirements that must be included in each member city's local controls. Member city buffer requirements may be more stringent than the minimum requirements specified herein.

B.1 Buffer Width Requirements

B.1.1 Wetland Buffer Width Requirements

Municipalities' ~~ember city~~ local controls must require average minimum buffer widths according to the Minnesota Rapid Assessment Method (MnRAM) classification (or similar classification system approved by the municipality):

- An average of 75 feet and a minimum of 50 feet from the delineated edge of wetlands classified as Preserve.
- An average of 50 feet and a minimum of 30 feet from the delineated edge of wetlands classified as Manage 1.
- An average of 25 feet and a minimum of 15 feet from the delineated edge of wetlands classified as Manage 2 or Manage 3 (Policy 68).

A plan showing the delineated boundary of the **wetland**, proposed buffer area, and MnRAM classification for the **wetland** must be submitted for city review. Maintenance of the buffer area must be included in the maintenance agreement developed between the city and the applicant.

B.1.2 Stream Buffer Width Requirements

~~Member city~~ Municipalities' local controls must require the following buffer widths adjacent to **priority streams**:

- For individual single family homes, the buffer width must be at least~~of~~ 10 feet or 25 percent of the distance between the ordinary high water level (measured from ordinary high water level, determined as the average top of bank elevation consistent with MDNR guidance [MDNR, 1993]i.e., the top of the bank of the channel) and the nearest existing **structure**, whichever is less. ~~(Policy 64)~~.
- For all other proposed projects, the buffer width must be an average of 30 feet and a minimum of 20 feet (measured from ordinary high water level, determined as the average top of bank elevation consistent with MDNR guidance [MDNR, 1993])

A plan showing the ordinary high water level of the stream (measured from ordinary high water level, determined as the average top of bank elevation consistent with MDNR guidance [MDNR, 1993]i.e., the top of the bank of the channel), nearest adjacent **structure**, and proposed buffer area must be submitted for city review. Maintenance of the buffer area must be included in the maintenance agreement developed between the city and the applicant.

Alternative Buffer Width Requirements

Municipalities may accept narrower buffer strips in certain situations, on a case-by-case basis, due to the unique physical characteristics of a specific project site. Narrower buffer strips would be allowed (minimum required width of 10 feet) based on an assessment of individual site conditions, such as: parcel size, roads/utilities, or undue hardship that would occur if the buffer standards were applied.

- Parcel size.
- Existing roads and utilities on the parcel.
- Percentage of the parcel covered by streams.
- The configuration of the streams on the parcel.
- Any undue hardship that would arise from not allowing the alternative buffer strip.

Municipalities must provide reporting/documentation to BCWMC at the end of each year or at time of project permitting/design, regarding occurrences and reasons for when alternative buffer width standards are applied.

B.2 Buffer Design Requirements

- Buffer required for all proposed projects shall be limited to property owned or managed by the applicant (i.e. to the extent of a drainage and utility easement owned by a city on a city

stormwater project or to the property boundary on a commercial, institutional, or residential project).

- Buffer areas must be left native if not disturbed as part of the project and where acceptable natural vegetation exists. A buffer has acceptable natural vegetation if it:
 - Has a continuous, dense layer of perennial grasses that have been uncultivated or unbroken for at least five consecutive years, or
 - Has an overstory of trees or shrubs with at least 80 percent canopy closure that have been uncultivated or unbroken for at least five consecutive years, or
 - Contains a mixture of the plant communities described above that have been uncultivated or unbroken for at least five consecutive years.
- Buffer areas must be planted with native plants if disturbed as part of the project (plantings must be comprised of at least 75% native species).
- Soil in the buffer areas disturbed as part of the project shall be amended, as necessary, to ensure that the soil has an organic content of not less than 10 percent and not more than 35 percent.
- Buffers must be kept free of all **structures** and features, including fences and play equipment.
- Buffers shall not be used for storage of household and personal items, lawn equipment, furniture, firewood, parts, yard waste, and the like.
- A conservation easement or equivalent to the city for the buffer area is recommended to ensure appropriate maintenance of the buffer.
- Buffer vegetation must not be cultivated, cropped, pastured, mowed, fertilized, subject to the placement of mulch or yard waste, or otherwise disturbed, except for periodic cutting or burning that promotes the health of the buffer, actions to address disease or invasive species, mowing for purposes of public safety, temporary disturbance for placement or repair of buried utilities, or other actions to maintain or improve buffer quality and performance.
- The edge of the buffer must be indicated by permanent, free-standing markers at the buffer's upland edge. A marker will be placed along each lot line, with additional markers at an interval of no more than 200 feet or where needed to indicate the contour of the buffer area.

B.3 Buffer Maintenance Requirements

The affected property owner or homeowner association that is responsible for the maintenance must:

- Maintain and repair damage to buffer areas from such activities as mowing, cutting, grading or other prohibited activities, unless mowing is approved by city staff as a buffer management strategy. Permission must be obtained from the city before implementing buffer management strategies, which may include mowing, burning, and the use of herbicides.
- Be responsible for maintaining only the permitted vegetation in the buffer area and must remove all noxious weeds and invasive, non-native species such as European buckthorn.
- Ensure that all soil surfaces in the buffer area are planted with the permitted vegetation and that there is no open soil surface that may result in erosion.

B.4 Buffer Exemptions

Exemption areas must be properly designed, maintained, and constructed to prevent erodible conditions. The **BCWMC** will allow the following exemptions from the buffer requirements to be included in member city local controls, at the discretion of the member city:

- Public recreational facilities adjacent to the feature (e.g. trails, stairways, and docks) up to 20 feet in width will be allowed, with that width being added to the required buffer width.
- Minimally improved areas within the buffer for private access to the feature will be allowed (e.g. wood chip trails, stairways, and docks).

A perpendicular access to the feature is allowed up to 20 feet in width or 20 percent of the lot width, whichever is more restrictive.