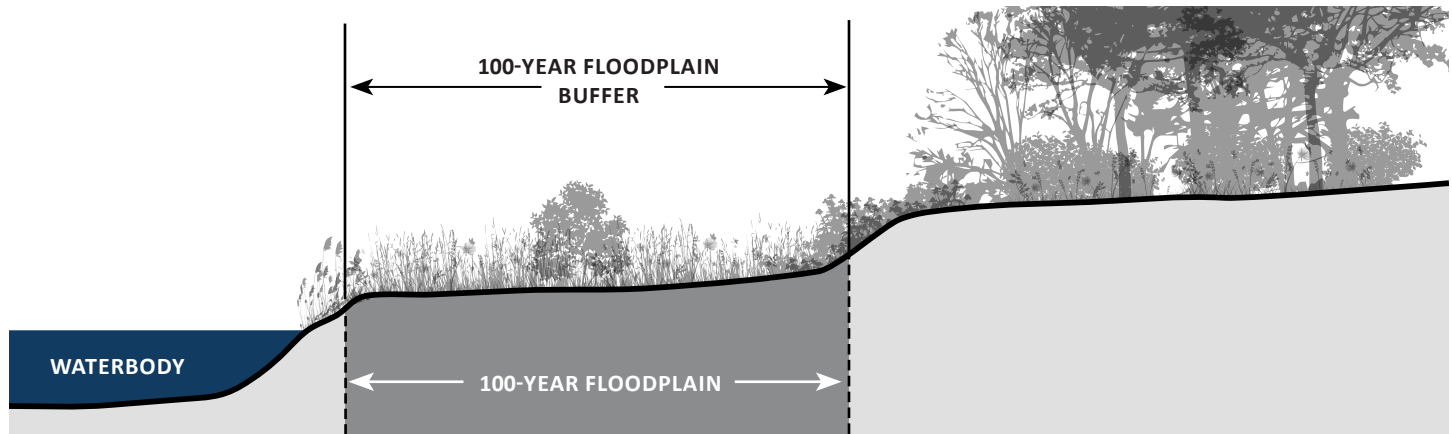


Additional Buffer Considerations

For Lake, Stream, and Wetland Buffers per BCWD Rules 4.3.1 -4.3.4

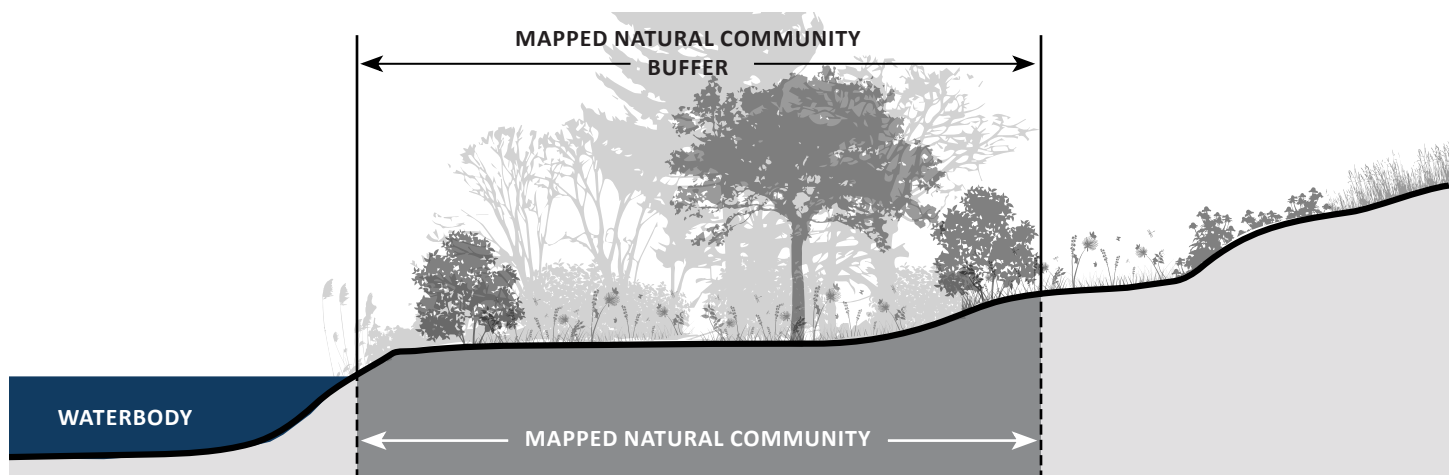
100-Year Floodplain Buffer

If the floodplain¹ extends past the standard buffer (Rule 4.3.1), the buffer must be extended to include it. Per Rule 4.3.4, where the 100-year floodplain extends further than the upland edge of the lake buffer, wetland buffer, or middle zone of the stream buffer specified in Rule 4.3.1, the zone or buffer must extend to the upland edge of the floodplain.



Mapped Natural Community Buffer

If a mapped natural community² (associated with the water body) extends past the standard buffer (Rule 4.3.1), the buffer must be extended to include it. Per Rule 4.3.2, where a mapped natural community is associated with a stream, lake, or wetland subject to rule 4.0, the upland edge of the buffer or, for a stream, the middle zone, must be as specified in subsection 4.3.1 or contiguous with the upland edge of the mapped natural community, whichever is greater.



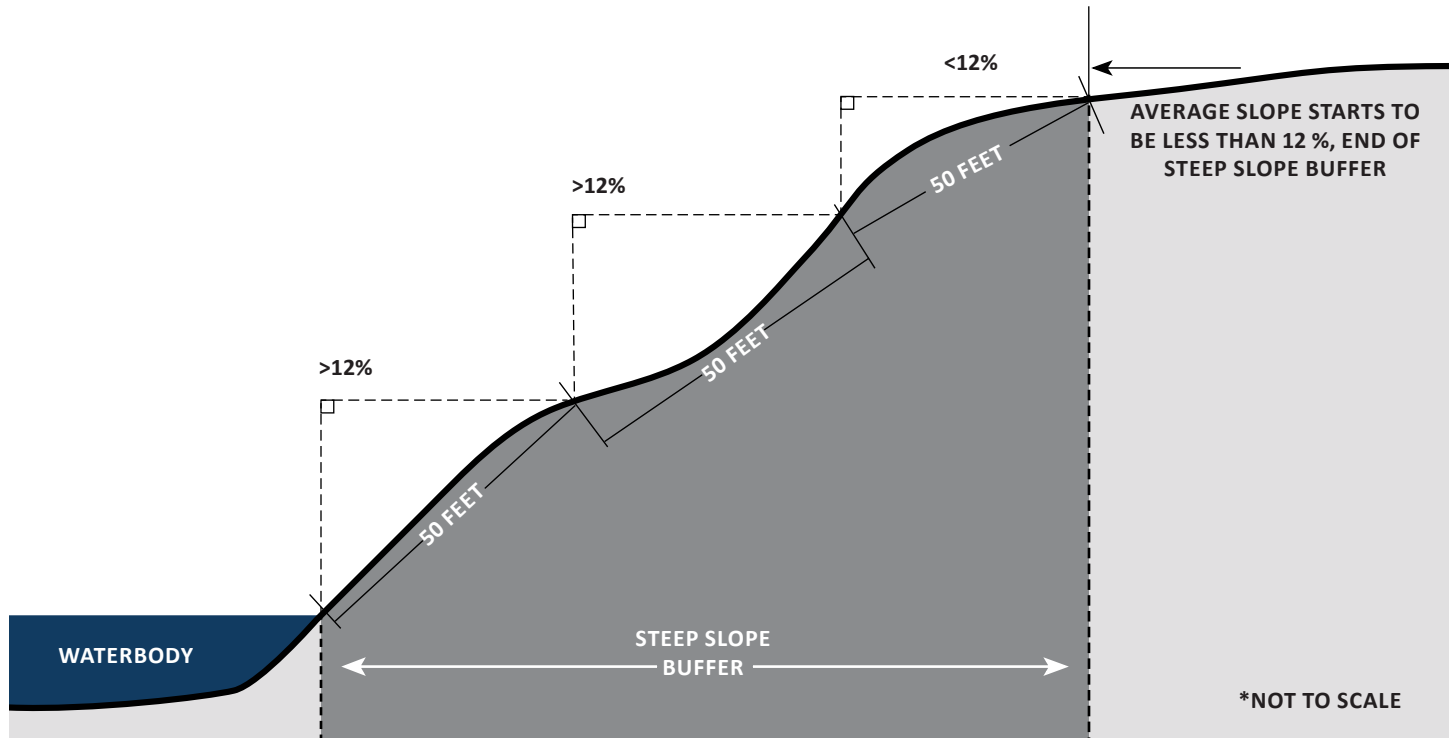
1 "Floodplain" means the area adjoining a watercourse, or a natural or constructed water basin, including areas around lakes, wetlands, stormwater ponds, depressions, and intermittent and perennial streams, that is inundated by the 100-year 24-hour rainfall event or, for landlocked basins, the 100-year 10-day rainfall event.

2 "Mapped natural community" means a natural community identified in "Natural Communities and Rare Species Map for Washington County" (MNDNR, Natural Heritage Program, 1990), or in a natural resources inventory using the same protocol as established by the Minnesota Department of Natural Resources.

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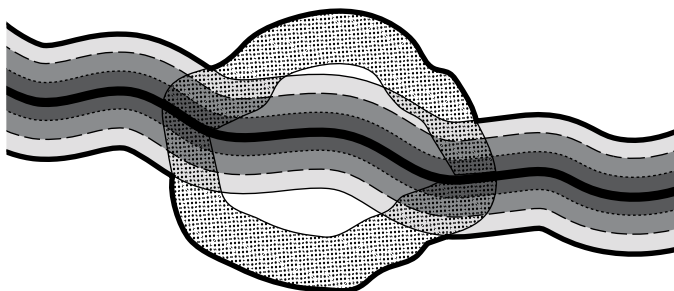
Steep Slope Buffers (greater than 12%)

When slopes leading to the water body have an average slope greater than 12% when measured over 50 feet, the upland edge of the standard buffer (Rule 4.3.1) must be extended until the average slope measured over 50 feet is less than 12%. Where a lake or wetland buffer, or a streamside or middle zone of a stream buffer, encompasses all or part of a steep slope, the buffer must extend to the distance specified in Rule 4.3.1 or to the top of the steep slope, whichever is greater. An existing contour alteration or artificial structure on a steep slope constitutes a break in slope only if it indefinitely will dissipate upgradient velocity and trap upgradient pollutant loading.



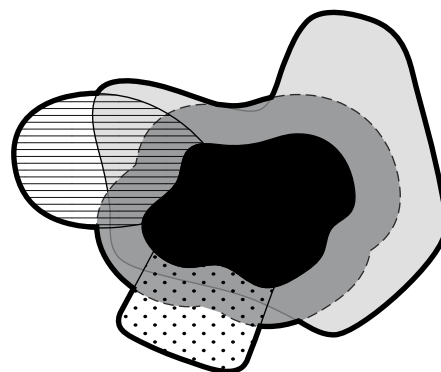
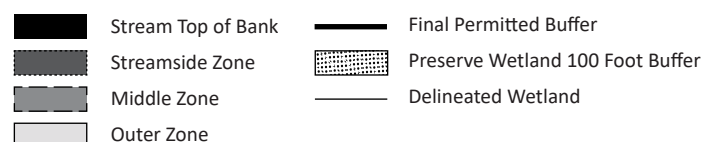
More Than 1 Buffer Rule Can Apply

If more than one buffer rule applies, the final buffer is extended to include ALL applicable Rule triggers and considerations. (BCWD Rules 4.3.1-4.3.4).



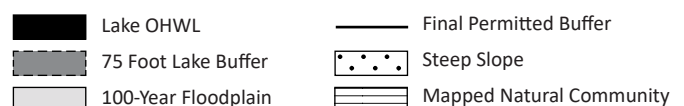
Example: Two waterbodies overlap

Shown here: Stream buffers and wetland buffer overlap



Example: Water body with multiple additional considerations.

Shown here: Lake buffer with intersecting steep slopes, mapped natural community, and 100-year floodplain



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