Vermillion River Watershed
Joint Powers Organization
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The Vermillion River Watershed encompasses an area of approximately 335 square miles, including portions of two counties and all or portions of 20 cities, towns, and townships. The main stem of the river begins in southeastern Scott County in New Market Township flowing east through central Dakota County, passing over a waterfall in the City of Hastings, and then discharging to the Mississippi River both through a northerly flowing outlet near the City of Hastings as well as through a southerly flowing outlet near the City of Red Wing, Minnesota.

What are some examples of buffer requirements?

An existing 80-acre parcel is farmed, has no buildings, and has two eligible building sites. The owner sells the property, and the new owner wants to split the property into three new lots, one lot of 77 acres and two lots of 1.5 acres each to use the two building eligibilities. The 77-acre piece will still be farmed, but the other two pieces are going to the new owner's children to build their houses. *The buffer requirement would be in effect on the two 1.5-acre lots if the zoning changes from agricultural to residential, and would not be in effect on the 77-acre parcel, as it would remain zoned agricultural.*

A 10-acre parcel is going to be split into eight lots, six lots of one acre each and two two-acre lots. The owner is going to build on one of the two-acre lots but is doing nothing with the other lots. *The buffer requirement would be in effect on all of the lots unless located in an area zoned agricultural.*

A parcel of 20 acres was split into 5 lots of 4 acres each about 20 years ago. The owner is going to sell the property. *The buffer requirement does not come into effect unless the new owner further subdivides the lots.*

A 60-acre parcel is farmed and is being split into two parcels, one of 40 acres and one of 20 acres. A house, sheds, and bins are going to be built on about an acre of the 20 acre parcel, but the majority of the 60 acres will continue to be farmed. *The buffer requirement would not come into effect if the properties continue to be zoned agricultural and/or continue to be enrolled in Green Acres, Rural Preserves, or Agricultural Preserves.*

Where can I find the current Standards?

The Standards are in Appendix B of the Watershed Plan on the Vermillion River Watershed website: www.vermillionriverwatershed.org, under "Plans/Reports."

Frequently Asked Questions #4

Buffer Standard

What are buffers and why are they necessary?

In a watershed setting, buffers are bands or strips with permanent vegetation that run adjacent to a stream or wetland. The purpose of a buffer is to provide a protective barrier or cushion between activities occurring on the upland side of the buffer and the stream or wetland.

Research on riparian (streambank) buffers has shown that appropriately designed buffers protect and improve water quality by intercepting pollutants carried in surface runoff and shallow subsurface water flow. The riparian zone is an area that is transitional between the land and the water. Although it makes up a small portion of the landscape, it has a critical impact on the water quality in the stream, as well as the number of animal and plant species supported in the landscape.

A healthy and properly buffered riparian zone stabilizes the shoreline or stream bank, provides erosion-control benefits, provides a source of organic matter for aquatic organisms, captures nutrients, reduces flood peak flows, and provides water temperature controls.

Riparian buffers also provide significant habitat benefits, especially for species with a direct relationship to water for food sources or that require either an aquatic or terrestrial environment for certain life stages.

The Vermillion River Watershed Standards define a buffer as an area of natural, minimally maintained, vegetated ground cover abutting or surrounding a watercourse, public waters wetland, or wetland. A property owner is not required to allow public access to a water quality buffer.

How is this different than the "Buffer Law"?

In, 2015 the State of Minnesota passed the "Buffer Law" that requires 50-foot buffers on Department of Natural Resources (DNR) Public Waters and 16.5-foot (one rod) buffers on public ditches. The watershed's buffer standard does not require placement of buffers immediately, but rather only requires them when properties are subdivided for development. Buffer widths in the Standards are generally wider and affect more types of waterways, as detailed inside this Fact Sheet.

How wide do buffers need to be?

Buffers need to be wide enough to provide the required protection for the uses the stream should support and the condition of the water and land nearby. To be most effective, buffers vary in width to address the specific local conditions. However, that approach is impractical to apply and regulate, and it would be very difficult to set guidelines or policies that would fit all situations; each situation would be unique.

The Vermillion River Watershed Joint Powers Organization (VRWJPO) conducted a public input and review process to identify classifications for different water resources. This process determined that local conditions could be addressed by setting buffering requirements that would be general, yet still specific enough to provide the necessary protections. The result is a set of five stream buffer and four wetland buffer classifications. A map showing the streams and their designated classification can be found on the Vermillion River Watershed website at www.vermillionriverwatershed.org search "stream classification map."

Stream classifications:

- conservation corridor – average 150 feet, minimum 100 feet
- aquatic corridor principal connector with trout stream designation – 100 feet, no averaging (as required by the Minnesota Pollution Control Agency's construction stormwater permit)
- aquatic corridor principal connector – average 100 feet, minimum 65 feet
- aquatic corridor tributary connector – average 50 feet, minimum 35 feet
- water quality corridor – average 30 feet, minimum 20 feet

Wetland classifications:

- exceptional quality – average 50 feet, minimum 30 feet
- high quality – average 40 feet, minimum 30 feet,
- medium quality – average 30 feet, minimum 25 feet
- low quality – average 25 feet, minimum 16.5 feet (one rod)

When are buffers required?

Buffers apply when new lots are created by the subdivision of an existing property.

Are there exceptions?

There are exceptions to the buffer requirements. The primary exceptions are:

- For any lot that existed prior to the development of the watershed rules (March 2007), the buffer requirement does not apply.
- For any lot that is created that remains eligible for Green Acres, Rural Preserves, Agricultural Preserves Program, or similar agricultural or rural preservation program, the buffer requirement does not apply.
- For any wetland area that is filled under an approved Wetland Conservation Act (WCA) replacement plan or a wetland with an applicable WCA exemption, the buffer requirement does not apply.
- The Buffer Standards do not apply to existing outlots that received preliminary plat approval in the two year period preceding March 22, 2007. Buffer standards in effect at the time of LGU approval of a development agreement shall remain in effect throughout the term of the agreement or for a ten year period from the date of approval, whichever is less.
- In areas zoned agricultural with one building per every quarter of a quarter section (40 acres), the buffer requirement does not apply until such time that the zoning changes and higher density building eligibilities exist. This exemption does not allow transfer of building eligibilities for purposes of clustering.
  - **Note:** Setbacks for structures constructed in agricultural zoned areas should be met to allow for future implementation of the buffer with no impact to structures (i.e. no structural improvements allowed in setback for buffer).

Cover illustration from NRCS.
Updated 5/2017

Figure 1: Meander belt with buffer

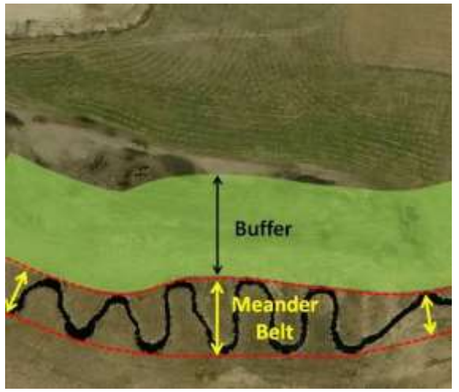
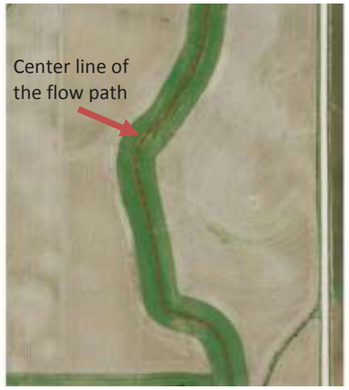


Figure 2: Center line of flow path on a water quality corridor with buffer



Where does a buffer start?

Most streams in the Vermillion River Watershed would have the buffer measured beginning at the line of the meander belt (see Figure 1). The meander belt is a line connecting the outside points on the same side of a meandering stream bank. Buffers on water quality corridors are measured from the center line of the flow path (see Figure 2). Buffers on wetlands begin at the delineated edge of the wetland (the line where hydrology, vegetation, and soils indicate a change between upland and wetland).

What can and cannot be done within a buffer?

Once a buffer is established, certain activities within it are allowed and others are prohibited.

Activities allowed within any buffer include:

- Use and maintenance of a 10-foot-wide unimproved strip through the buffer to access a waterway or wetland;
- Structures that existed when the buffer was created;
- Placement, maintenance, repair or replacement of public roads, utilities, and drainage systems that are required as part of subdivision approval or building permit, so long as adverse impacts to the buffer are avoided or minimized to the extent practical;
- Clearing, grading, and seeding when performed as part of an approved wetland replacement or stream restoration;
- Construction of underground utilities provided the minimum impact alignment is used, the disturbed area is stabilized, and setbacks are met;
- Construction of a multipurpose trail through an area protected by conservation easement or in a dedicated outlot, provided erosion and new impervious surface area is minimized, and maintains an absolute minimum distance of at least fifteen feet as measured from the edge of the trail nearest the water resource to the wetland or public waters wetland edge, the bank of the watercourse, or the meander belt, and averages at least one-half the total VRWJPO identified buffer width.

Activities allowed within portions of the average buffer width that exceed the minimum buffer width include:

- Stormwater management facilities;
- The area of shallow vegetated infiltration and biofiltration facilities, and water quality ponds not to exceed 50 percent of the pond area, adjacent to wetlands and watercourses may be included in buffer averaging provided the facilities do not encroach into the minimum buffer width.

Prohibited activities include: building, storage, paving, routine mowing, burning, plowing, introduction of noxious vegetation, cutting, dredging, filling, mining, dumping, grazing livestock, agricultural production, yard waste disposal, or fertilizer application. However, periodic mowing or burning or the use of fertilizers or pesticides for the purpose of managing or maintaining the native vegetation is allowed with the approval of the local government unit. Noxious weeds may be removed by mechanical means or by spot treatment with herbicides, but broadcast treatment is not acceptable.