

Buffers - Questions and Answers

Question: Is there flexibility in the buffer proposal to use practices other than a 50-foot buffer instead of being “one size fits all?”

Yes, the initiative allows landowners to use an alternative conservation measures that would provide the equivalent water quality, soil stabilization and habitat benefits. Conservation plans and alternative practices will follow established NRCS guidelines.

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Question: Are corn and soybean farmers being singled out?

No, other laws cover water quality impacts from other industries and municipalities. For example, the Clean Water Act provides a comprehensive permitting system governing pollution loads from all other industries, commercial enterprises, public wastewater treatment and water supply works and Concentrated Animal Feeding Operations (CAFOs). Existing zoning restrictions apply to houses, other structures, roads, driveways, residential lots and cropland alike.

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Question: Does a 50-foot buffer requirement represent an illegal “taking” of property from farmers?

No. Buffers and setbacks to protect water resources are ordinary land use restrictions. Landowners will still be able to exclude others from buffer strips, farmers will still be able to plant perennial crops, or use buffers for haying and grazing, and, consequently, no landowner will lose the "total economic value" of a “whole parcel of land” necessary to create a “taking.” In addition, producers are allowed to use alternative conservation measures providing equivalent protection to the 50-foot vegetated buffer. No one has a "property right" to pollute water that belongs to the public.

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Question: Is there financial support for farmers needing to install and maintain a 50-foot buffer?

Yes, there are a number of publicly-subsidized programs that provide cost-share for installation and maintenance of buffers, including the Continuous Conservation Reserve Program (CCRP), Conservation Reserve Enhancement Program (CREP), Conservation Reserve Program (CRP) and Reinvest in Minnesota (RIM). Counties that have been active in implementing existing buffer requirements indicate that most producers have installed buffers without financial assistance.

Question: Are buffers proven effective?

Yes, the efficacy of perennial buffers in filtering sediment, phosphorus, bacteria and nitrogen is well established in research and practice. These four pollutants are very common Minnesota waters. The Minnesota Department of Agriculture's Best Management Practices Handbook estimates that on average, grass buffers reduce sediment by 86%, phosphorus by 65% and nitrogen by 27%.

Buffers offer many benefits in addition to water quality protection. They improve soil health and water retention, stabilize stream banks, and provide important habitat for pollinator insects, Monarch butterflies and grassland birds including pheasants. The Minnesota Department of Agriculture's recent Best Management Practices for Pollinators in Agricultural Landscapes includes riparian buffers with plant diversity to provide habitat for pollinators, noting that pollinators are required for one-third of our food production.



Question: Is there any scientific backing to the 50-foot buffer width?

Yes. Studies have found that pollutant removal generally increases with buffer width up to a point. The Minnesota Department of Agriculture's Best Management Practices Handbook reviews buffer width and pollutant removal efficacy and recommends a 50-foot buffer for lands adjacent to public waters. Additional studies have focused on buffer width ranges found to maximize specified goals:

| GOAL | OPTIMAL BUFFER WIDTH |
|------------------------------|-----------------------------|
| Phosphorus removal | 49 feet |
| Pesticide removal | 49-328 feet |
| Aquatic life protection | 33-164 feet; 164-1300 feet |
| Erosion control | 30-98 feet |
| Stream temperature | 30-230 feet |
| Bacteria removal | Greater than 30 feet |
| Nitrogen removal (in runoff) | 92 feet |

It is necessary for administrative purposes to pick a buffer width that is efficient at producing results. Research and existing standards validate the use of a 50-foot width and show it will be effective at helping Minnesota meet many of its water quality challenges.