

Buffer Strips: Common Sense Conservation

Conservation buffers are small areas or strips of land in permanent vegetation, designed to intercept pollutants and manage other environmental concerns. Buffers help maintain a productive, profitable, and responsible farming operation.



There are many types of buffers, but those particularly important to water bodies are grassed waterways, filter strips and riparian buffers.

These strategically placed buffer strips in the agricultural landscape can effectively mitigate the movement of sediment, nutrients, and pesticides within and from farm fields. When coupled with appropriate upland treatments, including crop residue management, nutrient management, integrated pest management, winter cover crops, and similar management practices and technologies, buffer strips should allow farmers to achieve a measure of economic and environmental sustainability in their operations.

Riparian buffers, (predominantly tree and shrub plantings along streams and other watercourses), have a direct effect on the health of the waters that flow past them and are

strongly advocated for all rivers, streams and other water bodies.

Environmental Benefits of Riparian Buffers

Riparian buffers are a boon to water quality in many ways. For instance, if properly installed and maintained, they have the capacity to:

- remove up to 50 percent or more of nutrients and pesticides.
- remove up to 60 percent or more of certain pathogens.
- remove up to 75 percent or more of sediment.

Few, if any, conservation practices provide as many benefits for water quality as do these streamside buffers. Riparian buffers

- Control soil erosion.
- Improve soil quality.
- Slow water runoff.
- Improve water quality by removing sediment, fertilizers, pesticides, pathogens, and other potential contaminants from runoff.
- Stabilize the stream.
- Reduce the water temperature.
- Enhance fish and wildlife habitat.
- Improve infiltration within the buffer.
- Reduce flooding.
- Conserve biodiversity.

These buffers provide other benefits besides water quality improvement. They reduce noise and odor. They are a source of food, nesting cover, and shelter for many wildlife species. Buffers provide connecting corridors that enable wildlife to move safely from one habitat area to another. Buffers also offer a setback distance

from water sources for agricultural chemical use.

Like the trim on a house makes the house look better, well-planned conservation buffers improve the appearance of a farm or ranch. If used as part of a comprehensive conservation system, buffers will make good use of areas that often should not be cropped.



Conservation Buffers Help Landowners Economically

These buffers are generally less expensive to install than practices that require extensive engineering and costly construction. In addition, USDA provides financial incentives through these conservation programs for conservation buffers

- continuous Conservation Reserve Program (CRP)
- Environmental Quality Incentives Program (EQIP)
- Wildlife Habitat Incentives Program (WHIP)
- general CRP, Wetlands Reserve Program (WRP)
- Stewardship Incentives Program (SIP)

Many state and local governments--and even some private organizations--offer additional financial incentives to install conservation buffers on farms.

Buffers themselves provide additional income sources, increasing economic diversity for the

landowner. Plants can be chosen that provide quail and small game habitat leading to fee-hunting enterprises. Trails through the buffer zone make possible fee-based nature tourism and bird-watching. In addition, well done buffers will increase property values.

Conservation Buffers Demonstrate Landowner Stewardship

Landowners who care for the land by maintaining conservation buffers set a valuable example for their children.

For more information visit

<http://www.nrcs.usda.gov/feature/buffers/>

<http://www.bufferguidelines.net/>

<http://fwrc.msstate.edu/pubs/buffers.pdf>

http://www.agclassroom.org/teen/ars_pdf/9earth/2003/12conserv_buffers.pdf

http://www.thewatershed.org/images/pdf/SBMWA_Backyard_Buffers.pdf

http://www.conservationinformation.org/?action=learningcenter_core4_conservationbuffer



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