What's a Conservation Buffer?

Buffers are best described as small areas or strips of land in permanent vegetation that are designed to slow water runoff, improve water quality, provide shelter and stabilize riparian areas.

They are a great way to protect the environment and demonstrate a commitment to conservation.  

For more information see Page 2
Sediment, nutrients and other forms of non-point pollution are the number one threat to our streams, rivers and lakes. This can be attributed to the conversion of sensitive shoreland areas from protective natural vegetation to buildings, farm fields, concrete and manicured lawns. In order to make progress in nonpoint pollution control, the restoration of our shorelands is essential.

Buffer strips are narrow strips of land planted and maintained in natural grasses and other vegetation. Established along streams and lakes and other areas prone to erosion, they work by slowing down runoff and trapping sediment and other pollutants. They also capture and use excess fertilizer that would otherwise pollute surface or groundwater.

Filter strips, riparian buffers, field borders, grassed waterways, vegetative buffers and contour grass strips are all different types and names of this valuable practice. In urban and residential settings, they preserve the natural beauty of the shoreline and provide an alternative to heavily fertilized lawns. On the farm, buffers create an effective barrier between a field and nearby waterway. Research shows that a 35-45’ wide grass buffer can remove up to 95% of the sediment in field runoff.

There are many programs and efforts underway to promote the preservation and restoration of these critical strips of land. Washington County’s shoreland-zoning ordinance is being revised to address problems in urbanizing areas by requiring developers to maintain areas of natural vegetation along their shorelines. To address agricultural runoff, the state is proposing “riparian” standards. These will require farmers to adopt management practices that reduce sedimentation from cropland along streams and other water bodies.

Whether urban or rural, farm or non-farm, all riparian landowners play a key role in maintaining the environmental quality. Their immense benefit yet low installation and maintenance costs make conservation buffers truly common sense conservation.
REASONS TO CONSIDER PLANTING BUFFERS ALONG STREAMS, RIVERS AND LAKES

- Slow runoff from fields
- Reduce downstream flooding
- Stabilize stream banks
- Reduce water temperature
- Reduce soil erosion
- Reduce noise and odor
- Remove up to 60% or more of pathogens in runoff
- Remove up to 75% or more of sediment in runoff
- Remove up to 50% or more of nutrients and pesticides in runoff
- Provide food, nesting cover and shelter for wildlife
- Increase profitability by taking marginal land out of production
- Reduce the risk of tractor rollover by stabilizing the stream bank and providing a turnaround area
- Take advantage of financial incentives provided to establish buffers through local, state and federal programs
- Provide setback distance for chemical use from watercourses, wells, sinkholes,
- Establishment of natural vegetation to enhance aesthetic beauty of shorelands

Local Farmer Attests to Value of Buffers

Harold Groth, from the town of Polk, is a true believer in the value of buffers. In 1995, Harold installed 25’ wide buffer strips on both sides of Frieden’s Creek, a picturesque stream that runs through the middle of his 230 acre farm.

“Best thing ever done!” claims Harold. “It should have been installed 100 years ago”.

Like most people, Harold never realized how much of his soil was actually washing off his fields and into the creek. This is because most topsoil washes away through a process called “sheet erosion”. The only evidence left by this erosive erosion is deposits of fine soil where a field levels out or where runoff hits a barrier. Buffer strips, such as those installed by Harold’s, serve as that barrier.

Though his twenty-five foot wide buffer will trap over 60% of the sediment, it isn’t quite wide enough for the size of his equipment. In addition to strongly encouraging anyone with a stream or other type of waterway to install a buffer strip, Harold suggests planting one wide enough to be able to easily harvest and to turn large equipment around on.

“Best thing I’ve ever done. Should have been installed 100 years ago”

Harold Groth
Benthic Macroinvertebrate live on the river bottom and give us valuable information about the health of the waterway.

Water pennies prefer cold, fast-moving streams. Their smooth, flattened bodies enable them to resist the pull of the current. Measuring about 1/4 inch in length these beetle-like critters are usually found on smooth rocks where they graze on attached algae. They are considered sensitive to pollution and are indicators of good water quality.

Steps You Can Take to Reduce Runoff Pollution

**Phase Out Phosphates**
Avoid using phosphates in detergents. Phosphates create algae blooms in waterways. Phosphate-free detergents are available.

**Rally Around Construction**
Building expansion and construction of roads, commercial developments and even new homes can cause water pollution if practices are not in place to control runoff of sediment during heavy rains and snow melts. Encourage local officials to adopt erosion control ordinances and encourage developers to use “Best Management Practices to minimize runoff during and after construction.

**Crop Rotation**
Design crop rotations to meet your farm’s needs, goals for yields and erosion control. Rotations can save fertilizer costs and reduce pesticide use by naturally breaking the cycle of weeds, insects and diseases.

**BE A CHAMPION**

K-12 students are invited to participate in the fourth annual Champions of the Environment Competition.

The theme is **“We’re All Connected”**

Show your concern and become active in protecting Washington County’s precious natural resources.

There are six divisions: Essay, Computer Art, Poster, Spokesperson, Photography and Project.

Medals and savings bonds will be awarded to the top three finalists in each age category...$100, $75 and $50 respectively.

For more information or registration forms contact
Sue Millin, Education Coordinator
Phone: 262-335-4800
email: lcdnue@co.washington.wi.us
Land & Water Plan Ready for Action

The Washington County Land and Water Resource Management Plan was recently approved by the County Board of Supervisors and Wisconsin Land and Water Conservation Board. This marked the end of a year-long process identifying land and water resource issues, goals and objectives. These approvals also mark a new beginning! For years, the Land Conservation Department has worked largely as "agents" for federal and state government conservation programs. Consistent with an evolving statewide trend, the LWRM Plan represents our taking local leadership over soil and water resource protection and improvement.

There were many individuals who devoted much time to participating in the development of this plan. We are indebted to each of them for helping us produce what we feel is an outstanding product. Obviously, the best way to demonstrate our gratitude is by ensuring it does not become one of those plans that sit on a shelf and collects dust.

The LCD is committed to using the Land and Water Plan to guide us for the next 5 years as we address the issues of rapid development, stormwater, animal waste, groundwater, soil sustainability and sedimentation.

"Accuse not nature, she has done her part; do thou but thine!"

Milton

This fall over 250 teachers, scout & 4-H leaders, parent aides and students took to the rivers to learn how to protect Washington County waterways. Now they are teaching others! For information on how you can get involved, call Education Coordinator, Sue Millin @ 262-335-4800
While many of us monitor our lakes, streams and wet areas for Eurasian Milfoil, Rusty Crayfish, Zebra Mussels, and Purple Loosestrife, an invasion of another sort is going on right in our back yard, a very serious invasion that is just starting to catch the eye of the general population.

Now that the leaves have fallen and winter is approaching, think back to October. Think of your favorite hiking trail along a woods line. Or, think of the fence line behind your home or your neighbor’s land. Was the vegetation a little denser this year? Did you notice any small trees or shrubs that seemed to stay green and keep their leaves longer than the other shrubs? While walking in the woods, did you see any large green patches of plants with violet-like leaves growing on the forest floor even though all other plants were dormant?

The plants that we are seeing are relatively new to our area. These plants “think” that they are growing in the warmer and milder areas of Europe and Asia, areas where winter comes later and spring arrives earlier than in Wisconsin. And, genetically speaking, they are. These plants grow on the same timetable as the mild areas from which they originated. This gives them a significant competitive advantage over our native plants. Such plants fall into a group that many call aggressive alien invaders. Unlike the zebra mussel, the gypsy moth, and the Asian long horned beetle that reached North America by accident, our ancestors knowingly brought many alien plants to our county. These plants were imported for medicinal purposes, as cooking herbs or because they looked attractive.

But now the “explosion” of alien plants has, in many experts’ opinion, reached or passed a level that some call an “ecological critical mass.” Large areas now exist where these aliens have gone beyond the level of easy control. These plants out-reproduce, out-grow, out-compete, shade-out and displace our native plants. They are well entrenched in the eastern and central parts of our country and southern Canada. Outbreaks are also being noted in West Coast locations in both countries.

In many peoples’ opinion garlic mustard (Alliaria petiolata) is the most serious of these invaders. The buckthorns, bush honeysuckles and autumn olives tend to take over abandoned fields and fence lines. From the distance many of us welcome any greenery where once fallow fields existed. Garlic mustard, however, invades established hardwood forests and quickly out-competes the native forest plants that so many of us love. The forest floor becomes a green monoculture, a seed bank of millions and millions of seeds waiting to be carried to new areas by passing deer, transient opossums and raccoons and, of course, hikers, bikers and horseback riders.

Most southern Wisconsin parks, forest preserves, and nature centers are starting to coordinate volunteer efforts to try to preserve what they still have, and to perhaps hopefully recover some areas lost to alien invaders. Last year Girl Scouts, Boy Scouts, Cubs, Brownies, school groups, and service organizations all helped. Several Boy Scouts earned their Eagle rank through well-organized community invasive plant eradication service projects.

If you would like to help, contact Jackie Sharfenberg, Forest Naturalist, phone (920) 533-8322, at the Ice Age Visitor Center. She is presently organizing an extensive “Spring Time 2001 Attack” on garlic mustard and other troublesome aliens.

Lee Krueger is a retired science teacher/naturalist and currently works for the DNR in the control of invasive plants and as an independent natural areas consultant.
Interested in a Dairy Expansion?

A full day workshop is being planned to assist farmers who are thinking about a modernization or expansion of their existing dairy operation.

Still in the planning stages, this opportunity will be held in February or early March. The cost of the workshop has not yet been determined but will be packed with opportunities to help you make a smooth transition.

University specialists will be on hand to answer questions and will work with small groups in the following areas: Farmstead and Facility Planning, Milking Center Design and Equipment, Manure Handling and Storage Systems, and Freestall Barn and Feed Center Design.

For more information or to receive a registration form please call Paul Sebo at the Washington County Land Conservation Department (262)335-4800.

Hazardous Waste Clean Sweep
Friday, April 6 from 3:00 PM-6:00 PM
Saturday, April 7, from 9:00 AM-12:00 PM
Washington County Hwy Dept, Slinger
For more information call James Pamperin at 414-335-4399

For Sale
Native Trees, Shrubs, Vines
Prairie Seed
For order forms contact the
Washington County Land Conservation Dept.
333 E. Washington St. Suite 3200
West Bend, WI 53095
262-335-4810

NEW...SOIL SURVEY CD’S NOW AVAILABLE
A computer disk containing complete digital images from the Washington County Soil Survey Book has just been released! For more info call 262-335-4800.

Conservation News is a quarterly newsletter for Washington County residents. Its purpose is to increase awareness and promote action to protect our land and water resources. Viewpoints of authors do not necessarily reflect those of the Land Conservation Committee or the Washington County Board of Supervisors. The Committee and Land Conservation staff encourage responses from our readers.

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Dairy Producers experiencing concerns about the volatile milk prices should consider attending the "Dairy Price Risk Management" Workshop scheduled for February 1, 8 and 15th. This three afternoon workshop will be held from 12:30-3:30 PM at the PAC in West Bend. Reservations should be made by January 26. For more information call UW-Extension @ 262-335-4477.
Congratulations to Gary Wolf of Hubertus for his correct identification of Kari’s Can Company which is located on the 400 block of Scenic Road in the town of Richfield. Gary is the lucky winner of a rustic bluebird house!

Kari Walters is a remarkable 12 year old who has established her own recycling business. With money earned she has donated to numerous causes and even adopted an endangered snow leopard. She has collected enough to purchase two American Girl Dolls for herself too! Kudos to Kari for taking care of the environment while sharing her good fortune with others.