



Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

Pennsylvania Stream ReLeaf Restoring and Conserving Our Streamside Buffers

In May 1997, Gov. Tom Ridge launched a multi-agency initiative to restore and conserve streamside forest buffers in Pennsylvania. This initiative paves the way for improved water quality and habitat by restoring native vegetation next to streams. These restored areas filter surface runoff, protecting the stream from pollutants. Restoring buffers along streams and shorelines of ponds and lakes costs less than removing pollutants from water sources and restoring streambanks to protect adjacent properties. Wildlife benefits from these forested streamsideways as well.

Who can be involved?

Farmers, land developers, timber managers, local governments, school groups, conservation and environmental organizations, civic groups and public, as well as private, landowners can help in this volunteer effort. Many nonprofit organizations, citizens groups, businesses and private citizens are already involved in this important, statewide initiative.

What are the environmental benefits?

Lush forests once covered most of Penn's Woods. By the 1800s, human activities had dramatically changed the landscape, especially along waterways, as agricultural activities, industries, businesses and housing expanded to meet the state's growing demand for goods, services and space. Over the past three centuries, the extensive forests that once grew here were changed by land uses—often unplanned—that contributed pollutants to streams and changed streamflows.

The once seemingly endless corridor of streamside forests became fragmented and less effective at reducing polluted runoff. This, in turn, impacted fish and wildlife habitat and Pennsylvania's renowned outdoor and sporting opportunities.

The forested strip slows runoff, or holds it where natural processes have a chance to break down what otherwise would become water pollutants. Runoff, which may contain eroded soil, pesticides, excess fertilizer, road salt, chemicals that drip from cars and many other modern products, is slowed and filtered by buffers before it enters the stream.

Streamside buffers provide leaf fall into the stream, an important source of energy for the aquatic food chain. Trees shade smaller streams from the summer sun, allowing the water temperature to remain cooler and

store more dissolved oxygen for fish and other aquatic animals.

Woody debris that falls into the water provides shelter for aquatic species.

Buffers shield water bodies from wind-borne dust which may carry additional pollutants.

Forested streamside habitat supports many more kinds of plants and wildlife than mowed streamside, thus enhancing biodiversity.

While all types of streamside buffers — trees, shrubs, grass and even unmowed areas — provide a wide range of environmental benefits, forested buffers offer the greatest range of these benefits.

So what is the plan?

Pennsylvania, through a series of advisory committees, developed a comprehensive strategy to fully implement the streamside buffer initiative. The plan includes guidance on how to:

- Restore new buffers;
- Conserve existing buffers; and
- Properly record and report data on new buffers.

How can I help?

If you are a landowner:

- Report your buffer project data at www.dep.state.pa.us/WaterManagement_Apps/Watershed Management/Stream/;
- Plant native species of trees and shrubs;
- Stop mowing to the stream's (pond's) edge;
- Join your local watershed organization; and
- Protect buffers through conservation easements.

If you are a farmer:

- Fence streams;
- Enroll buffers in set aside programs;
- Partner with local watershed and sporting organizations; and
- Consider alternatives to cropping that also provide economic returns while maintaining buffers.



If you are a developer:

- Avoid removing streamside trees and shrubs; and
- Incorporate conservation into your subdivision designs.

If you help to run a business or industry:

- Plant native species of trees and shrubs;
- Consider sponsoring a school or community organization that wants to plant trees; and
- Consider options for limiting business activities that impact buffers.

If you belong to a conservation or volunteer organization:

- Plant native species of trees along streams;
- Partner with agricultural landowners and municipalities; and
- Organize volunteers and work parties to help maintain buffers.

If you are a municipal official:

- Adopt zoning that protects and improves stream corridors;
- Support landowners who protect their buffers;
- Partner with neighboring municipalities to promote consistent ordinances; and
- Create recreational greenways.

If you are a student or teacher:

- (Colleges/Universities) Conduct research to help further define buffer values and maintenance techniques;
- Incorporate buffer protection activities into lesson plans; and
- Establish a buffer on school premises if you have a stream or pond.

If you work for a regional, state or federal agency:

- Develop new information and act as a clearinghouse for existing information;
- Develop guidelines for establishing and maintaining buffers, and provide technical assistance; and
- Establish incentives for participation.

**The Chesapeake Bay
Riparian Forest Buffer Initiative**

Through Stream ReLeaf, Pennsylvania is participating in an initiative to restore 2,010 miles of forested streamside buffer along the Chesapeake Bay's shorelines and tributaries by the Year 2010. Pennsylvania's goal is to restore and conserve at least 600 miles of forest buffer averaging 35 feet wide along our Chesapeake Bay tributaries -- the basins of the Susquehanna River, the Potomac River, the Gunpowder River, the Northeast River and Elk Creek. Pennsylvania also has the goal of eventually restoring buffers along all of our streams, lakes and ponds.

Getting More Information

Contact DEP's Bureau of Watershed Management
P.O. Box 8555
Harrisburg, PA 17105-8555
(717) 787-5267

For more information, please visit the PA PowerPort at www.state.pa.us, Keyword: "DEP Watersheds."

Click on Stream ReLeaf Project Data Form and Information Center.

Useful References from DEP

Fact Sheet: Pennsylvania Stream ReLeaf Plan for Restoring and Conserving Buffers Along Pennsylvania Streams.
Pennsylvania Streamside Forest Buffer Tool Kit.
Pennsylvania Stream ReLeaf – Project Data Entry Form.

(The Stream ReLeaf logo is used under agreement with American Forests)