

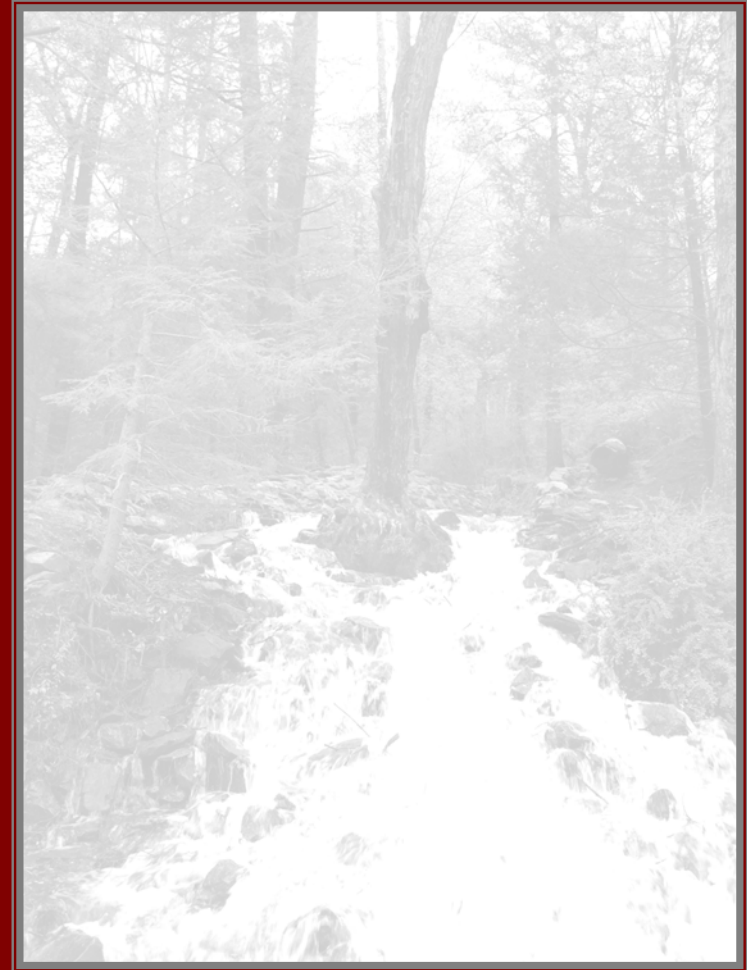
Riparian Forest Buffer Toolkit

Pennsylvania Department of Environmental
Protection

Bureau of Watershed Management
Agricultural Advisory Board Meeting
June 17, 2009

Overview

- **Riparian Forest Buffer Guidance**
- **Riparian Forest Buffer Toolkit as Appendix to Guidance**



Benefits of Riparian Forest Buffers



- **Stabilize stream banks.**
- **Shade stream to optimize temperature and light conditions for aquatic organisms.**
- **Reduce pollutant levels (e.g. nutrients and sediments) reaching stream.**
- **Increase instream processing of pollutants.**
- **Attenuate flooding.**

Purpose of Guidance

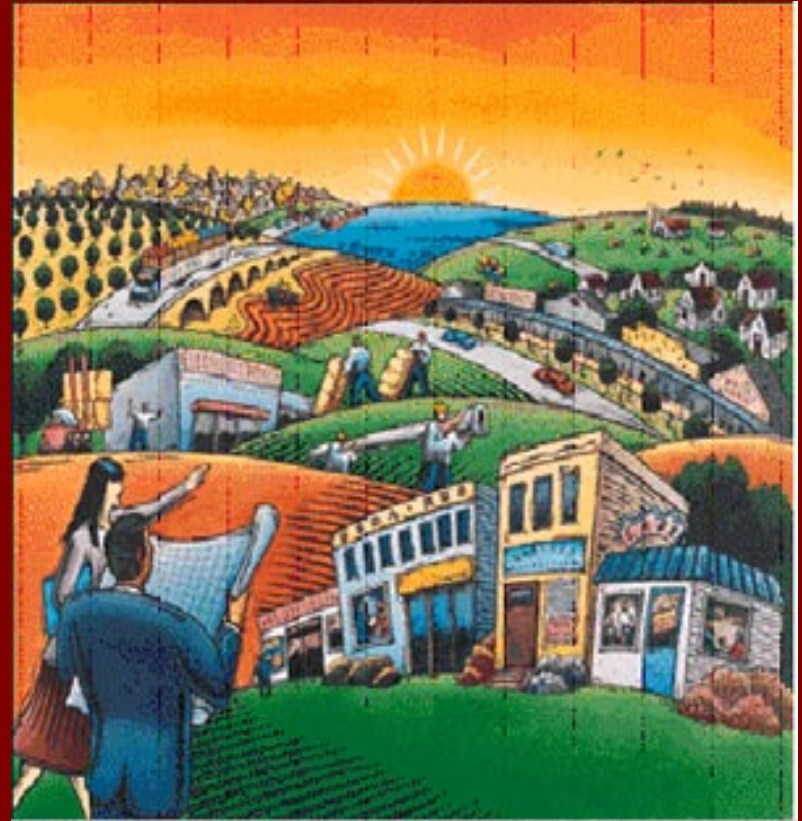
**Assist DEP in making
Riparian Forest
Buffer
recommendations:**

- Regulatory programs**
- Voluntary programs**
- Grant programs**



Purpose of Guidance - continued

Assist outside entities in developing science-based guidelines or policies regarding Riparian Forest Buffers.



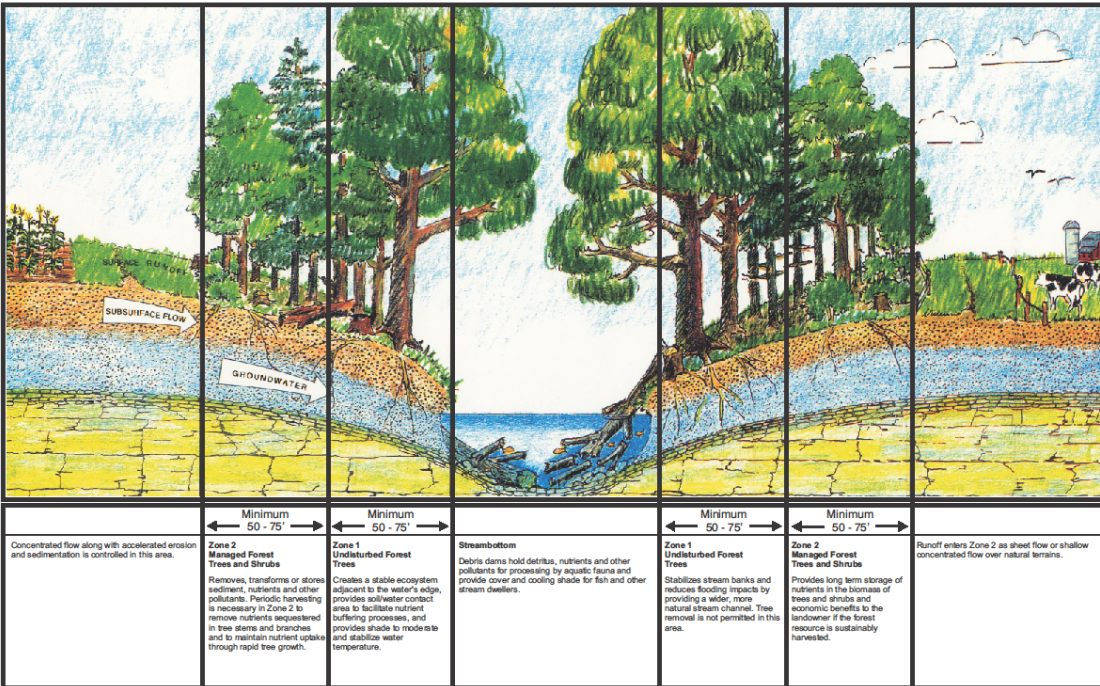
Definition: Riparian Forest Buffer

- Area of predominantly native trees and shrubs.
- Along surface waters
- Maintained in natural state/ sustainably managed.



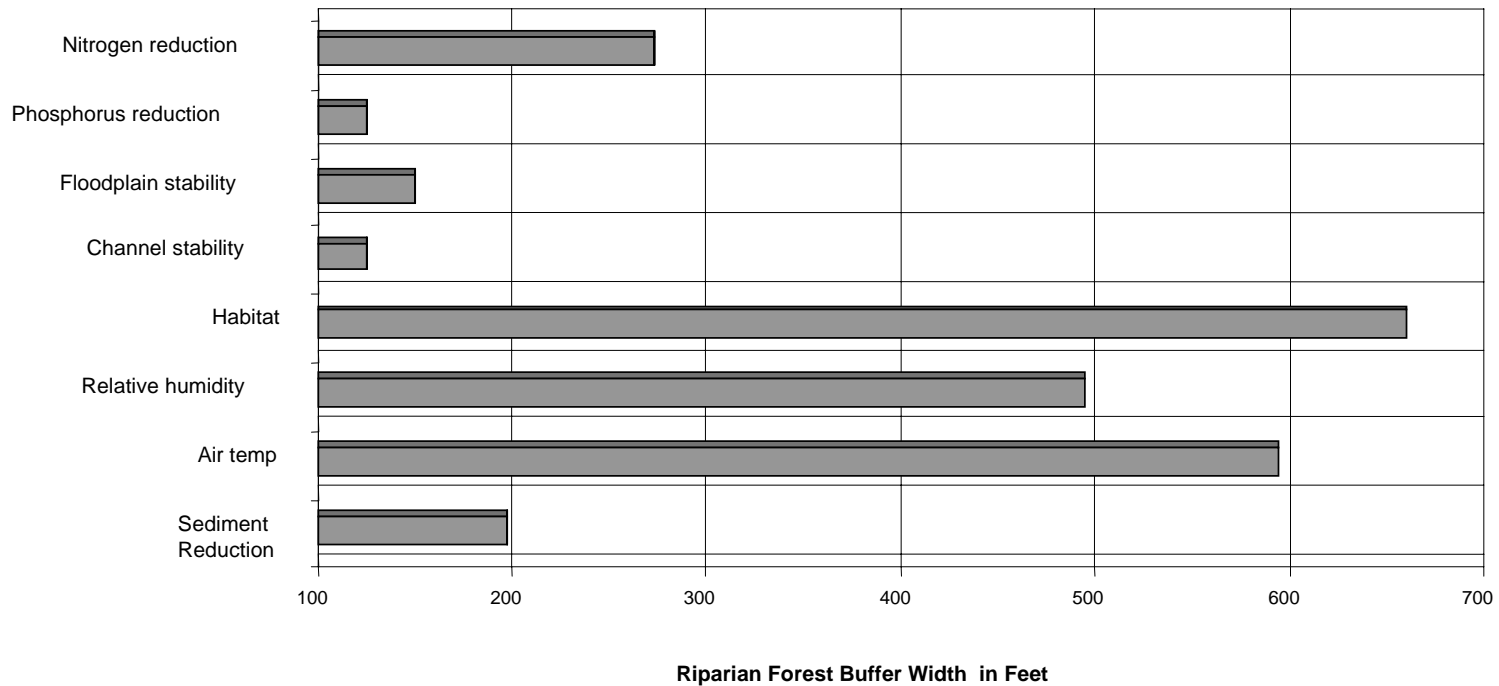
Recommended Composition for Newly Established Riparian Forest Buffers

RIPARIAN FOREST BUFFER



- Zone 1 – Undisturbed Forest (Native Trees)
- Zone 2 – Managed Forest (Native Trees and Shrubs)
- Concentrated flow/ accelerated erosion and sedimentation controlled

Range of Minimum Widths for Meeting Specific Riparian Forest Buffer Objectives



Riparian Forest Buffer Average Width on All Streams



- **100 feet from top of streambank or normal pool elevation of lakes, ponds and reservoirs**
- **Scientific research indicates significant benefits occur with buffers of 100 feet or greater**

Riparian Forest Buffer Average Width on Special Protection Waters

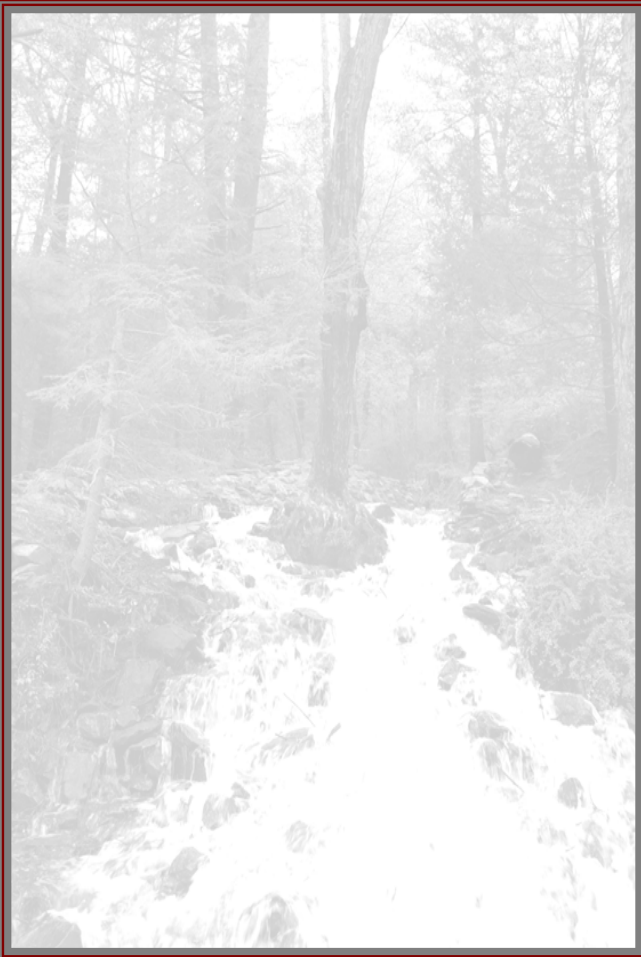
- 150 feet from top of streambank or normal pool elevation of lakes, ponds and reservoirs
- Exceptional Value (EV) and High Quality (HQ) Waters



Recommended Composition for Existing Riparian Forest Buffers

- **Minimum 60% uniform canopy cover**
- **Pennsylvania Noxious Weeds and other undesirable species removed or controlled to the extent possible.**
- **Concentrated flow/ accelerated erosion and sedimentation controlled in area that is up grade and adjacent to buffer**

Pennsylvania Stream ReLeaf Buffer Toolkit Update



- **Purpose**
- **9 Steps to a Streamside Forest Site Plan**
- **Riparian Forest Buffer Establishment**
- **Riparian Forest Buffer Management Plan**
- **Riparian Forest Buffer Protection**
- **Appendices**





courtesy Arthur Brühlmeier



Purple loosestrife
Lythrum salicaria
Copyright 2000 John Murray









