

Presentation Outline

TOPICS FOR TODAY

Penn State Master Watershed Steward Program

What is a riparian buffer?

Benefits of installing buffers

Caln stream health

Riparian buffer planting in township parks

Penn State Master Watershed Steward Program

TRAINING PROGRAM

Initial training - 40 hours (land use impacts on watersheds, geology and groundwater, climate, drinking water and wastewater, wildlife, restoration, best management practices, stream monitoring, communication, etc.)

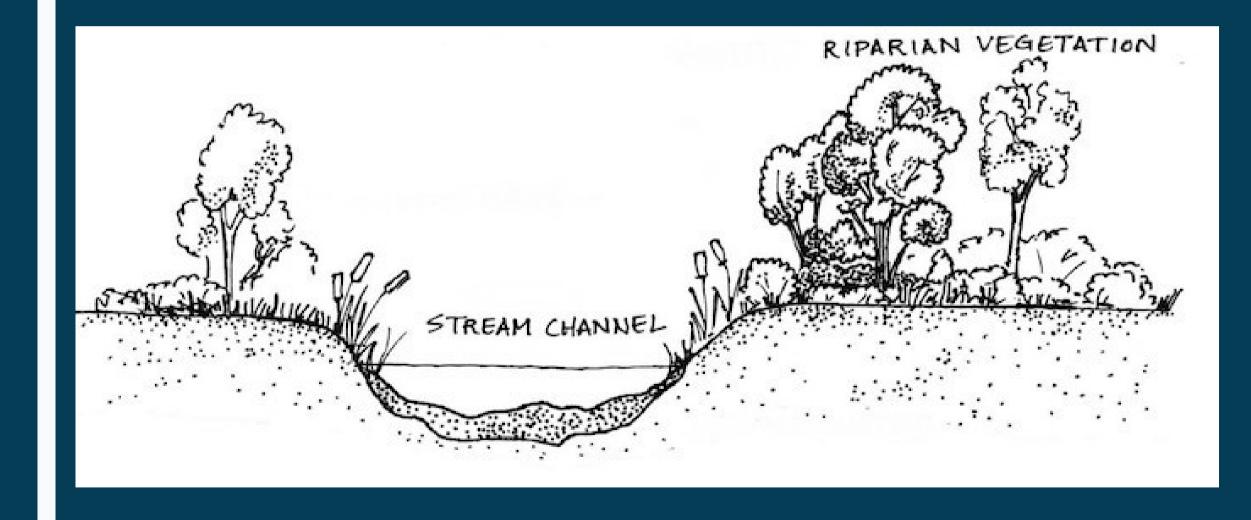
10 training hours per year in subsequent years

VOLUNTEER REQUIREMENTS

50 hours of volunteering (first year), 20 hours subsequent years Volunteering includes public outreach, riparian buffer and rain garden plantings, stream health monitoring, stream cleanups, etc.

What is a riparian buffer?

Riparian buffer - The permanent, vegetated strip adjacent to streams, lakes, ponds and wetlands.



Benefits of riparian buffers:

SHADES AND COOLS
WATER, BENEFITS
AQUATIC ORGANISMS
AND FISH



PROVIDES WILDLIFE CORRIDORS

ADDS TO STREAM BANK STABILIZATION (HELPS STOP EROSION)



ENHANCES
BIODIVERSITY OF
PLANTS, INSECTS, AND
ANIMALS



INTERCEPTS RUNOFF CONTAINING NUTRIENTS, PESTICIDES, AND OTHER NONPOINT POLLUTION



INCREASES
GROUNDWATER
INFILTRATION
(WHICH HELPS WITH
FLOODING)

Caln Township Stream Health



Image: Valley Run Erosion in Caln Park



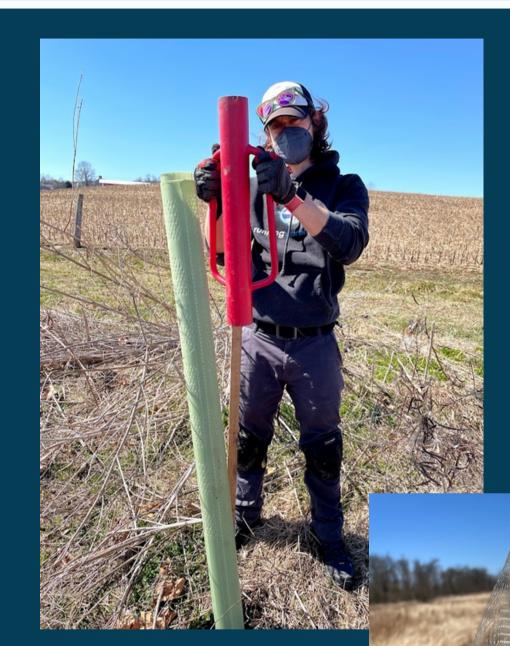
VALLEY RUN AND BEAVER CREEK - IMPAIRED



Image: Lloyd Dog Park Bank Damage

Planting buffers in Caln Township Parks

- With assistance from:
 - Chester County Conservation District
 - Keystone 10 Million Trees Partnership (aims to plant 10 Million Trees in PA by 2025)
 - Restore Our Roots (Downingtown nonprofit)
- Requested 500 trees and shrubs
- Native tree and shrub species like arrowwood, basswood, persimmon, and pin oak (easy to maintain and provide habitat)
- Master watershed stewards plus local volunteers for the planting
- Protective tree tubes prevent deer browse and damage from flooding
- Tentative planting date November 6th



Images: MWS riparian buffer planting in Elverson March 2021



LLOYD PARK
PLANTING PLAN

Section 1: 50 ft Buffer 1.1 acres Section 2: 35 ft Buffer .24 acres Section 3: 50 ft Buffer 1.34 acres

Thank you!

ADDITIONAL RESOURCES:

PENN STATE EXTENSION STREAMS AND RIVERS ARTICLES

https://extension.psu.edu/water/watershed-protection-and-restoration/streams-and-rivers

KEYSTONE 10 MILLION TREES PROGRAM

http://www.tenmilliontrees.org/

CHESTER COUNTY CONSERVATION DISTRICT

https://www.chesco.org/205/Conservation-District

