

West Donegal Township

Water Quality Projects

What are They?

Municipalities all over the Susquehanna Valley are implementing water quality projects in an effort to reduce pollutants to the Chesapeake Bay. You may see some right here in West Donegal Township!

They include things like:

- Riparian Buffers
- Detention Basin Retrofits
- Streambank Stabilization/Restoration
- Floodplain Restoration

Riparian Buffers:

Also known as streamside tree plantings. You might see the tree tubes before you see the trees.

Various species of trees are spaced 5-10 feet apart. Buffers are typically planted a minimum of 35 feet wide on either side of a streambank. Tree roots provide stability to streambanks, their shade provides much needed temperature mitigation to the stream, and their understory provides a continuous wildlife habitat. They also provide pollutant filtering by capturing the water before it reaches waterways.



Detention Basin Retrofits:

Traditional detention basins provide little water quality benefit. One of the best ways to provide more pollutant filtering is to retrofit a traditional detention basin with plantings and amended soils. In addition to filtering, basins help infiltrate water back to the groundwater supply. The plantings provide habitats for birds and wildlife which keeps down populations of ticks and mosquitoes.



Streambank Stabilization/Restoration:

Streambank stabilization and restoration involves grading or engineering with the intent of protecting the streambank from further erosion. This can include shaping of banks to a more manageable slope, bioengineering with rolls of fiber/vegetated geogrids/vegetated brush mattresses, or hard armoring with rock. Eroding sediment is one of the biggest pollutants to the Chesapeake Bay, and streambank stabilization helps prevent this problem.

Floodplain Restoration:

Floodplain restoration is excavation of sediment to return a floodplain to its historical level. This is reserved for areas with high amounts of legacy sediment which have built up in the floodplain, resulting in the stream eroding through the layers of sediment. This involves a great deal of study and excavation of sedimented materials to return the floodplain to its original elevation. Like streambank stabilization, floodplain restoration reduces the amount of sediment transported to the Chesapeake Bay and allows for a larger area for filtering of other pollutants.



Questions?

Call West Donegal Township!
717-367-7178