



RHINE RUN STREAMBANK RESTORATION

Streams don't know where they shouldn't go. Streams erode outside bends of banks because that's where they turn. The extra energy causes the water to scour that side of the stream; especially if there's nothing to hold the soil down. If there is no vegetation to slow the water down or keep the soil stable the stream will continue to meander in that direction. Cutting down trees along road sides to open roads up to sunlight and possibly reduce the amount of ice build-up in winter can cause a whole other set of problems if those trees are on a streambank.

Streambank vegetation is very important in keeping local waters clean and also reducing the amount of erosion that takes place on the outside bend of streams. If this vital vegetation is removed it may open the road up to more sunlight, but can expose it to the threat of being washed away.

The restoration project shown below is an example of erosion, due to a lack of

vegetation, threatening the structural integrity of a township road.

The following photo shows the project after its completion and you can see the stream's close proximity to the road.



If this project had been postponed for a long period of time it would have resulted in a much bigger (and more expensive) problem.

In locations where roads are located next to streams steps should be taken to install water-loving vegetation along the streambanks to ensure a more stable area less vulnerable to erosion. Willows were used in this project, but other examples include (but are not limited to)

dogwood, silver maple, river birch, ninebark, and spicebush.

The last picture shows the project site one year after its completion. Vegetation has been allowed to grow unhindered and will only be managed to

maintain visibility on the road if that does become a concern.

The stream came before the road. (This is not nearly as philosophical as the chicken/egg debate.) "Streamside terrain offered relatively easy slopes for construction and subsequent use by horses and wagons. These footpaths became the roads, many of which survive today as our dirt and gravel roads. *This close proximity of roads and streams, dictated by historical development, began the conflict of erosion and sediment degradation affecting both roads and streams.*

Erosion is a natural occurrence in the environment. When roads are constructed, however, they create an interference with the natural systems and collect water, increasing its volume and velocity, resulting in accelerated erosion."¹

(www.epa.gov/owow/nps/sensitive/chapl.pdf)

The best we can do is make sure substantial vegetation exists on any exposed streambank, but especially on those bordering roads.

