

Erosion Control & Streambank Stabilization

The National Pollutant Discharge Elimination System, (NPDES) part of the Federal Clean Water Act, (CWA) requires point source and non-point source dischargers of listed pollutants to obtain NPDES permits for various activities. The Environmental Protection Agency considers silt and sediment loading of our waterways at the top of their list of pollutants needing to be reduced. When rain falls on a site that is being developed, the runoff carries not only soil particles (the major pollutant), but may also carry attached pollutants like petroleum products, metals, chemicals, pesticides, bacteria and organic products. Numerous studies have shown that sediment loading rates from construction sites are typically 10 - 20 times greater than preconstruction rates from un-developed land.

In Holts Summit, developments greater than or equal to 1 ac. & sites less than 1 ac., but part of a larger common development plan or sale, are required to comply with provisions of the CWA. Because of the CWA, the City is required to enforce a program to reduce pollutants in storm water runoff from construction sites. This is accomplished through a review of erosion control measures submitted as part of a developer's site plan, and the monitoring of construc-

tion sites during the stages of development. Not all erosion comes from development sites. Other types of erosion which are prevalent in the City include yard erosion and streambank erosion. Many times, yard erosion results from concentrated water flow from downspouts or yard grading. These problems can be corrected with minimal effort and expense on the part of the homeowner, through various methods.

Streambank erosion represents a concern for many homeowners in Holts Summit, as many properties contain drainage swales, ditches, or small streams. Stream bank erosion generally is precipitated by two factors. The first factor is the degradation of the existing stream banks by the placement of leaves, grass clippings, or other yard waste on the banks (which is prohibited by City Code). This material suffocates vegetation on the stream bank, causing it and its root system to die. Once dead, this system of roots is no longer able to hold the soil on the bank together, and as a result, bank erosion begins. The second factor involved in stream bank erosion arises from development. As more land is developed, more area is covered by surfaces that are impervious to water infiltration. This causes storm water to drain off the sites faster, and in greater volume than before. The existing ditches are not able to withstand the in-

flux of water without changing. Erosion occurs as the stream begins to adjust to the increased flow, by increasing its width and depth. Stream bed and streambank erosion can be corrected through various methods, but it is always a good idea to seek professional advice first. Permits are sometimes required from the U.S. Army Corps of Engineers, as well as the MO Department of Natural Resources depending on the scope of work. If you have questions about erosion control or streambank stabilization please call the Department of Maintenance at **(573) 896 - 5600**.



Citizen Information Brochures

May be obtained from the
Maintenance Department

245 S. Summit Dr. Holts Summit, MO. 65043

Office Hours: 8am - 5pm, Mon. - Fri.

(573) 896 - 5600

<http://www.holtssummit.org>

