

# LANDOWNERS' GUIDE TO STORM WATER

## Functions and Values of the Water Resources



### Stream

The physical characteristic, water quality, and habitat of a stream can be protected through the maintenance of a natural buffer area along the stream.

A natural buffer area provides:

- Area for water storage which helps control flooding
- The roots of the native woody plant protect stream banks from erosion
- Woody plants that shade the stream which improves water quality/temperature
- Overhanging vegetation which supplies food and habitat for fish and wildlife
- A mix of vegetation types more effectively capture pollutants from water runoff



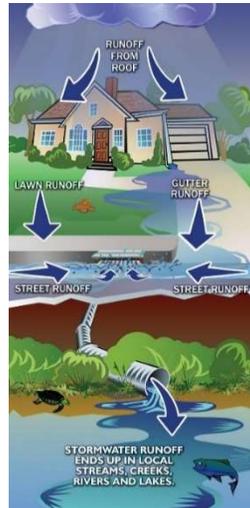
Mowing stream and pond banks causes bank erosion and slumping.

### Stormwater Water Management Basin



The stormwater basin was designed to collect stormwater and slowly release it at a controlled rate to the receiving stream to protect against so erosion and flooding. The basin is important for storing and slowing (attenuating) the runoff from impervious surfaces such as rooftops or pavement. The water level is controlled by a low flow orifice.

A retention basin can also provide water quality benefits by settling out sediments and pollutants, thus capturing the pollutants so they do not drain to the receiving stream.



# MANAGEMENT FACILITIES

## Land Management Practices/Maintenance

Land use adjacent to the stream and stormwater basin should be managed to protect the pond and stream banks from erosion, to provide habitat, and to improve water quality. Adjacent to these water resources:

- Maintain natural vegetation in the buffer. Avoid mowing, herbicide, and tree cutting. Pruning shrubs is ok.
- Inform lawn care personnel of buffer protection/vegetation avoidance.
- Remove trash to maintain the aesthetic viewshed, reduce pollution, and to avoid damage to plants.
- Plant only native plant species adjacent to these water resources.
- Do not place and/or dump plant debris, leaves, lawn clippings, or other material adjacent to or within these resources.
- Identify and repair areas of erosion on the banks.
- Avoid the use of heavy equipment (including riding mowers) within 10 feet of water edges. The weight of the equipment can lead to crumbling of the banks.
- Avoid grading, land clearing, buildings, grading, excavation, and impervious surfaces in the buffer zones.
- Inspect the basin outlet, removing debris and sediment to ensure that the orifice does not become blocked or clogged.

## Water Resource Protection

Per the County codified ordinances and township zoning resolutions, rivers, streams, and other natural watercourses contribute to the health, safety, and general welfare of the residents. To protect these areas, a minimum variable width of natural vegetated corridor is to be maintained each side of streams and cannot be removed unless a tree is in danger of falling and causing damage and/or blockage to the stream.

This SWM Info Guide was prepared for:



David L. Koontz, PE, SI  
330-643-8537

dkoontz@summitoh.net

by the Davey Resource Group with reference to guidance from the Summit Soil & Water Conservation District



Judith Mitchell, CPESC, CERP  
330-673-5685

judith.mitchell@davey.com



Stephanie Diebel  
330-929-2871

sdiebel@summitoh.net