Filter Strips

**DESCRIPTION**

Filter strips are vegetated areas that are situated between surface water bodies (i.e. streams and lakes) and cropland, grazing land, forestland, or disturbed land. They are generally in locations when runoff water leaves a field with the intention that sediment, organic material, nutrients, and chemicals can be filtered from the runoff water. Filter strips are also known as vegetative filter or buffer strips. Strips slow runoff water leaving a field so that larger particles, including soil and organic material can settle out. Due to entrapment of sediment and the establishment of vegetation, nutrients can be absorbed into the sediment that is deposited and remain on the field landscape, enabling plant uptake.


**POLLUTANT REMOVAL**

- Pesticides: slight to substantial
- Nutrients and Organics: substantial
- Suspended Sediment: substantial
- Salinity: slight
- Heavy metals: moderate to substantial
- Harmful Temperatures: Neutral
- Pathogens: moderate
- Petroleum: slight


**IMPLEMENTATION REQUIREMENTS**

- LOW Cost
- LOW Operation and Maintenance
- LOW Training for Operators


**LANDUSE APPLICATION**

- Cropland, Rangeland, Pasture

Ohio State University Extension
[http://ohioline.osu.edu/aex-fact/images/467_1.jpg](http://ohioline.osu.edu/aex-fact/images/467_1.jpg)
**SWAT CALIBRATION:**

*FILTERW(8.mgt):* width of edge of field filter strip (m). Edge-of-field filter strips may be defined in an HRU. Sediment, nutrient, pesticide, and bacteria loads in surface runoff are reduced as the surface runoff passes through the filter strip.