



Lawns, Landscapes and Water Quality

We all live in a watershed. A watershed is the land area that contributes water to streams, ponds, lakes and rivers. What we do in our watershed affects water quality.

Nonpoint source pollution is run-off pollution. It is one of the largest sources of water pollution.

Run-off pollution occurs with each rainfall, snowmelt, or excess irrigation when water flows over land/paved areas picking up pollutants and depositing them in streams, ponds, lakes, rivers.

Run-off pollution can cause excess algal growth in water, fish kills, reduced recreation dollars, and impaired drinking water.

Urban/Acreage pollution sources include:

- Sediments - soil erosion from construction sites and bare soils
- Fertilizers
- Pesticides
- Tree leaves, Grass clippings
- Household chemicals
- Oil/Grease
- Litter
- Faulty septic systems

Correctly designed, planted, and maintained lawns and landscapes provide many benefits for the environment. For example, leaves and roots act as filters for pollutants; roots hold soil to prevent erosion; plants cool the air to reduce energy costs; plant leaves trap dust and carbon dioxide; and more.

Best Management Landscape Practices for Water Quality

Best management practices help prevent or reduce pollutants in run-off water and they help reduce or slow down water run-off.

Reducing Pollutants in Run-off:

- ✓ Fertilize lawns and ornamentals based on soil tests and plant needs. Avoid overfertilization.
- ✓ Use pesticides (products that control weeds, insects and diseases) sparingly and according to label direction. Use least toxic products.
- ✓ Calibrate fertilizer and pesticide applicators to apply correct amount.
- ✓ Keep fertilizers, pesticides, grass clippings and mulch off paved areas. Do not sweep or hose them into the street.
- ✓ Recycle yard waste by composting or leaving clippings on lawns. Keep storm gutters and drains clear of leaves and grass clippings.
- ✓ Do not dump unwanted landscape chemicals on the ground or into storm drains.
- ✓ Dispose of excess pesticides and other household hazardous waste at pest collection centers.
- ✓ Use mulch on bare soil.

- ✓ Preserve existing trees and plant trees and shrubs to prevent erosion.
- ✓ Select landscape plants with low requirements for water, fertilizers and pesticides.
- ✓ Maintain plants correctly. Healthy plants usually have fewer pests.

Reducing or Slowing Down Run-off:

- ✓ Direct downspouts onto lawns or landscape beds so rainfall soaks in.
- ✓ Avoid excess irrigation leading to run-off.
- ✓ Avoid watering impermeable surfaces such as sidewalks and driveways.
- ✓ Use porous materials, i.e. brick, for walkways and patios when possible.
- ✓ Improve soils with compost to increase infiltration of water.
- ✓ Core aerate lawns to relieve soil compaction and increase water infiltration.
- ✓ Design landscape beds, rain gardens, to collect and allow rain water to soak in.
- ✓ Use rain barrels to collect rainwater.

Prepared by Kelly Feehan, Extension Educator with UNL Extension in Platte County. Sources: "Protecting Your Watershed" NF632 and Environmental Protection Agencies Do's & Don't Around the Home. www.epa.gov.