Residential Practices

Residential pollution prevention practices are household and neighborhood activities that prevent or reduce the contamination of stormwater.

Key Considerations

Residential pollution prevention practices prevent or reduce stormwater contamination from residential sources such as yards, driveways, sidewalks, and household products.

These practices are often simple, low cost behavioral changes that improve subwatershed water quality by minimizing the introduction of pollutants including sediment, nutrients, metals, bacteria, trash, oil, and toxins.

Each of these practices are highly suitable and effective in cold climates. Table 12.PREV.1 indicates the pollutants controlled by various residential pollution prevention practices while Table 12.PREV.2 describes some of the methods used for each of these practices. See Photo Credits and References for further information.

Eagle Valley - Woodbury, MN

Table 12.PREV.1 Residential Practices Pollutant Controls (Source: modified from the Center for Watershed Protection

Practice	Stormwater Pollutants Controlled						
	Sediment	Nutrients	Metals	Bacteria	Trash	Oil	Toxins
Fertilizer and Pesticide Management	○	●	○	○	○	○	●
Litter and Animal Waste Control	○	●	○	●	●	○	○
Yard Waste Management	◑	●	○	◔	◔	○	○
Household Hazardous Waste Control	○	◔	●	○	○	●	●
Alternative Product Use	○	○	○	○	○	○	●
Better Car and Equipment Washing	◑	●	◑	○	○	◑	◑
Better Sidewalk and Driveway Cleaning	●	◑	◑	○	◑	◑	◔
Better Sidewalk and Driveway Deicing	◑	◔	◔	○	○	○	◑
Proper Pool Discharge	○	○	○	○	○	○	●
Septic Tank Maintenance	◔	●	○	●	○	○	◔
Exposed Soil Repair	●	◑	◔	◔	○	○	○
Native Landscaping	●	●	◔	◔	◔	○	○
Healthy Lawns	●	◑	◔	◔	○	○	○

Legend	
○ = Uncontrolled	◑ = Moderately Controlled
◔ = Slightly Controlled	● = Significantly Controlled

Pollution Prevention

Table 12.PREV.2 Residential Pollution Prevention Methods

Practice		Method
	Fertilizer and Pesticide Management	Reduce or eliminate the need for fertilizer and pesticides by practicing natural lawn care, planting native vegetation, and limiting chemical use; follow Minnesota Statutes Chapter 18C and federal regulatory requirements on fertilizer and pesticide storage and application if used.
	Litter and Animal Waste Control	Properly dispose of pet waste and litter in a timely manner and according to local ordinance requirements.
	Yard Waste Management	Prevent yard waste from entering storm sewer systems and water bodies by either composting or using curbside pickup services and avoiding accumulation of yard waste on impervious surfaces; keep grass clippings and leaves out of the street.
	Household Hazardous Waste (HHW) Control	Ensure that hazardous waste, including paints, stains, solvents, cleaning products, used motor oil, antifreeze, and pesticides, are disposed of properly by participating in a County household hazardous waste collection program; properly store hazardous waste items.
	Alternative Product Use	Use less harmful products including alternative cleaning solutions, pesticides, fertilizers, automotive and paint products to reduce the amount of toxic substances released into sewer systems.
	Better Car and Equipment Washing	Wash cars less often and on grassy areas using phosphorus-free detergents and non-toxic cleaning products or use commercial car washes to prevent dirty wash water from flowing to storm sewer systems and water bodies.
	Better Sidewalk and Driveway Cleaning	Sweep sidewalks and driveways and dispose of sweepings in the trash instead of using hoses or leaf blowers to clean surfaces.
	Better Sidewalk and Driveway Deicing	Reduce or eliminate the need for deicing products by manually clearing sidewalks and driveways prior to deicer use; use environmentally-friendly deicing products when possible, apply sparingly and store properly if used.
	Proper Pool Discharge	Check local ordinances for pool water discharge requirements; pool water should be discharged to sanitary sewer systems or held for a week or more without addition of chlorine prior to spreading over pervious areas to prevent stormwater contamination.
	Exposed Soil Repair	Use native vegetation or grass to cover and stabilize exposed soil on lawns to prevent sediment wash off.
	Native Landscaping	Reduce turf areas by planting native species to reduce and filter pollutant-laden runoff and prevent the spread of invasive, non-native plant species into the storm sewer system.
	Healthy Lawns	Maintain thick grass planted in organic-rich soil to a height of at least 3 inches to prevent soil erosion, filter stormwater contaminants, and absorb airborne pollutants; limit or eliminate chemical use and water and repair lawn as needed

Note: See page 7 for photo credits

Municipal Practices

Municipal pollution prevention practices are public operation and maintenance activities and educational efforts implemented by municipal staff that prevent or reduce the contamination of stormwater.

Key Considerations

Municipal pollution prevention practices prevent or reduce stormwater contamination from public sources such as streets, parking areas, maintenance vehicles, storm and sanitary sewers, dumpsters, swimming pools and other potential stormwater hotspots. These practices improve subwatershed water quality by minimizing the introduction of pollutants including sediment, nutrients, metals, bacteria, trash, oil, and toxins. Each of these practices is highly suitable and effective in cold climates. Table 12.PREV.3 indicates the pollutants controlled by various municipal pollution prevention practices while Table 12.PREV.4 describes some of the methods used for each of these practices. See Chapter 13 for further discussion of potential stormwater hotspots. See Photo Credits and References for further information.

Salt delivery to a Washington County Salt Shed

Table 12.PREV.3 Municipal Practices Pollutant Controls (Source: modified from the Center for Watershed Protection)

Practice	Stormwater Pollutants Controlled						
	Sediment	Nutrients	Metals	Bacteria	Trash	Oil	Toxins
Temp. Construction Sediment Control	●	◑	◔	○	◔	○	○
Wind Erosion Control	●	◑	◔	○	◔	○	○
Streambank Stabilization	●	◑	○	○	○	○	○
Material Storage Control	●	◑	◑	○	○	●	●
Dumpster and Landfill Management	◔	◑	◑	●	●	◑	●
Proper Pool Discharge	○	○	○	○	○	○	●
Better Turf Management	◑	●	○	○	○	○	●
Better Street and Parking Lot Cleaning	●	◑	◑	○	◑	◑	◔
Better Street and Parking Lot Deicing	◑	◔	◔	○	○	○	●
Proper Vehicle Management	●	●	●	○	◑	●	●
Storm Sewer System Maintenance	●	◑	◔	○	◑	○	○
Sanitary Sewer System Maintenance	◔	●	○	●	○	○	◔
Litter and Animal Waste Control	○	●	○	●	●	○	○
Public Education	◑	◑	◑	◑	◑	◑	◑
Staff and Employee Education	◑	◑	◑	◑	◑	◑	◑

Legend

○ = Uncontrolled	◑ = Moderately Controlled
◔ = Slightly Controlled	● = Significantly Controlled

Pollution Prevention

Table 12.PREV.4 Municipal Pollution Prevention Methods

Practice		Method
	Temporary Construction Sediment Control	Implement and encourage practices to retain sediment within construction project area; see Temporary Construction Erosion and Sediment Control Factsheets for additional information.
	Wind Erosion Control	Institute a local program for wetting of open construction surfaces and other sources for windblown pollutants.
	Streambank Stabilization	Repair erosion occurring on a streambank of lakeshore in a timely manner; inspect bank areas for ice damage in the spring.
	Material Storage Control [1]	Reduce or eliminate spill and leakage loss by properly inspecting, containing, and storing hazardous materials and having a cleanup plan that can be quickly and efficiently implemented.
	Dumpster and Landfill Management	Ensure that contaminated material is contained to prevent solid and/or liquid waste from being washed into storm sewer systems or water bodies.
	Proper Pool Discharge [1]	Discharge pool water to sanitary sewer systems or hold for a week or more without the addition of chlorine prior to spreading over pervious areas instead of draining water directly to storm sewer systems. Follow local ordinances.
	Better Turf Management [1]	Ensure that mowing, fertilization, pesticide application, and irrigation are completed in ways that will prevent or reduce grass clippings, sediment, and chemicals from entering storm sewer systems; use native vegetation where possible.
	Better Street and Parking Lot Cleaning [1]	Maintain streets and parking lots frequently and especially in the spring by sweeping, picking up litter, and repairing deterioration; pressure wash pavement only as needed and avoid using cleaning agents.
	Better Street and Parking Lot Deicing	Properly store and conservatively apply salt, sand, or other deicing substances in order to prevent excessive and/or unnecessary contamination; implement anti-icing and prewet salt techniques for increased deicing efficiency.
	Proper Vehicle Management [1]	Ensure that vehicles are fueled, maintained, washed and stored in a manner that prevents the release of harmful fluids, including oil, antifreeze, gasoline, battery acid, hydraulic and transmission fluids, and cleaning solutions.
	Storm Sewer System Maintenance	Regularly clean debris from storm sewer inlets, remove sediment from catch basin sumps, and remove any illicit connections to storm sewer systems.
	Litter and Animal Waste Control [1]	Mandate litter and pet waste cleanup within the community and control waste-generating wildlife, such as geese; provide waste containers for litter and pet waste in public areas.
	Public Education	Label storm drains to indicate that no dumping is allowed and institute pollution prevention programs to educate and implement needed community practices.
	Staff, Employee, and Volunteer Education	Provide internal training for staff and provide direction to hired employees or volunteers regarding pollution prevention techniques to be used during work activites.

Note: See page 7 for photo credits