CITY OF LA CRESCENT

Storm Water Pollution Prevention Program

NPDES MS4 Program

Under state and federal rules, the City of La Crescent has been classified as a Municipal Separate Storm Sewer System (MS4) community. As such, the City has developed a Storm Water Pollution Prevention Plan (SWPPP) designed to develop, implement and enforce a Storm Water Pollution Prevention Plan (SWPPP) that is intended to minimize the discharge of pollutants from its storm sewer system in order to protect the water quality of the receiving waters in accordance with the Federal Clean Water Act (CWA) and its amendments.

This Storm Water Pollution Prevention Plan is a local plan that has been prepared with the purpose of meeting the requirements of the Federal National Pollutant Discharge Elimination System (NPDES) Phase II permit.

Best Management Practices (BMPs), including education, maintenance, pollution control techniques, system designs and engineering methods as well as local provisions deemed appropriate, are to be used to meet the minimum requirements of the NPDES Phase II permit.

The La Crescent SWPPP is a plan to meet each of the six Minimum Control Measures (MCM) described by the permit. The tasks described are not one-time efforts; they will continue throughout the permit period and beyond to maintain water quality. They are:

1. Public education and outreach;
2. Public participation/involvement;
3. Illicit discharge, detection and elimination;
4. Construction site runoff control;
5. Post-construction site runoff control; and
6. Pollution prevention/good housekeeping.

Facts on Storm Water Pollution

What is storm water run-off?

We commonly think of the water that falls as rain as being pure, but its quality is quickly threatened once it reaches earth. Storm water run-off occurs when precipitation from rain or snow melt flows over the ground. Impervious surfaces like driveways, sidewalks and streets prevent storm water from naturally infiltrating into the ground.

Why is storm water run-off a problem?

Storm water run-off can pick up debris, chemicals, dirt and other pollutants during a rainfall or snowmelt event. The run-off can flow into the storm sewers and eventually into the river and backwaters. Anything that enters a storm sewer system is ultimately discharged into nearby surface waters.

Polluted storm water run-off can have many adverse effects on plants, fish, animals and people. Sediment can cloud the water and make it difficult for aquatic plants and habitat to survive. Excess nutrients can cause algae blooms. When algae die they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms cannot exist in water with low dissolved oxygen levels.

Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil and automotive fluids can poison aquatic life. Surface water pollution in these forms can pose a health hazard to animals and people.

Polluted storm water often affects drinking water sources such as ground water or other surface water features from which the potable supply is drawn. This, in turn, can affect human health and increase drinking water treatment costs.

Homeowner Information

Lawn Care Tips

During spring with the melting snow and rain the runoff is funneling down streets and alleys into storm sewers that carry it to the river and wetlands. Here are some ideas to help reduce pollution in the spring:

Keep Your Spring Runoff Clean:

- Remove pet waste and trash from streets, sidewalks and driveways and put it into the garbage.
- Clean gutters regularly. Put leaves in your compost pile or bag with other yard trimmings to be taken to the City's compost site.
- Direct water from your downspouts away from your house and paved surfaces and onto your lawn.

Restore Your Lawn:

- Remove debris and yard trimmings
- Reseed bare spots. If spots are caused by salt, reseed with a salt-tolerant grass mix
- Lightly mulch newly seeded areas with straw and keep moist for three or four weeks.
- Control soil-erosion around your home. When left bare soil washes away easily with rain and carries phosphorus with it. Soil erosion can be prevented by keeping soil covered with vegetation or mulch.

Fertilizer tips

Fertilize with Grass Clippings

- Mow high and often.
- Set your mower at 2 1/2 to 3 inches to help keep out weeds and make your lawn more resistant to drought and disease.

By mowing high and often you will be able to leave grass clippings on the lawn, which adds nutrients to the soil, lessening the need for commercial fertilizer. Clippings also add organic matter, which improves the quality of the soil in turn increasing its ability to infiltrate storm water.

Test First

- Fertilizers, leaves, and grass clippings from lawns contribute to phosphorus problems in our lakes and rivers. Homeowners can protect water quality by using lawn fertilizers that do not contain phosphorus—

it's the law in Minnesota. Look for a middle number of zero—and sweeping up grass clippings from streets and sidewalks after mowing and trimming.
- Minnesota soils are naturally high in phosphorus, so our lawns usually don't need any extra, but to determine if your lawn is nutrient poor and requires fertilizer, have a soil test completed. In the La Crescent area you can contact the University of Minnesota Extension Office in Caledonia, 507-725-5807, to receive information on soil testing.
- If your lawn is deficient in some nutrient, remember it is best to fertilize just prior to periods of active growth – this means fall for cool-season northern grasses.
- More fertilizer is NOT better! Whatever is not taken up by the plant runs off in the next rain event. Follow package instructions for applying fertilizer. Keep fertilizer off paved surfaces: It's illegal to spread any fertilizer on hard surfaces such as streets, sidewalks, and driveways. Rain can wash the fertilizer into storm drains eventually leading to a lake or river near you. If you accidentally spill or spread fertilizer on a hard surface, clean it up immediately.
- Slow-release fertilizers excellent alternatives to soluble fertilizers (those that break down when they come in contact with water). Slow-release fertilizers are categorized into groups based on how nutrients are released (pellets, chemically altered, or coated). Rather than releasing a quick rush of nutrients, soluble crystal, or granular fertilizers do, these release their nutrients slowly over a longer period and are less likely to create a flush of nutrient-laden runoff pollution.

EROSION CONTROL

Erosion is a major problem, not only for homeowners who end up with ugly yards, but also for the river and back waters. Loose soil doesn't stop when it reaches the edge of the lawn. Instead it continues onward and into nearby storm sewers.

- **Cover all bare soil.** This could be accomplished temporarily with a tarp or landscaping fabric.
- **Establish permanent vegetation in the area**. This may mean sodding the area or planting grass seed. The best results come from products that control erosion and distribute seed together in one package. Some examples include compost with seed and hydro mulch with seed. You can also protect newly seeded soil with a biodegradable erosion control blanket, available at many garden centers.
- **For steep hillsides and shoreline property, deep-rooted native plants are the best defense against erosion**. The roots of native grasses, flowers and shrubs anchor the soil and increase its ability to absorb water. Visit www.BlueThumb.org to learn more about planting your shoreline property.

Help keep winter salt and sand out of local waterways

- At your home, you can prevent pollution to the river and backwaters by limiting the amount of salt and deicers you use on your driveways and sidewalks. **One teaspoon of salt can contaminate five gallons of water!**
- As a rule of thumb, if there is a layer of salt remaining on your driveway after the ice melts, you used too much salt. If you do have excess sand or salt, sweep it up and throw it away so that it is not washed into the storm sewer.
- The earlier you shovel after a snowfall, the less likely you are to need salt.
- Consider using an anti-icing agent before it snows. It will prevent the snow from bonding with the pavement and speed the melting process.

Car washing tips -
Because cleaning your car shouldn't dirty the river and backwaters.

Outdoor car washing is a common watershed behavior resulting in high loads of nutrients, metals, and hydrocarbons as detergent-rich water used to wash grime off cars flows down the street, into the storm drain,

and directly to surface waters. This activity is not limited by geographic region, but it has the greatest negative impact on water quality in urban areas with more pavement, and higher concentrations of automobiles. Perhaps the biggest limitation to implementing residential car wash best management practices is the lack of knowledge regarding the impacts of polluted runoff. Many people do not associate vehicle washing with local water quality, and may be unaware that the discharges that enter storm drains are not treated at plants before being discharged into local waters.

Commercial car washes

Quite simply, the best way to protect the river and backwaters when washing your car is to take it to the car wash!
Commercial car wash facilities often recycle their water or are required to send their wash water to the wastewater treatment plant, so if at all possible, use a facility to keep your car clean.

Cleaning your car at home

Out of doors, go out of your way
If you must wash your car out of doors, here are a few tips to minimize negative impacts:

- Remove all trash and debris from the car washing area.
- Use only soap or detergent labeled "non-toxic," "phosphate free," or "biodegradable;" The safest products for the environment are vegetable-based or citrus-based soaps.
- Do not use acid based wheel cleaners or engine degreasers.
- Select a site where the wash water can soak into grass, gravel, or be diverted to nearby landscaping. This will allow the wash water to filter through the vegetation and/or soil instead of flowing directly into the storm drain.
- Drive the car onto a piece of plywood or direct the wheels onto 1x8s to minimize soil compaction from the weight of the automobile
- If you select a site that drains into a street, block off the storm drain with sandbags and either divert the wash water to an area where the water can pool and evaporate throughout the day.
- Shake car mats into a trash can or vacuum them - do not shake dirt from car mats directly onto the ground.
- Use a bucket of soapy water to re-soap rags or sponges throughout the wash rather than adding more soap directly to rags or sponges.
- Wring sponges and wash rags into buckets, not the ground.
- Conserve water by using a spray nozzle with an automatic shut off and shutting off or kinking the hose when not in use.
- Always empty buckets into the sanitary sewer system (e.g. sinks/toilets).

Storm Drains

If a storm drain near your home is clogged with debris you can try to clear it with a shovel. However, if you feel that the situation is too dangerous or you are unable to clear the obstruction, you may call the City Street Department at 507-895-2595 to ask for assistance.

Construction Site Runoff Control

Erosion from construction sites has the potential to be 10 times greater than erosion from farming, and nearly 200 times greater than erosion from your lawn. Sediment pollutes the river and backwaters and can plug up our local storm sewer system, causing backups and flooding during rain events. The state of Minnesota currently regulates construction sites that disturb more than 1 acre of land by requiring the property owner and the

contractor to apply for a MPCA NPDES construction permit. Information regarding the state permitting process can be found on the MPCA's website at www.pca.state.mn.us .

The City of La Crescent, in an effort to comply with the City's SWPPP to protect area waters and our own storm sewer system, has a storm water and erosion control ordinance in place. The purpose of the ordinance is to use to the fullest current understanding of good design, architecture, landscape architecture and civil engineering to reduce the discharge of pollutants from the storm water system to the Maximum Extent Possible (MEP) to protect water quality, and satisfy the appropriate water quality treatments of the Clean Water Act. The SWPPP consists of a combination of Best Management Practices (BMPs) including education, maintenance, control techniques, system design and engineering methods the City deems appropriate, as long as the BMPs meet the requirements of the Stormwater Pollution Prevention Plan (SWPPP).

The ordinance establishes standards and specifications for conservation practices, planning activities, and construction activities which minimize storm water pollution, soil erosion, and sedimentation. It protects public health and property while encouraging retention of natural topographic features and existing vegetation and encouraging alternative approaches to conventional flatland development practices on steep slopes including imaginative and innovative techniques suited to the natural surroundings to enhance the existing and future appearances of hillsides.

Every applicant for a substantial building permit, subdivision approval, or a permit to allow land-disturbing activities involving disturbing twenty thousand (20,000) cubic feet of land or more must submit a storm water pollution control plan and a grading plan to the City Engineer. No substantial building permit, subdivision approval, or permit to allow land disturbing activities shall be issued until the City approves these plans. At a minimum, the pollution abatement control practices proposed must conform to National Pollution Discharge Elimination Permit (NPDES) requirements, the filing or approval requirements of relevant Watershed Districts, Water Management Organizations, Ditch Authorities, Soil and Water Conservation Districts or other regulatory bodies in addition to those in the current version of the Minnesota Pollution Control Agency's publication "Protecting Water Quality in Urban Areas" and the most current version of the "Minnesota Storm Water Manual."

A copy of the storm water and erosion control ordinances #452 and 454 can be picked up at City Hall