

STREET SWEEPING POLICY

I. PURPOSE AND NEED FOR POLICY

The City of New Prague believes that it is in the best interest of the residents for the City to assume basic responsibility of sweeping on city streets. Reasonable sweeping is necessary for vehicle and pedestrian safety, street maintenance, surface water quality and environmental concerns. The City will provide such service in a cost-effective manner, keeping in mind safety, budget, personnel and environmental concerns. The City will use City employees, equipment and/or private contractors to provide this service. Completion dates are dependent on weather conditions, personnel and equipment availability. The Maintenance Supervisor or his/her designee will be responsible for scheduling of personnel and equipment.

II. POLICY

- A. Spring sweeping of snow and ice control aggregate will begin when streets are significantly clear of snow and ice, usually late March or early April, after the significant risk of later snowfall has passed. Priority will be given to areas draining into the higher priority water bodies as determined by the City's Surface Water Management Plan.
- B. Sealcoating is a surface application of an asphalt emulsion followed by a layer of small aggregate that protects the pavement from the deteriorating effects of sun and water plus it provides increased surface friction. Sealcoat sweeping will be completed within fourteen (14) days of application. Additional sweeping of sealcoat aggregate may be performed on an as needed basis.
- C. Fall sweeping will commence as soon as a sufficient quantity of leaves has dropped from the trees to make it cost effective. Priority will be given to areas draining into key water resources as determined by the City's Surface Water Management Plan Chapter 2.4 and to areas with greater accumulations of leaves. Overall sweeping priorities will be established based on the goal of removing the greatest quantity of leaves possible, so some streets may be swept twice prior to other streets being swept for the first time. The goal will be to sweep all the streets, but the onset of winter weather may make it impossible to achieve this goal.
- D. Key water resource areas (as described in Chapter 2.4 of the Surface Water Management Plan) will be swept on a priority basis throughout the year as shown in the Surface Water Management Plan.
- E. Environmental/general sweeping will be performed on an as needed basis.
- F. Erosion/siltation dirt & debris cleanup from construction projects is the responsibility of the developer, contractor or property owner. Except in cases of emergency the streets shall be cleaned and swept with twenty-four (24) hours of notification. If the streets are not swept within the specified time allowed or in the case of an emergency, the City may sweep the street and the responsible party will reimburse the City of all associated costs.
- G. Citizen requests for sweeping will be evaluated and the Maintenance Supervisor will determine the priority.

III. PROCEDURE

Sweeping is a slow process with average gutter line speeds for the first sweeping in spring that can be as slow as 2 to 3 miles per hour. The City will sweep with its own equipment and manpower, or contract services. Normally center lines are swept after gutter lines are cleaned. Equipment may include mechanical, vacuum or regenerative air sweepers.

The City has classified City streets based on the street function, traffic volume, impact on water quality and the environment, and the importance of the welfare of the Community. Accordingly, sweeping routes will be designed to provide the maximum possible benefit to higher volume and water quality sensitive areas.

Sweeping operations will be conducted when weather conditions permit. Factors that may delay sweeping operations include: temperatures below 32°, wind, rain, snow and frozen gutter lines.

Sweeping operations are performed in conjunction with and can be impacted by other maintenance operations. Sweeping operations will normally be conducted Monday – Friday, from 7:00 am to 5:00 pm. Extended work days and shift changes may be utilized for spring cleanup or emergency sweeping to provide maximum efficiency.

The City will sweep trails and sidewalks on collector and arterial streets once in the spring after the risk of snow has passed and are clear of snow and ice or on an as needed basis.

Sand, sealcoat rock, or other dirt and debris on the street can create a potentially dangerous condition for vehicles, motorcyclists, bicyclists and pedestrians. It would not be practical or effective to sign all streets for potential dangerous conditions. During sealcoat or milling operations, warning signs indicating loose rock will be placed on each end of collector and arterial streets or other appropriate areas where needed. These signs will remain in place until the street has been swept. Employees will follow all work rules, OSHA regulations, and Federal and State laws to ensure a safe sweeping operation.

2.4 KEY WATER RESOURCES

A description of key water resources within the study area follows. Key water resources include the three streams identified earlier as well as the large DNR wetland (104W) north of the wastewater treatment plant.

SAND CREEK

Sand Creek is a DNR protected watercourse though its tributary is not. The tributary is a ditch that begins immediately north of Trunk Highway 19 in Greenway Park. This ditch runs north through the Park before turning west under County Road 37. The ditch enters Sand Creek approximately 1,000 feet east of the current City limits. The protected portion of Sand Creek begins at Le Sueur County Road 29. From New Prague, Sand Creek flows north and west toward the Minnesota River. Its confluence with the Minnesota River occurs north of Jordan. Sand Creek joins Raven Stream upstream of the Minnesota River, just south of Helena. Further downstream of its meeting with Raven Stream and Sand Creek joins Porter Creek.

From Porter Creek to the Minnesota River, approximately 13.2 creek miles, Sand Creek is listed as impaired under the Minnesota Pollution Control Agency's (MPCA) impaired waters list. The listing of impaired waters is one of the MPCA's duties in its administration of Section 303d of the federal Clean Water Act. According to the MPCA, the impairment is to aquatic life due to turbidity. The turbidity is most likely caused by high stream velocities that erode stream banks as well as sediment runoff from agricultural drainage.

The USGS maintains a flow measuring station on Sand Creek at Trunk Highway 19. At that location Sand Creek's tributary area totals approximately 62.2 square miles. The USGS has measured historic peak discharges since 1960. In 1960 the USGS recorded a 1,100 cubic feet per second (cfs) discharge at this station -- the highest flow ever recorded. The lowest annual peak discharge occurred in 1963 at 54 cfs. These flows are the annual highs. In dry times, the Creek flow can dwindle to nothing. Most commonly, instances of annual peak discharge highs occur in the spring though there are some instances when the annual peak discharge resulted from a summertime rainfall event. Typically, when any significant snowpack is present, snowmelt will generate the highest peak flows. The majority of annual peak discharge highs fall within the range of 200 to 400 cfs -- including those recorded in the period 2000 to 2003.

In addition to the USGS station, the MPCA maintained a monitoring station on Sand Creek from 2000 through 2001. This station was located at 270th Street. The MPCA placed their station to collect water quality for their stream status evaluation.

Recent FEMA flood studies have set base flood elevations for Sand Creek. The Sand Creek tributary was also part of this study and base flood elevations have been calculated for the tributary. Scott County and FEMA are currently restudying Sand Creek. Base flood elevations for Sand Creek have been established for all of Scott County and will appear on new floodplain mapping panels scheduled to be produced in 2008.

PHILLIP CREEK

Phillip Creek begins as a Le Sueur County ditch 2½ miles south of Le Sueur County Road 29. North of County Road 29, it becomes Phillip Creek, a DNR protected water course. This protection extends north to the Creek's confluence with Raven Stream. Phillip Creek itself runs only 2½ miles before it joins Raven Stream. Over most its length the Creek runs adjacent to Trunk Highway 21. Before the Creek leaves the City limits it takes a wide arc to the east and then west, meeting up with Raven Stream approximately ½ mile west of the City limits.

MPCA data indicates that there are two current NPDES industrial permittees discharging to Phillip Creek. These are B and F Distributing Inc. of New Prague and the City of New Prague wastewater treatment plant. The MPCA maintains monitoring sites along the Creek to ensure permit compliance.

FEMA flood studies have developed base flood elevations for Phillip Creek from Le Sueur County Road 29 to Trunk Highway 21 (FIRM Map #27079C0087 D; Panels 87 and 89; July 21, 1999). For development proposals adjacent to the Creek these are a necessary reference. Base flood elevations range from 986 (MSL) at County Road 29 to 959 (MSL) at Trunk Highway 21. Floodplain encroachment onto developed property is most notable in the vicinity of the Middle School and along 1st and 2nd Avenues NW near their intersections with 6th Street NW.

RAVEN STREAM

The Raven Stream detailed in this Report is actually the East Branch of Raven Stream. The main branch of Raven Stream originates in Belle Plaine Township, Scott County, approximately 8 miles northwest of New Prague. Another branch of Raven Stream, the west Branch, originates in Derrynane Township, Le Sueur County, approximately 6 miles southwest of New Prague. The main and west branches join the east branch approximately one mile north of the study area boundary. For ease of reference Raven Stream, in the context of this Report, refers to the East Branch within the SWMP study area.

Raven Stream begins as a public ditch near Lake Pepin in Lanesburg Township. From Le Sueur County Road 29 north it is a DNR protected watercourse. From 1960 to 1985, the USGS maintained a flow measuring station on Raven Stream where it crosses under 260th Street. According to USGS data the tributary area at this point is approximately 22.1 square miles. Similar to Sand Creek, the USGS has collected historic annual peak flows at this station since 1960. And, again similar to Sand Creek, the highest of these annual peak flows occurred in 1960 when a flood peak of 929 cfs was measured.

The Raven Stream drainage area at the station is $\frac{1}{3}$ that of Sand Creek at its station yet the 1960 annual peak flow is similar. Overall, the historical record indicates a higher discharge per acre in the Raven Stream subwatershed than in the Sand Creek subwatershed (upstream of TH 19). Typically a higher per acre discharge results from topographic differences or from differences in the agricultural practices (i.e., presence of ditching, draining of wetlands). The majority of Raven Stream's annual peak discharges occur during the spring though a handful has occurred in the summer and fall.

FEMA has prepared some floodplain mapping of Raven Stream though no base flood elevations have been developed (FIRM Map #27079C0088 D, Panel 88; FIRM Map #27079C0089D, Panel 89; both dated July 21, 1999).

Figure 4 at the end of Section 3 describes regulatory jurisdiction over watercourses. This protection applies to all three streams north of where they cross Le Sueur County Road 29. The DNR protection of these streams means that any work affecting their course, current, or cross section requires a DNR permit.

OTHER NATURAL AND WATER RESOURCES

The Public Waters Inventory (PWI) identifies the large wetland north of the wastewater treatment plant. In rural areas, wetlands larger than 10 acres are designated as DNR protected. In urban or developed areas, including the New Prague City limits, this threshold falls to 2.5 acres. For this reason two additional DNR protected wetlands exist in the City which do not have PWI numbering. These are the wetlands immediately south of the Middle School on either side of Columbus Avenue North.