

2006 NPDES Stormwater Management Program Accomplishments

Storm Drain System Operation

Maintenance operations accomplishments:

- Responded to 466 complaints of plugged or backed-up catch basins.
- Responded to 66 complaints of cave-ins around catch basins and manholes.
- Completed 395 minor repairs to storm drain lines, catch basins or manholes.
- Completed 27 major repairs.
- Cleaned 8.02 miles of storm drain by jetting.
- Televised 4.69 miles of storm drain.

Structural Controls Maintenance and Operation

- Monitored and maintained 25 pump stations.
- Inspected 121 and cleaned 90 grit chambers. A total of 626 cubic yards or about 870 tons of grit was removed.
- Maintained 10 (up from 9 in 2004) stormwater holding ponds.
- Inspected 120 of 387 storm drain outfalls in 2005 inspection program. Of the 120 outfalls inspected, 11 were judged to be in need of maintenance.

Stormwater Management for New Developments and Construction

Public Works' staff has been reviewing the Stormwater Management Ordinance for potential modifications. Revisions will be recommended following careful analysis. Site inspections and other work associated with the erosion and sedimentation control program have been increased substantially after a full time employee was hired for the task.

Other accomplishments:

- Minneapolis Public Works took part in the preliminary review of over 250 site plans. Of those 250 sites, 160 site plans eventually received City of Minneapolis Planning Commission approval, were routed for final review, and received permits.
- Over 40 sites provided some sort of Stormwater BMP. The BMPs that were proposed included rain gardens, pervious pavement, infiltration areas, ponds and underground detention facilities. When installed, these BMPs will provide rate control and water quality for over 100 acres of land. City personnel coordinated 3,061 site inspections for erosion and sediment control compliance, with 8 sites receiving enforcement action for non-compliance.
- Number of sites captured for stormwater management: 26
- Number of BMPs installed as a result of current programs: 350
- Number of properties receiving quality or quantity credits: 215

Roadways

The 2004-2005 winter season was a cold year with many small snow events. The most snowfall occurring in January and February, two snow emergencies and 156 days of snow and/or temperatures below freezing. The quantities of salt and sand used in snow and ice control are tracked by recording amounts that are delivered by suppliers and also by estimating the quantities that are on-hand on a daily basis. Street sweepings are counted by volume (truckload). These counts are converted to material weight by taking an average of a random weighing of trucks and multiplying by number of truckloads hauled. Leaves picked up are weighed at certified scales that are located at City facilities or in Hutchinson. The statistics for last year's program are as follows:

- 12,500 tons of *salt* was applied to roadways
- 9,400 tons of *sand* was applied to roadways
- 16,200 tons of material was reclaimed during spring and summer street sweeping operations
- 5,700 tons of leaves were collected (for composting) during the fall citywide sweeping
- Twenty staff members attended an eight hour refresher for the 40-hour hazardous materials training class

Flood Control

During 2005, several flood projects realized significant progress. The following is a summary of Flood mitigation project activity in 2005:

Flood Mitigation Area 1

- Pipe work completed on 42nd from Newton to Russell.
- Road restored at 42nd & Russell.

Flood Area 5 - 35th Ave. N. to Dowling Ave. N. & Washburn to Morgan Ave. N.

- The XPSWMM model and engineering report were completed

Flood Area 8 - 3rd St. N at 23rd Ave. N.

- The XPSWMM model and engineering report were completed

Flood Area 14 - 40th St. E from 4th to 5th Ave. S

- The XPSWMM model and engineering report were completed

Flood Area 18 - 47th St. W between Pleasant Ave. S. and Garfield Ave. S.

- The XPSWMM model and engineering report were completed

Flood Mitigation Area 19 – Phase II Tunnel Construction

- Project was completed on September 20, 2005.

Flood Mitigation Area 19 – Phase III Construction by City Crews

- The Grit Chamber near Upper Harriet Parkway was completed.

Flood Area 25 - 44th St. W. to MNDOT I-35W tunnel

- The XPSWMM model and engineering report were completed

Flood Mitigation Area 27

- Road resurfacing is completed on 30th and 29th Ave S from 40th to 38th St E.

Flood Area 29 - 50th to 51st St. W. and York to Zenith Ave. S.

- The XPSWMM model and engineering report were completed

Flood Area 30 - 51st St. W & Abbott Ave. S.

- The XPSWMM model and engineering report were completed

Flood Area 38 - Dean Parkway

- The XPSWMM model and engineering report were completed

Flood Area 39 - 36th Street E from 4th Ace. S. to the Mississippi

- The XPSWMM model and engineering report were completed

Pesticides and Fertilizer Control

The Minneapolis Park and Recreation Board (MPRB) manages 6,400 acres of parkland in the City of Minneapolis (18% of 35,244 total land acres).

Accomplishments:

The MPRB continued water quality education programs throughout the City in 2005. With storm water education models and printed materials in hand, Environmental Operations Naturalist staff participated in 56 Minneapolis community festivals (such as May Day, Stone Arch Bridge Art Festival), and events (Aquatennial, Log Rolling Championships), neighborhood celebrations (like local corn-feeds and Pageant Hill), and concert series at local water bodies (Lake Harriet, Minnehaha Park, Loring Park). Hands-on water quality educational displays focused on neighborhood watersheds and how human activities impact local water bodies. Adults and children participated in Watershed Jeopardy and other educational games. Bookmarks, temporary tattoos, stickers, and water quality informational materials were also distributed at these events.

Illicit Discharges and Spill Control

Accomplishments:

- Successfully addressed 164 calls for emergency response (containment of spills, chemical dumping, illegal disposal or handling of regulated or hazardous materials).
- 41 direct connections (registrations) to the storm drain (NPDES Permits)
- Investigated 301 water and land pollution complaints (illegal dumping, improper storage of material, chemical storage)
- Sewer Maintenance responded to, and subsequently mitigated 16 spills in 2005
- Notices sent to 48 residential erosion control permit holders of 479 erosion permits issued for residential, multi-family and commercial projects.
- Inspected 15 contaminated soil complaints

Public Education

The Public Works Department managed the 2005 Stormwater Education Program. These efforts included partnerships with third party organizations and the MPRB, extensive distribution of information via the City's Website, and various other educational initiatives.

Coordination with Other Governmental Agencies

In 2005, the City continued its coordinated efforts with the following four watershed management organizations: the Bassett Creek Watershed Management Commission, the Shingle Creek Watershed Management Commission, the Mississippi Watershed Management Organizations, and the Minnehaha Watershed Management District. In addition, the City coordinated efforts with the Minnesota Pollution Control Agency, Metropolitan Council Environmental Services, Hennepin County, and various other governmental agencies.

Stormwater and Water Quality Monitoring

Accomplishments:

- In 2005, the MPRB monitored one of the City of Minneapolis' stormwater ponds located in north Minneapolis. The pond was designed for flood mitigation purposes and to help reduce pollutants. The stormwater pond is referred to as Logan Pond, which is located at 29th Ave. N. and Logan Ave. N.
- In 2005, the MPRB monitored the permeable paver lot located at the City of Minneapolis' Animal Shelter in north Minneapolis.
- 11 lakes/ponds show stable water quality or water quality improvements.
- Continued Wetland Health Evaluation Project begun in 2002 including Diamond Lake.