

BMP Summary Sheet

MS4 Name: City of Minnetonka

Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Unique BMP Identification Number: 5a-1

*BMP Title: Development and Implementation of Structural and/or Non-structural BMPs
*BMP Description: <p>The City of Minnetonka currently has procedures in place for a Development and Redevelopment Plan Review Program. The City's planning process considers any proposal and its compliance with, among others, the following ordinances: zoning, shoreland, wetland, and floodplain districts, and tree preservation. Water quality impacts and impervious surface restrictions are also considered. The City's Water Resources Management Plan also has specific guidelines for development. Some of the specific components (BMPs) are current practices conducted by the City and some have been selected as possible BMPs which may be appropriate options for minimizing stormwater runoff pollution and flooding. BMPs are implemented as part of developments and redevelopments that minimize the impact of storm water runoff by trapping floating debris and oils and removing sediment and nutrients by infiltrating runoff through rain gardens, by filtering it with other bioretention techniques or by settling sediment and nutrients out in temporary or permanent ponds. Runoff volumes are reduced by minimizing impervious surface, by infiltration where possible and through evapotranspiration in vegetated swales, drainage corridors and ponds.</p>
*Measurable Goals: <ul style="list-style-type: none">• Number of plan reviews performed annually
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Continue to implement existing procedures
Specific Components and Notes: <ul style="list-style-type: none">• Zoning, Shoreland, Wetland and Floodplain ordinances• Water Resources Management Plan (WRMP) will be updated on or before 2009, See BMP Summary Sheet 5b-2• See BMP Summary Sheets 5a-2 thru 5a-9
*Responsible Party for this BMP: Name: Geoff Olson Department: Planning Phone: 952-939-8296 E-mail: golson@eminnetonka.com

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Unique BMP Identification Number: 5a-2

<p>*BMP Title: Electronic Version of Construction Site BMPs and Installation Criteria</p>
<p>*BMP Description:</p> <p>The City of Minnetonka will provide a link on its website to the MPCA’s website where the MPCA Construction Site BMP manual is available for review. The City will also provide a link to the Minnehaha Creek Watershed District’s website where the Urban Small Site BMP manual is available for review.</p>
<p>*Measurable Goals:</p> <ul style="list-style-type: none"> • Website links kept up to date
<p>*Timeline/Implementation Schedule:</p> <ul style="list-style-type: none"> • Links have been created. Continue to monitor to assure that they are up to date
<p>Specific Components and Notes:</p> <ul style="list-style-type: none"> • Keep link to MPCA website up-to-date: www.pca.state.mn.us • Keep link to MCWD website up-to-date: www.minnehahacreek.org • Links to other watershed districts also • Public Education component
<p>*Responsible Party for this BMP:</p> <p style="margin-left: 20px;">Name: Jennifer K. Posma</p> <p style="margin-left: 20px;">Department: Engineering</p> <p style="margin-left: 20px;">Phone: 952-939-8234</p> <p style="margin-left: 20px;">E-mail: jposma@eminnetonka.com</p>

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Unique BMP Identification Number: 5a-3

*BMP Title: Community Resource Guide for BMP Availability
*BMP Description: The City of Minnetonka has prepared printed resource material to distribute to citizens and trade professionals interested in knowing where and how to obtain erosion and sediment control products and services. This material will be updated as needed.
*Measurable Goals: <ul style="list-style-type: none">• Completed resource materials• Number of resource materials distributed
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Continue to distribute Resource Material• Update as needed
Specific Components and Notes: <ul style="list-style-type: none">• Distribute material at community events, on a “as-requested” basis, or as otherwise appropriate• Material available on the city website• Update as needed• Public education and public involvement components
*Responsible Party for this BMP: Name: Jo Colleran Department: Public Works Phone: 952-988-8415 E-mail: jcolleran@eminnetonka.com

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Unique BMP Identification Number: 5a-4

*BMP Title: Education Classes and Workshops on Proper Erosion Control Installation Techniques
*BMP Description: The City of Minnetonka will provide training to area trade professionals who attend the City's Building contractors Workshop. Training will include appropriate installation criteria and guidelines for erosion and sediment control products. Guidelines for inspection criteria will be included.
*Measurable Goals: <ul style="list-style-type: none">• Number of attendees at workshop
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Training Component was developed in 2004• Continue to implement training at the Building Contractors Workshop
Specific Components and Notes: <ul style="list-style-type: none">• Develop training agenda and brochures for handout• Public educational component• Encourage attendance at other available training and workshops (i.e. MnDOT certification)
*Responsible Party for this BMP: Name: Jo Colleran Department: Public Works Phone: 952-988-8415 E-mail: jcolleran@eminnetonka.com

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Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Unique BMP Identification Number: 5a-5

*BMP Title: Wet Ponds, Dry Ponds
*BMP Description: The City of Minnetonka will continue to require wet and dry storm water detention ponds as detailed in the Water Resources Management Plan (WRP) to protect lakes and creeks within the jurisdictional limits and other water bodies in which surface drainage from the jurisdiction discharges into a receiving water.
*Measurable Goals: <ul style="list-style-type: none">• Number of wet ponds installed• Number of dry ponds installed
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Wet and dry ponds will be implemented as a BMP immediately in areas where it is appropriate
Specific Components and Notes: <ul style="list-style-type: none">• Water Resources Management Plan, See BMP Summary Sheet 5b-2• Planning Ordinances, See BMP Summary Sheet 5b-1
*Responsible Party for this BMP: Name: Jennifer K. Posma Department: Engineering Phone: 952-939-8234 E-mail: jposma@eminnetonka.com

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Unique BMP Identification Number: 5a-6

*BMP Title: Underground Storage Pipe
*BMP Description: The City of Minnetonka will continue to allow underground storage pipes in lieu of surface ponding, as appropriate. The use of the underground storage pipes will protect lakes and creeks within the jurisdictional limits and other water bodies in which surface drainage from the jurisdiction discharges into a receiving water.
*Measurable Goals: <ul style="list-style-type: none">• Number of underground storage pipes installed
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Underground storage pipes will be implemented as a BMP immediately in areas where it is appropriate.
Specific Components and Notes: <ul style="list-style-type: none">• Water Resources Management Plan, See BMP Summary Sheet 5b-2• Planning Ordinances, See BMP Summary Sheet 5b-1
*Responsible Party for this BMP: Name: Jennifer K. Posma Department: Engineering Phone: 952-939-8234 E-mail: jposma@eminnetonka.com

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Unique BMP Identification Number: 5a-7

*BMP Title: Infiltration Basin, Infiltration Trench, Rain Garden
*BMP Description: In locations within the City of Minnetonka of acceptable sandy soil conditions for infiltration, the City has installed infiltration basins, infiltration trenches, and rain gardens to minimize localized storm water pollution runoff as well as increase the aesthetic quality of the City, the City plans to continue this BMP in areas as physical conditions allow.
*Measurable Goals: <ul style="list-style-type: none">• Number of infiltration basins, including infiltration trenches and rain gardens, installed
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Implementation of infiltration basins, infiltration trenches, and rain gardens as BMPs immediately in areas where it is appropriate
Specific Components and Notes: <ul style="list-style-type: none">• Water Resources Management Plan, See BMP Summary Sheet 5b-2• Planning Ordinances, See BMP Summary Sheet 5b-1
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Unique BMP Identification Number: 5a-8

*BMP Title: Filter/Buffer Strips
*BMP Description: The City of Minnetonka recently adopted a wetland buffer provision in its <i>Wetland Ordinance</i> . Acting as buffer strips, the wetland buffer requirements vary in width based on the quality of the receiving wetland. The city currently has many naturally occurring buffers adjacent to wetlands and will require new buffers and wetland setbacks as the ordinance indicates.
*Measurable Goals: <ul style="list-style-type: none">• Approximate number of buffer strips installed
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Implementation of wetland buffer strips as a BMP immediately in areas where it is appropriate
Specific Components and Notes: <ul style="list-style-type: none">• Water Resources Management Plan, See BMP Summary Sheet 5b-2• Planning Ordinances, See BMP Summary Sheet 5b-1• Minnehaha Creek Watershed District buffer requirements also apply
*Responsible Party for this BMP: Name: Jo Colleran Department: Public Works Phone: 952-988-8415 E-mail: jcolleran@eminnetonka.com

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Unique BMP Identification Number: 5a-9

*BMP Title: Stabilization Seeding
*BMP Description: The City of Minnetonka currently requires proper seeding of disturbed sites for stabilization and erosion control. This provision will be reviewed in conjunction with the Grading and Erosion Control Ordinance and modified as necessary. The City will continue to enforce this requirement to ensure timely vegetative cover after soil disturbance to stabilize the surface.
*Measurable Goals: <ul style="list-style-type: none">• Number of site visits without violations• Number of violations to seeding provision• Number and types of enforcement actions
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Effective immediately• By 2008 – make modifications, if appropriate to the Grading and Erosion Control Ordinance
Specific Components and Notes: <ul style="list-style-type: none">• Installation requirements• Inspection procedures, See BMP Summary Sheet 4f-2• Water Resources Management Plan, See BMP Summary Sheet 5b-2• Planning Ordinances, See BMP Summary Sheet 5b-1• Grading and Erosion Control Ordinance, See BMP Summary Sheet 4a-1
*Responsible Party for this BMP: Name: Jo Colleran Department: Public Works Phone: 952-988-8415 E-mail: jcolleran@eminnetonka.com

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Unique BMP Identification Number: 5a-10

*BMP Title: Bio-Engineering
*BMP Description: The City of Minnetonka has seen a limited number of bio-engineering techniques such as live stakes used in recent conservation/low impact developments. The city will encourage the use of more bio-engineering techniques in future developments.
*Measurable Goals: <ul style="list-style-type: none">• Number of bio-engineering techniques used
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Implementation of bio-engineering as BMPs immediately, in areas where it is appropriate
Specific Components and Notes: <ul style="list-style-type: none">• Live Gully Repair• Live Crib Wall• Tree Revetments• Log Root Wads• Willow Posts• Live Stakes• Wattling or Live Facines
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Unique BMP Identification Number: 5a-11

*BMP Title: Structural or Hard Engineering Techniques
*BMP Description: The City of Minnetonka has used structural stabilization techniques in the past and will continue to allow the use of these techniques. Some of the specific components listed below are current practices conducted by the City and some have been selected as possible BMPs which may be appropriate options for minimizing stormwater runoff pollution and flooding.
*Measurable Goals: <ul style="list-style-type: none">• Number of structural techniques used
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Implementation of structural techniques as BMPs immediately in areas where it is appropriate
Specific Components and Notes: <ul style="list-style-type: none">• Gabions• Grid Pavers• Grid Stabilization Structures• Paved Flumes• Outlet Stabilization Structure• Channel Riprap• Slope Riprap
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Unique BMP Identification Number: 5a-12

*BMP Title: Manufactured BMPs
*BMP Description: The City of Minnetonka had routinely installed sump catch basins within its MS4, especially in recent years. The City will continue to install/require sump catch basins and will consider other manufactured BMPs on a project by project basis to determine suitability.
*Measurable Goals: <ul style="list-style-type: none">• Number of units installed
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Implementation of manufactured BMPs immediately in areas where it is appropriate
Specific Components and Notes: <ul style="list-style-type: none">• Catch basin inserts• Oil and Grit Separators• Swirl Concentrators (i.e. StormCeptor)
*Responsible Party for this BMP: Name: Jennifer K. Posma Department: Engineering Phone: 952-939-8234 E-mail: jposma@eminnetonka.com

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Unique BMP Identification Number: 5b-1

<p>*BMP Title: Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment</p>
<p>*BMP Description: The City of Minnetonka currently operates under a Zoning Ordinance that focuses on current subdivision regulations and water quality goals written within the Water Resources Management Plan (WRMP). The City has numerous provisions within the Zoning Ordinance to address general water quality issues and post-construction runoff from new developments and redevelopment projects</p>
<p>*Measurable Goals:</p> <ul style="list-style-type: none"> • Number of plan reviews performed annually
<p>*Timeline/Implementation Schedule:</p> <ul style="list-style-type: none"> • Existing ordinances, continue implementing
<p>Specific Components and Notes:</p> <ul style="list-style-type: none"> • Zoning Ordinance Adopted • Steep Slope Ordinance Adopted • Tree Preservation Ordinance Adopted • Shoreland Ordinance Adopted • Wetland Ordinance Adopted • Water quality standards adopted as part of the Water Resources Management Plan, See BMP Summary Sheet 5b-2 • Maximum allowable impervious surface • Low Impact Development
<p>*Responsible Party for this BMP:</p> <p style="margin-left: 20px;">Name: Geoff Olson</p> <p style="margin-left: 20px;">Department: Planning</p> <p style="margin-left: 20px;">Phone: 952-939-8296</p> <p style="margin-left: 20px;">E-mail: golson@eminnetonka.com</p>

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Unique BMP Identification Number: 5b-2

*BMP Title: Water Resources Management Plan (WRMP)
*BMP Description: The City of Minnetonka currently has a Water Resources Management Plan (WRMP) that was adopted in January 1999 to comply with State and Watershed District requirements. The WRMP describes and identifies the specific components listed below. The WRMP will be reviewed in five-to ten-year intervals to determine whether updates are required to meet changing legal or physical conditions. Amendments may be either minor or major.
*Measurable Goals: <ul style="list-style-type: none">• Completed WRMP
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Existing procedures, implement immediately
Specific Components and Notes: <ul style="list-style-type: none">• Geology and soil types• Water Resources• Sensitive Resources• Wetland Inventory• Basin Outflow Rates• Water quality goals and requirements• WRMP will be updated on or before 2009• Major and minor amendments will be submitted to the appropriate agencies per Chapter 10 of the WRMP
*Responsible Party for this BMP: Name: Jennifer K. Posma Department: Engineering Phone: 952-939-8234 E-mail: jposma@eminnetonka.com

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Unique BMP Identification Number: 5c-1

*BMP Title: Long-term Operation and Maintenance of BMPs
*BMP Description: The City of Minnetonka will continue an existing program of inspection and repair to structural BMPs. There will be a rotational inspection schedule and repairs made as they are discovered.
*Measurable Goals: <ul style="list-style-type: none">• Number of inspections performed• Number of repairs made
*Timeline/Implementation Schedule: <ul style="list-style-type: none">• Existing procedures, continue to implement
Specific Components and Notes: <ul style="list-style-type: none">• See BMP Summary Sheets 6a-1 and 6b-1 thru 6b-6
*Responsible Party for this BMP: Name: Jennifer K. Posma Department: Engineering Phone: 952-939-8234 E-mail: jposma@eminnetonka.com

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