



Brainerd City Council Agenda Request

Requested Meeting Date:

Title of Item:

<input type="checkbox"/> INFORMATION ONLY <input type="checkbox"/> CONSENT AGENDA <input type="checkbox"/> P&F COMMITTEE <input type="checkbox"/> SPW COMMITTEE <input type="checkbox"/> MAIN AGENDA	Action Requested: <input type="checkbox"/> Approve/Deny Motion <input type="checkbox"/> Adopt Resolution (attach draft) <i>*provide copy of published hearing notice</i> <input type="checkbox"/> Direction Requested <input type="checkbox"/> Discussion Item <input type="checkbox"/> Hold Public Hearing* <input type="checkbox"/> Ordinance 1 st Reading
Submitted by:	Department:
Presenter (Name & Title):	Estimated Time Needed:
Summary of Issue:	
Alternatives, Options, Effects on Others/Comments:	
Recommended Action/Motion:	
Financial Impact: Is there a cost associated with this request: <input type="checkbox"/> Yes <input type="checkbox"/> No What is the total cost, with tax and shipping \$ _____ Is this budgeted? <input type="checkbox"/> Yes <input type="checkbox"/> No <u>Please Explain:</u>	



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MS4 fact sheet - Storm Drain Stenciling

Storm drains are gateways that allow pollutants in stormwater to flow untreated from local streets to lakes, rivers and streams. Residual oil, grease, solids, antifreeze, cigarette butts, yard waste, plastic and other wastes found on roads, parking lots and driveways pollute downstream waters by increasing phosphorus levels, reducing oxygen levels and ultimately impairing aquatic habitat for fish and other organisms as well as drinking water sources.

An unfortunate, yet still common, misperception is that storm drains discharge to water treatment plants. Stenciling is one public education tool that helps dispel this misperception.

This fact sheet provides guidance on implementing a storm drain stenciling program to increase public awareness of the direct connectivity between storm drains and water resources.

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Benefits and pollution reduction

Storm drain stenciling will help the people in your community understand what happens to polluted stormwater. When people are aware of the negative environmental impacts of their actions, they are more likely to stop dumping pollutants down storm drains. Reduction in the discharge of pollutants into storm drains results in cleaner downstream lakes, streams and wetlands. It contributes to improved water clarity, coloration and odor as well as fish and wildlife habitat.

Program development and implementation

Programs designed to increase public awareness through volunteer efforts have the benefit of educating both the general public and the volunteer. The extent of a Municipal Separate Storm Sewer Systems (MS4) storm drain stenciling program is dependent upon several factors including the MS4 owner's/operator's available resources, size of staff, and degree and character of its illicit storm drain discharges. Many pollution prevention awareness phrases can be effective: “No Dumping. Drains to River,” “No Dumping. Drains to <Insert Water Source>,” “You Dump It, You Drink It,” “No Waste Here,” and “Only Rain in the Drain.” For more information regarding other methods to trace and prevent illicit discharges see the Potential Discharge Identification and Risk Reduction fact sheet (https://stormwater.pca.state.mn.us/index.php?title=MS4_fact_sheet_-_Potential_Discharge_Identification_%26_Risk_Reduction).

Storm drain stenciling techniques

Storm drain ‘stenciling’ can be done with paint and stencils, medallions, pre-stamped grates or stamped concrete.

- **Paint** - Painting or spray painting with a paper, plastic or metal stencil as a guide is an inexpensive application for storm drain stenciling and easily implemented by volunteers. However, the lifetime of the paint may not exceed two years. Stenciling can be done on the street in front of the storm drain, on the adjacent sidewalk, or on the curb. Spray paint is the easiest to apply neatly, but contains air polluting propellants. Consider using environmentally-friendly paints free of heavy metals and low in volatile organic compounds.
- **Medallions** - Plastic, ceramic or metal medallions, typically 4 inches round, can be glued with a strong epoxy or embedded in concrete and bolted down. Gluing medallions is easily transferable to volunteer programming.



Example of a message used for storm drain stenciling.

- **Pre-stamped grates** - Pre-stamped grates will last a long time (until the metal is worn down) and are an effective means to implement a city-wide storm drain stenciling initiative.
- **Stamped concrete** - While concrete is still wet, stamp an impression of the selected ‘no dumping’ slogan. Stamped concrete will last longer than paint or medallions. In addition, concrete stamps allow versatility in design since, unlike medallions, long-term stability is not based on size of the design.

Volunteer recruiting

- **Encourage organization-sponsored stenciling** Storm drain stenciling is a great activity for all types of organizations including service clubs, neighborhood associations and scout groups. Stenciling does not require extensive volunteer participation. A few trained volunteers can thoroughly mark storm drains within a single neighborhood. However, the educational nature of the activity facilitates greater understanding among participants of the value of water resources.

MS4s can provide brochures and guidance documents identifying how to stencil and recruiting organizations to get involved. The City of Burnsville (<http://mn-burnsville.civicplus.com/?nid=1107>), MN, provides an online sign-up form for individuals and organizations to get involved. The City of Woodbury, MN, recruits community groups for storm drain stenciling projects. Volunteers also distribute informational door hangers to homes in the project area. A single project area is a commitment of one to two hours of work. In all cases of recruiting volunteers, the City provides materials and instructions. Friends of the Mississippi River (<http://fmr.org/storm-drain-stenciling>), University of Minnesota Extension Service and North Carolina State University (<https://www.bae.ncsu.edu/programs/extension/wqg/smp-18/stormdrain/>) are just a few of the entities that provide detailed guidelines on volunteer safety, protection of public and private property, MS4 liability, painting quality and stenciling effectiveness.

- **Adopt A Street integration** The City of Ashland, Oregon (<http://www.ashland.or.us/Page.asp?NavID=1568>), has instituted a storm drain stenciling program in collaboration with their Adopt a Street Program. They encourage participants in the existing Adopt a Street Program to stencil storm drains as well. The same collector or arterial street adopted for quarterly trash pick-up by businesses, organizations or schools can serve as the site to conduct storm drain stenciling with City resources.
- **Be prepared** - The EPA suggests that organizers be prepared with the following at all volunteer stenciling events:
 - Kits containing all necessary materials and tools
 - A map of the storm drains to be marked
 - Safety training on the technique for using stencils or affixing signs including the use of masks or goggles, gloves, traffic safety equipment such as traffic cones, safety vests
 - Incentives and rewards (e.g. badges, t-shirts, certificates).

Standard specifications and/or ordinances

Require that all new and repaired storm drains be outfitted with storm grates that have a pre-stamped pollution prevention message such as “No Dumping, Drains to River.” The City of South Jordan, Utah provides a good example of engineering specifications for storm drain stenciling:

Developments must provide theft-resistant permanent installation of a City-approved storm drain marker at each stormwater inlet. The marker is part #STDM-9131-SSP, a 4" Stainless Steel Green Painted Marker with Custom Tree Logo with ¼" square hole made by Almetek Industries, Inc. Installation requires Drive Rivet and approved adhesive. Lettering on the marker as appropriately follows:

- “Only Rain in the Drain” markers installed anywhere stormwater discharges to a retention or detention pond
- “No Dumping, Drains to River” markers installed anywhere stormwater discharges to the Jordan River
- “No Dumping, Drains to Creek” markers installed anywhere stormwater discharges to a Creek in the City
- “No Dumping, Drains to Lake” markers installed anywhere stormwater discharges to a lake in the City

Specifications such as this could be contained in MS4 drainage manuals, stormwater design manuals, engineering guidelines, or stormwater management ordinances and permitting.

Maintenance considerations

In order to maintain the visibility of the storm drain stenciling, re-application may be necessary. Painting lasts about 2 years while medallions would not require replacement for many years, depending on the application.

Typical cost

The EPA indicates that plastic stencils that can last 25 to 500 uses, depending on paint application (spray, brush, or roller), cost \$10 to \$15.50. Metal stencils have the benefit of lasting longer and can cost \$100 or more. Medallions range from \$1 to \$3 for 4-inch diameter plastic markers, \$2 to \$5 for metal and up to \$7 for ceramic. Costs vary based on custom versus standard designs. Glue is only a fraction of the cost. A one-time set-up fee of \$200 to \$1,000 for pre-cast drain inlets with custom pollution prevention messages is applicable above the cost of the structures based on the text and or imagery of the message. Concrete stamps cost around \$100 depending on size and custom versus standard designs.

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/* Manually replaced by abbott Aug 6 '21 */

INDEMNIFICATION AND HOLD HARMLESS AGREEMENT

This Agreement is entered into as of the date last written below (“Effective Date”) by and between Discovery Woods, a Minnesota non-profit charter school, and the City of Brainerd, Minnesota, a Minnesota municipal corporation (collectively the “Parties”).

Recitals

- A. The City owns and operates a storm water drainage system that includes numerous storm drains, most of which are located on a public right-of-way.
- B. Discovery Woods requested permission for groups of students to paint certain storm drains in North Brainerd during the summer of 2022 with stenciling to inform the public of water quality issues (“the stenciling project”).
- C. The stenciling project will result in several students and teachers being near and interacting with storm drains and standing in public rights-of-way, potentially close to vehicular traffic.

Agreement

1. **Stenciling Project.** The City agrees to allow Discovery Woods to undertake its stenciling project on City-owned storm drains, subject to the following:
 - a. All work shall be supervised by Discovery Woods staff. Minors shall not be left unattended in the public right-of-way.
 - b. The messages to be stenciled shall be approved in advance by the Brainerd Director of Public Works.
 - c. Discovery Woods shall confirm with the Director of Public Works which storm drains are to be stenciled to ensure that they drain to the Mississippi River and are not in an area subject to 2022 street construction.
 - d. Discovery Woods staff shall notify Public Works when stenciling is to occur.
2. **Indemnification and Hold Harmless.** Discovery Woods shall defend and indemnify the City for all claims brought by or on behalf of the students and teachers involved in the stenciling project, or by any third party asserting damages arising out of or related to the stenciling project. Discovery Woods shall also hold the City harmless from, and shall reimburse the City for, any loss, damage, cost, expense (including reasonable attorneys’ fees), claim, or liability directly or indirectly arising out of or in any way related to the stenciling project.

DISCOVERY WOODS

Dated: _____

By: _____

Name: _____

Title: _____

CITY OF BRAINARD

Dated: _____

By: _____

David Badeaux, Mayor

Dated: _____

By: _____

Jennifer Bergman, City Administrator

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