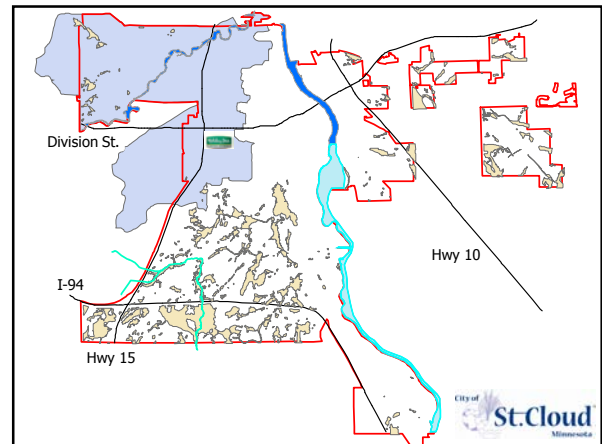


Meeting MS4 Permit Requirements & Improving Water Quality



Lake George, City of St. Cloud



City of St. Cloud Statistics

- 59,107 Population
- 41 Square Miles
- 202 Miles of Stormwater Pipe
- 7,780 Catch Basins
- 197 Outfalls
- 150 City Owned Stormwater Ponds
- 75 Private Stormwater Ponds
- 86 City Owned Infiltration Permanent BMPs
- 145 Private Infiltration Permanent BMPs



MS4 Permit Requirements

SWPPP Minimum Control Measures

- Public Education/Outreach
- Public Involvement/Participation
- Illicit Discharge Detection/Elimination
- Construction Site Runoff Control
- Post Construction Site Runoff Control
- Municipal Good Housekeeping

Anti-Degradation Requirements



Internal Communication

- Monthly meeting to discuss Stormwater Utility
 - Engineering Department
 - Public Utilities Department
 - Public Works Department
 - Parks Department
 - Planning Department
 - Health & Inspections Department



MN Cities Stormwater Coalition

- Coalition of ~ 100 Cities
- Randy Neprash staff member
- Cost effective
- Format to follow major SW issues
- 11 Member Board

Public Education & Outreach

- Central Minnesota Water Education Alliance (**CMWEA**) is a coalition of central Minnesota cities, counties and other organizations that provides educational outreach to promote water quality stewardship.
- Mission: to develop and implement educational programs that encourage individuals in Central Minnesota to protect water resources by increasing their knowledge and making simple behavior changes.
- Consistent water quality message in a cost effective manner.



CMWEA

- Annual Water Protection Tips – Top 10 List
- High School Video Contest
- Rain Barrel Program
- Blog

www.mnwaterconnection.com



Print Advertisements

Video Contest

- Public Involvement/Education
- High school students create 30 second Ads
- Top 3 Ads Each Receive:
 - \$700 for school
 - \$300 gift card for students
- Ads shown on local cable



Rain Barrel Program

CMWEA Partners

Member Cities

- St. Cloud
- Sartell
- Sauk Rapids
- Waite Park
- St. Joseph
- Cold Spring
- Melrose
- Rockville
- Paynesville
- Richmond

Supporters

- Thelen Advertising
- St. Cloud Times
- Charter Communications
- Albany Stearns Enterprise
- Newsleaders
- Cold Spring Record
- Sauk Rapids Herald
- WJON
- KASM
- BOB
- Lamar Advertising
- Gander Mountain

Advisors

- Stearns County SWCD
- Sauk River Watershed District
- St. Cloud State University
- MN Rural Water

Other Members

- Stearns County
- St. Joseph Township
- Le Sauk Township
- Koronis Lake Association
- Sauk River Chain of Lakes Association

Water Festivals

- 2 Water Festivals
- ~850 4th Grade Students
- Partnerships, Donations, Volunteers, Grant \$



Public Participation/Involvement

- Stormdrain Marking
- 950 marked in 2009
- AmeriCorps Service Day Event
- 154 Volunteers in 2009
- Door Hangers



Inspection Program

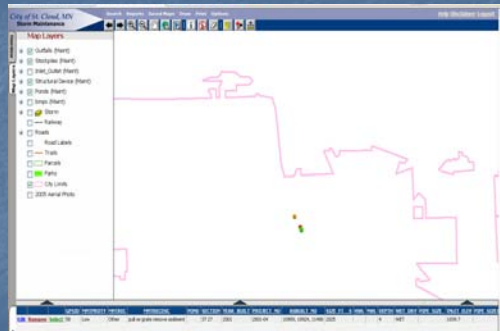
- Inspection reports on PDA using ArcPad
- Pictures linked to each inspection
- Data stored in Microsoft Access database
- Maintenance items stored on website
- Consultant assistance to create program
- Lessons Learned



Inspection Program – Screen Shots

Inspection Program – Screen Shots

Inspection Program – Screen Shots



Inspection Program – Screen Shots

Construction Site Stormwater Runoff

- Stormwater System Use Code Ordinance
- Land Disturbance Permit
- Inspection Program
- Education/Training



Post Construction Stormwater Management

- Land Development Code Requirements
 - Rate Control
 - Quantity Requirements

VOLUME CONTROL REQUIREMENTS		
Project Type	Impervious Surfaces	Pervious Surfaces
New Development	1/2"	1/2" for all new
Redevelopment	1/4" for all redeveloped 1/2" for all new	1/2" for all redeveloped

Public Improvement Projects

- Cost effective ways to improve water quality
- BMP Cost Analysis
- Resident Education
- Depressed Boulevards



Tree Planters



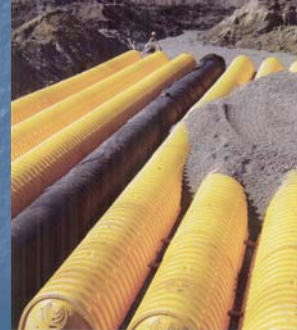
Library Rain Garden



Library Green Roof



Library - StormTech



Pervious Alley Apron



Neighborhood Rain Garden



Pervious Sidewalk



Thank You!



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