Community Development Stages

Growing Communities → Established Communities → Ultra-Urban Communities

Ham Lake, MN (~19% urban) → Eagan, MN (64% urban) → Minneapolis, MN (88% urban)
Volume and Rate Control BMPs in Series

Volume Control

Overflow

Infiltration

Rate Control

Emergency Overflow

Small Flows
<table>
<thead>
<tr>
<th>Minnesota Region</th>
<th>Natural Vegetation</th>
<th>Developed Site Imperviousness</th>
<th>X needed for “X times the impervious area” to not exceed the Natural Average Annual Runoff Volume (inches)</th>
<th>Retainment from Percentile Storm needed to not exceed the Natural Average Annual Runoff Volume (Precipitation Amount, inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of Locations</td>
<td>Average of Meadow and Woods</td>
<td>Average of 20% and 80%</td>
<td>1.1</td>
<td>1.1</td>
</tr>
</tbody>
</table>
MIDS Timeline

- **Feb, 2010**  Work Group initiated
- **Spring, 2010**  - Budget cuts
- **Summer 2010**  - Completed RFP, contracts signed, work began.
- **June, 2011**  Phase I completed.
- **July, 2011 - Feb, 2012**  – Phase II
  - Tom Schueler – redevelopment & support
  - MIDS Consultant contracts
    - Work orders in place mid-June ? July startup
    - Integrated with Stormwater Manual updates
Phase II

- Updated NOAA precipitation intensity
- Alternatives
  - Filtration, mitigation
- Redevelopment & Linear
- Credits
- Pilots – case studies
- Revised Calculator
MIDS Adjusted Timeline

Phase I
- May: Credits
- June: Calculator
- July: Redevelopment, Linear
- Aug: Pilots & Case Studies
- Sept: Work Group Reconvenes

Phase II
- Oct: Antidegradation Rule, MS4 Permit
- Nov: Ordinance Goals St. Croix MIDS
- Dec: Specs, Fact Sheets
- Jan-Feb: Stormwater Manual Update

2012:
- Due Date Products

Summary

Credits

Jan-Feb: Work Group Reconvenes

Redevelopment, Linear

Pilots & Case Studies

Revise Calculator

Ordinance Goals St. Croix MIDS

Specs, Fact Sheets

Antidegradation Rule, MS4 Permit

Due Date Products
New Development

- **New Development** (Wisconsin NR 151)
  - “New development” means development resulting from the conversion of previously undeveloped land or agricultural land uses.
  - “Development” means residential, commercial, industrial or institutional land uses and associated roads.

- **Redevelopment** means areas where development is replacing older development.
  - Redevelopment is: Any construction, alteration, or improvement that disturbs land where the existing land use is commercial, industrial, institutional, governmental, or multifamily residential. This also includes sites with these prior land uses that have been abandoned or razed.