

CITY OF MINNEAPOLIS

# 'Intake Plans': Minneapolis' Approach to Source Water Protection

Presentation to the  
Legislative Water Commission

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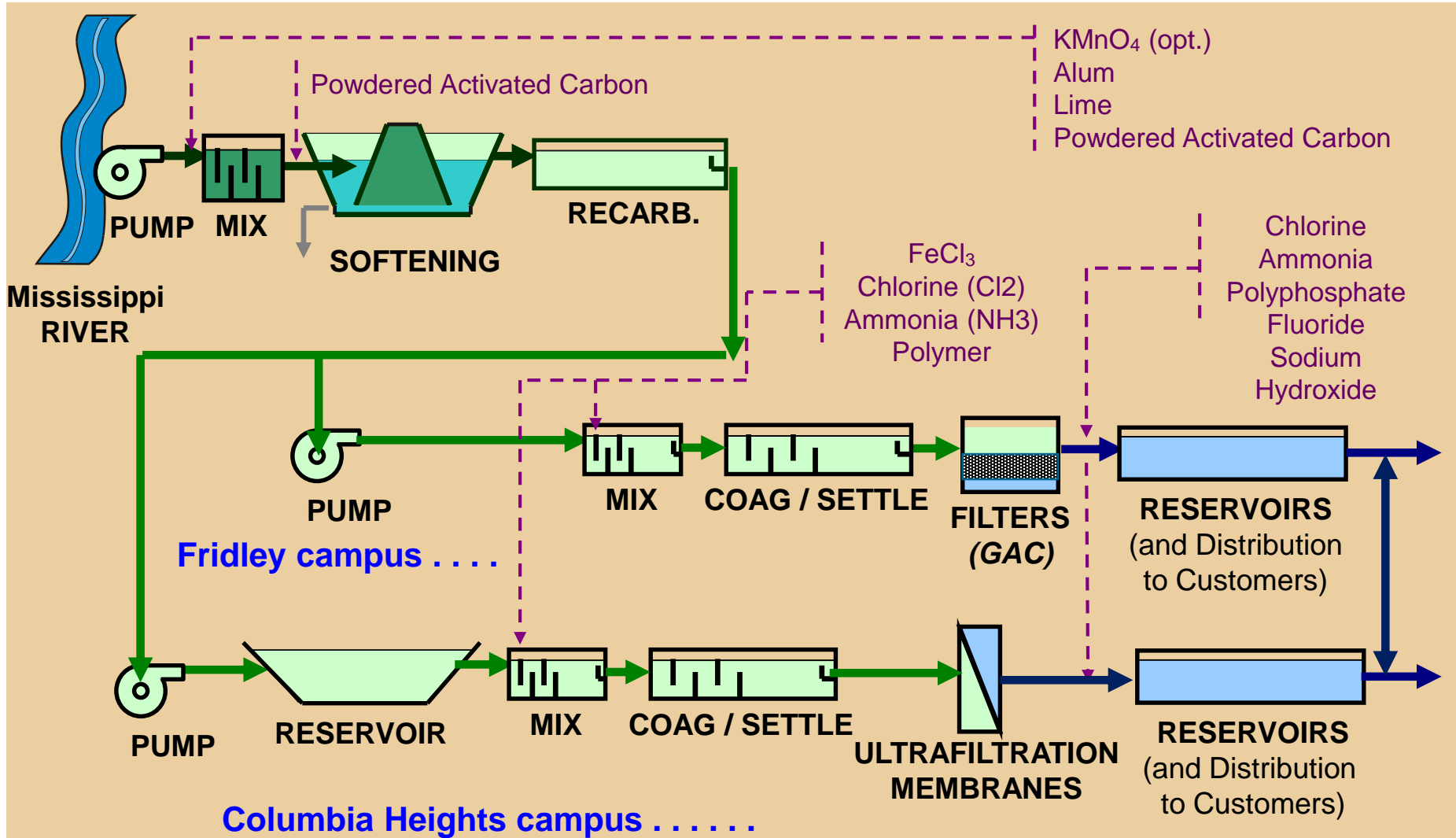
6/15/2017

# Minneapolis Water Works distribution area

Cities that get Minneapolis tap water



# Treatment System Overview

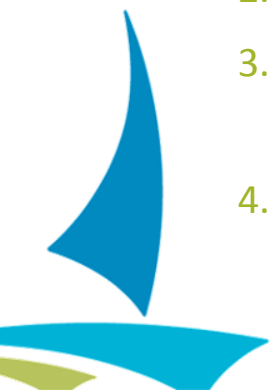


# Mississippi River



# Source Water Protection Plan Development

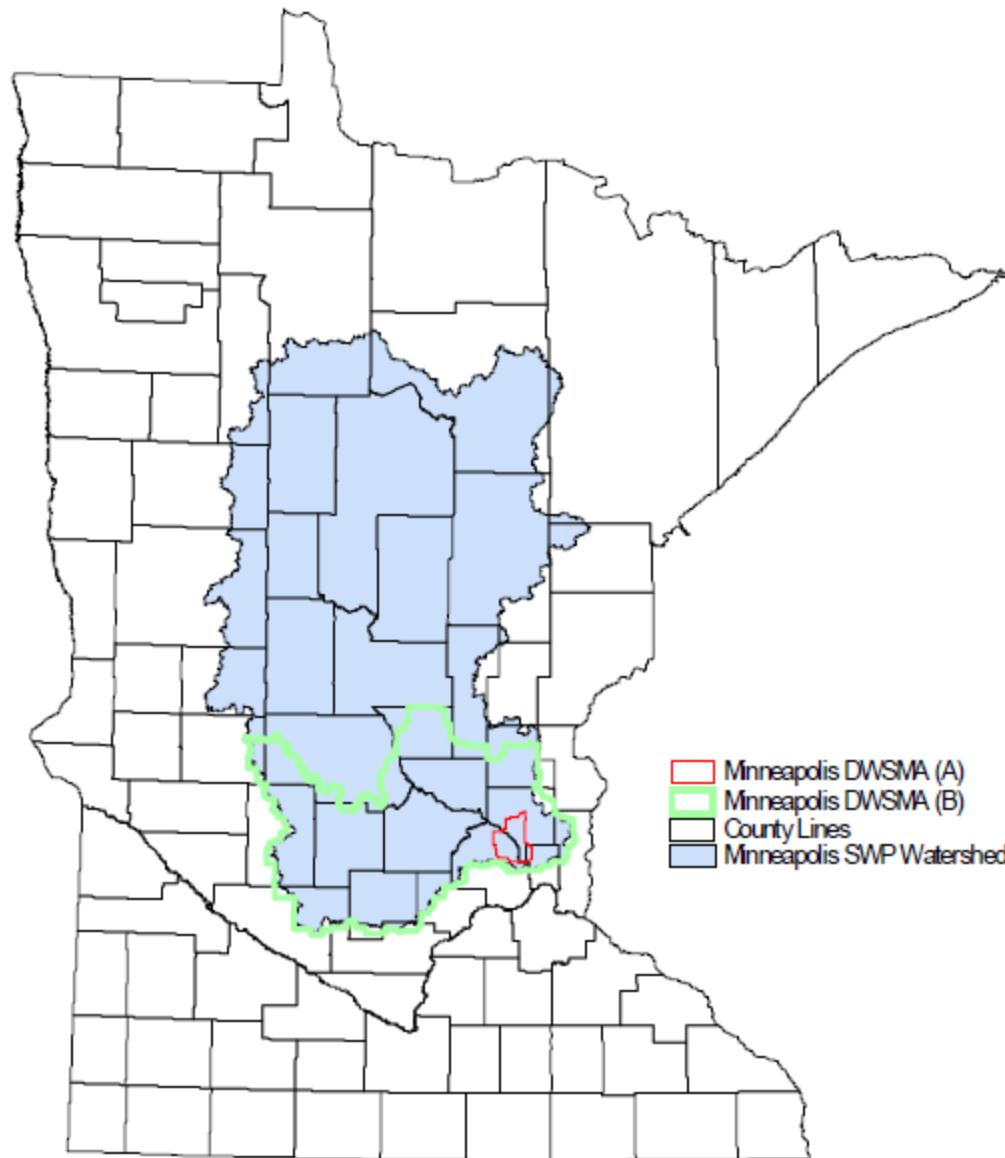
- 1996 Safe Drinking Water Act (SDWA), required states to prepare source water assessments for all public water supplies by May 2003. Source water assessments were prepared collaboratively for St. Cloud, St. Paul, and Minneapolis
- Utilities had a collective desire to move from “assessment” to protection planning.
  - Little guidance for surface water sources (vs. wellhead protection).
  - Support (grants) from MPCA and other agencies for protection planning
- The source water protection plans built on source water assessment by
  1. Delineating a “source water protection area”
  2. Identify contamination risks
  3. Identify management practices and implementation strategies to reduce the risk to the public water supply
  4. Raising awareness of the source of and risk to the public water supply.



# Minneapolis Source Water Protection Watershed

Prepared by the Upper Mississippi Source Water Protection Project

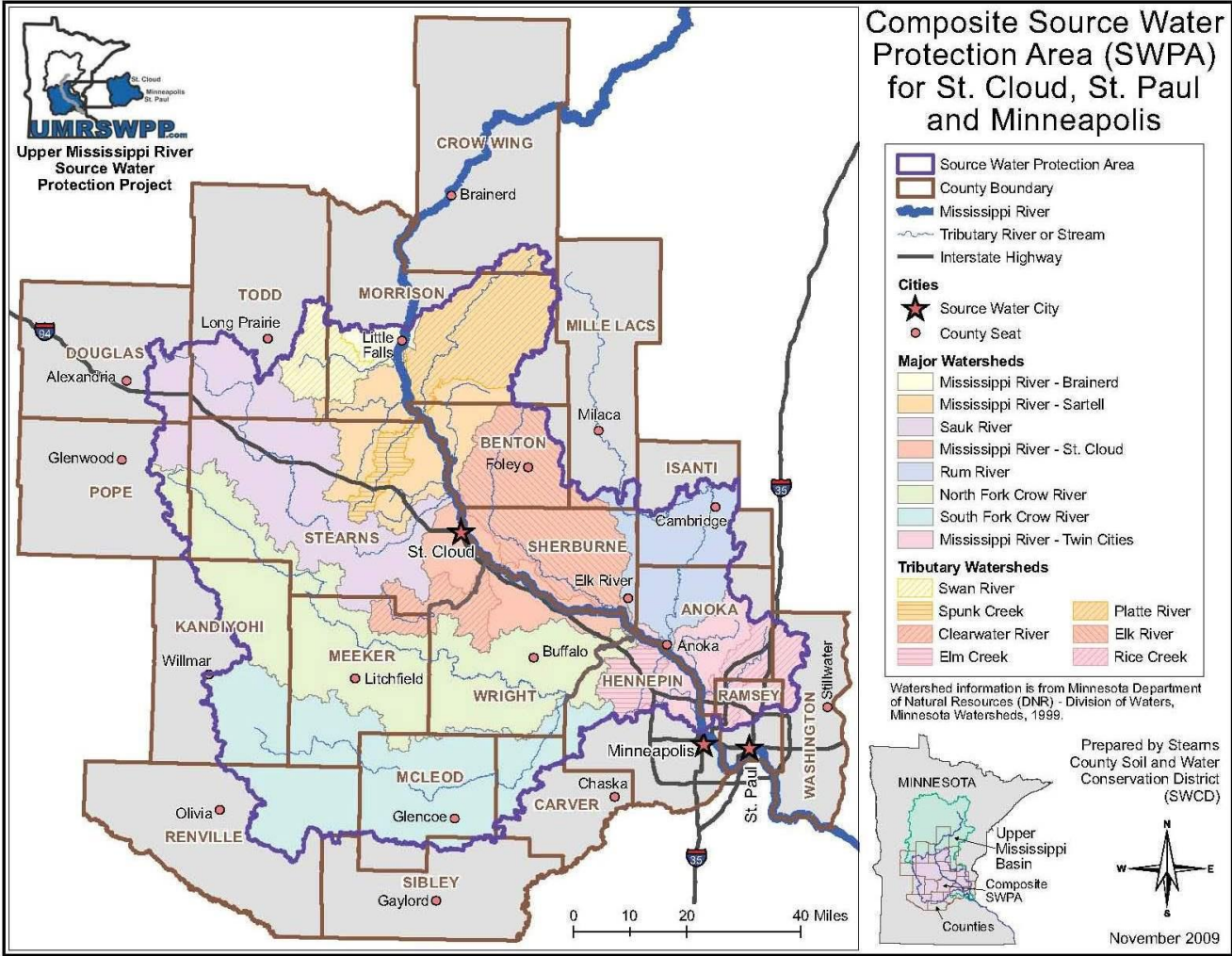
May 2005



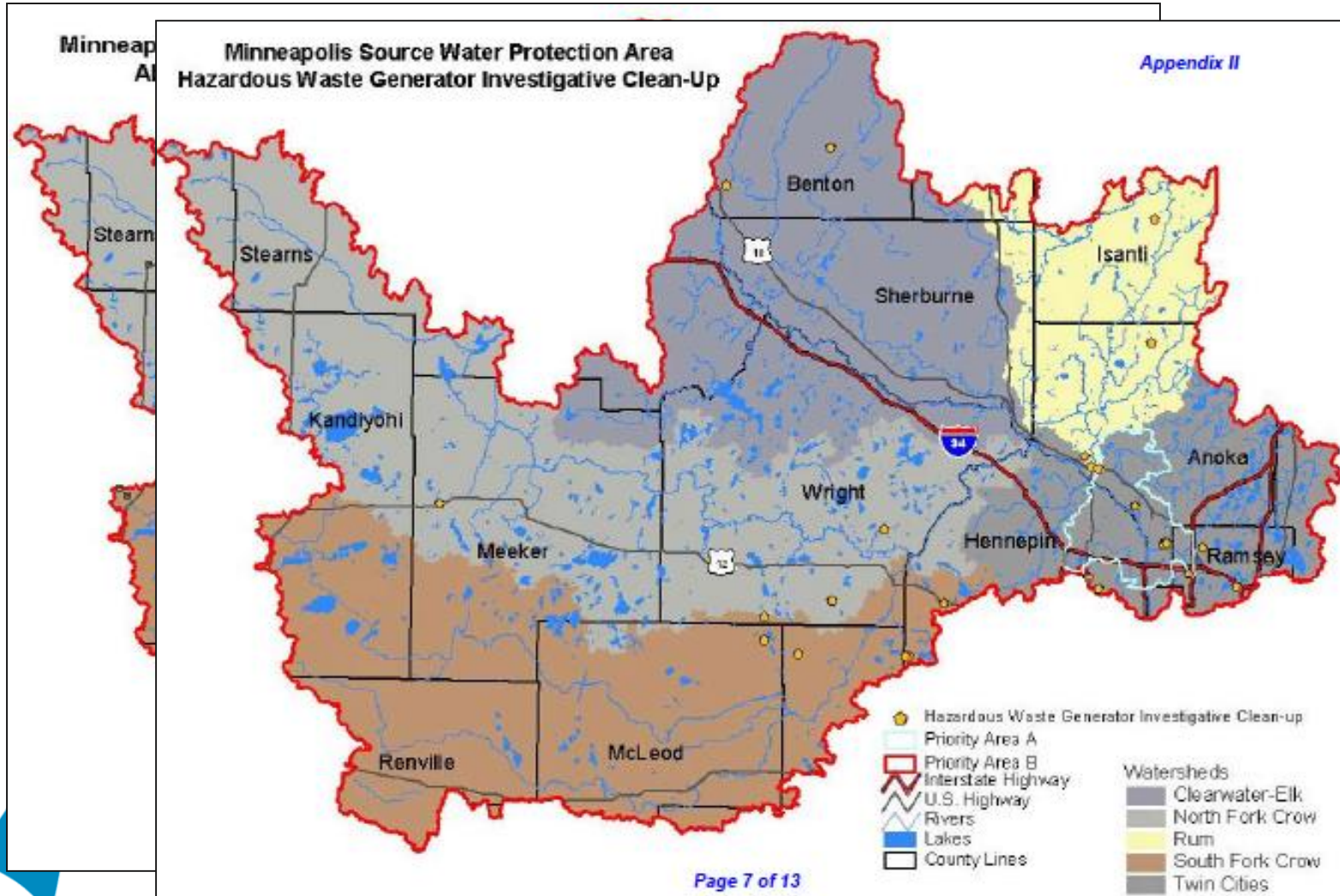
- Minneapolis DWSMA (A)
- Minneapolis DWSMA (B)
- County Lines
- Minneapolis SWP Watershed



# Composite Source Water Protection Area



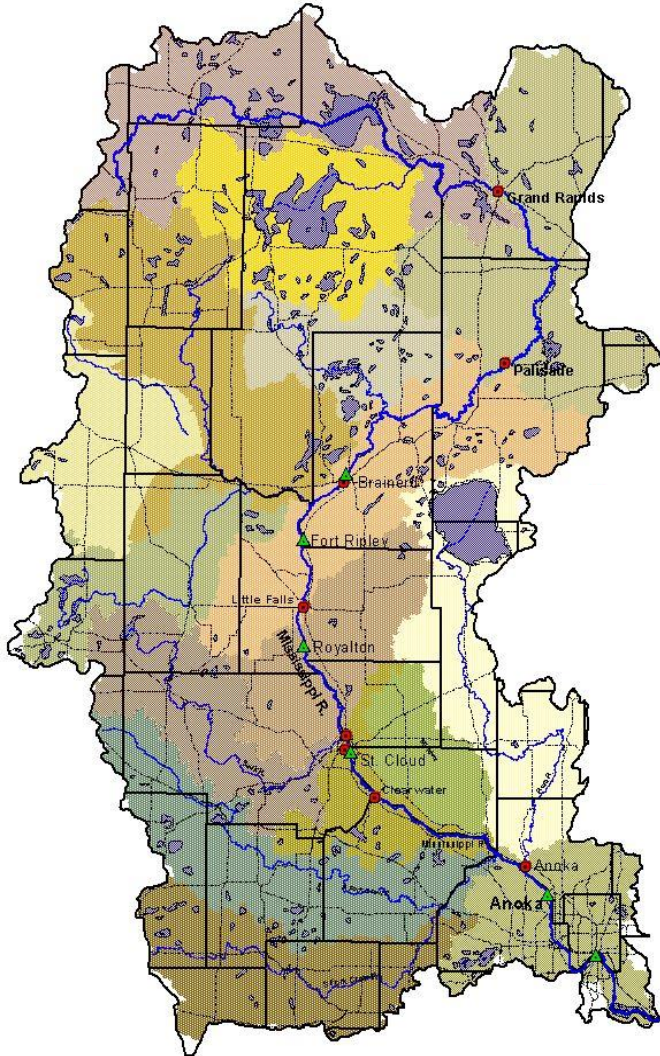
# Source Water Protection: Potential Contaminant Source Inventory



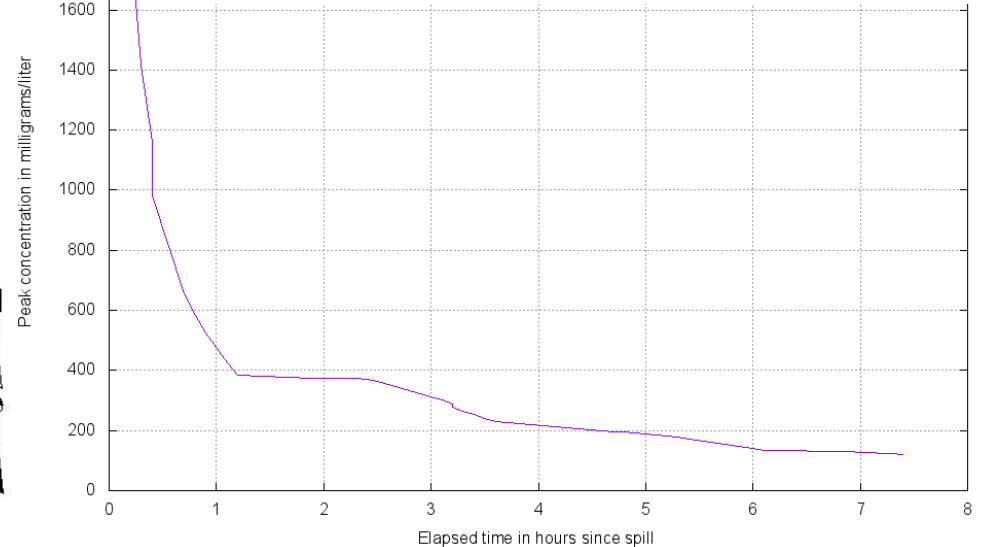
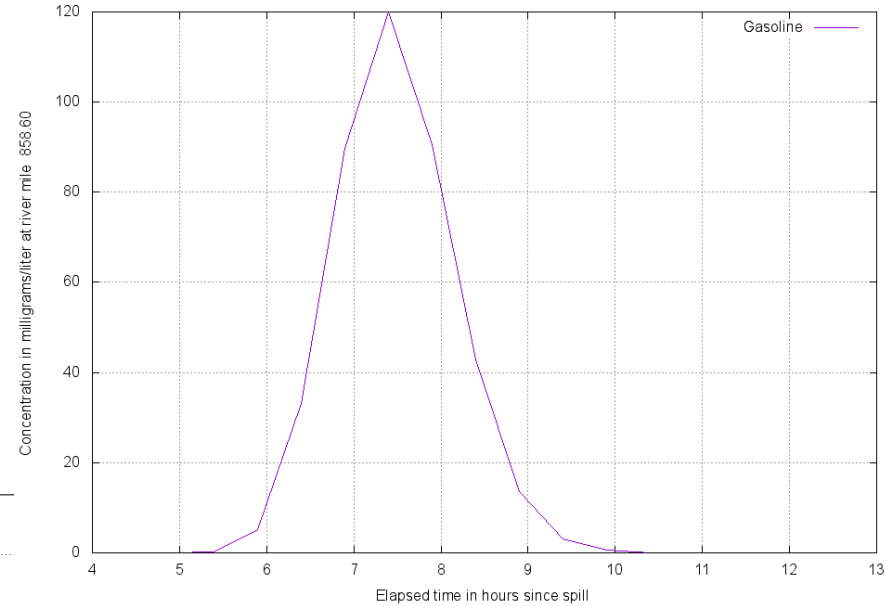


# Time of Travel Study Area Map & Model

Upper Mississippi River above Minneapolis, Mn  
River Defense Network



Spill occurred at river mile 864.80. Curve is for results at river mile 858.60



# Source Water Protection Plan “To Do’s”

- ✓ Delineating a “source water protection area”
- ✓ Identify contamination risks
- ✓ Identify management practices and implementation strategies to reduce the risk to the public water supply
- ✓ Raising awareness of the source of and risk to the public water supply.





# Upper Mississippi River Source Water Protection Project

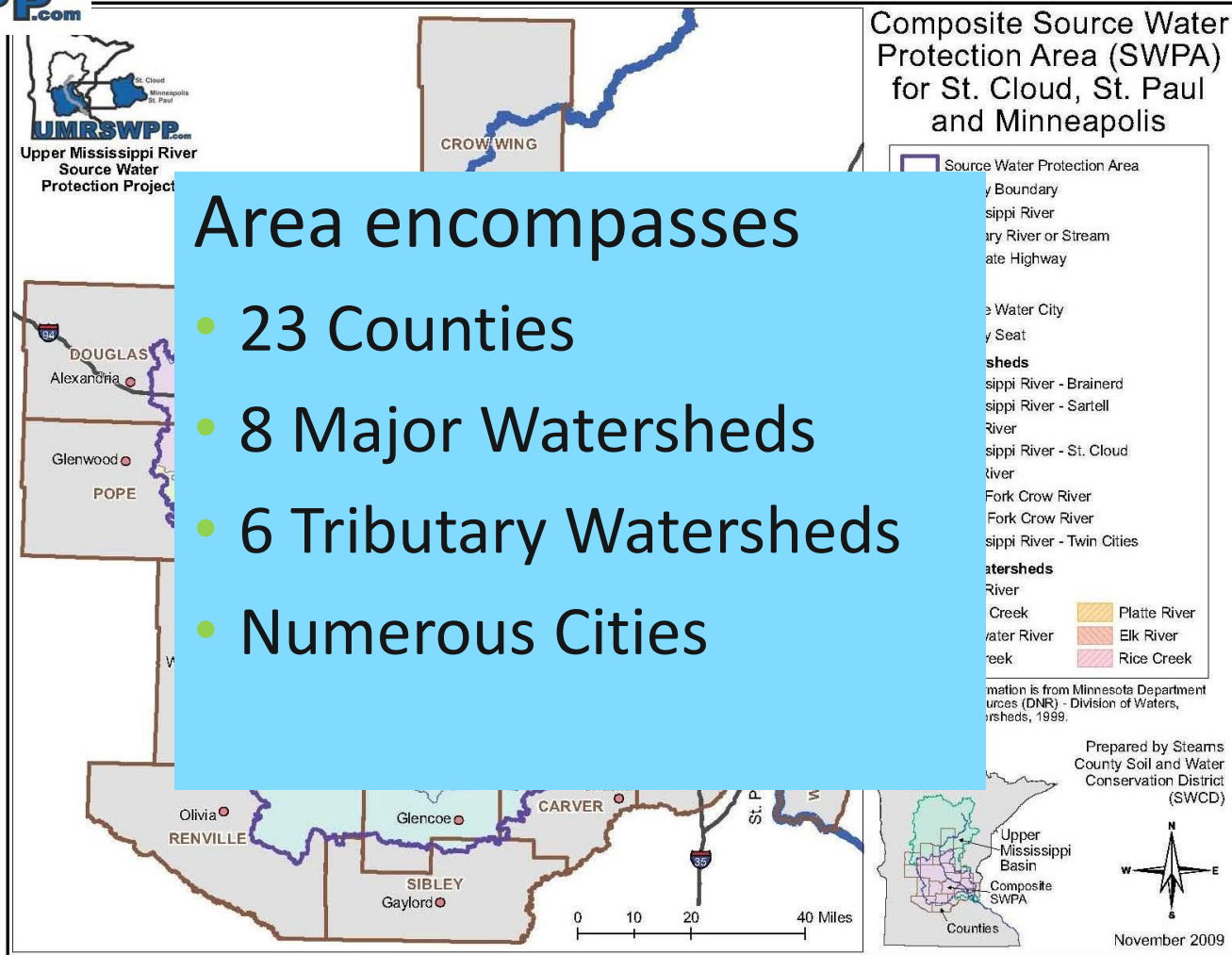


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# UMRSWPP – Source Water Protection Area



Area encompasses

- 23 Counties
- 8 Major Watersheds
- 6 Tributary Watersheds
- Numerous Cities

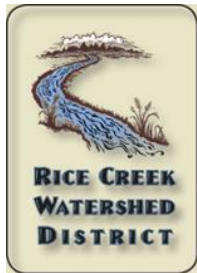




# UMRSWPP – What we do now

## Mission

Protecting Drinking Water Through Partnerships



MINNESOTA WATER  
LET'S KEEP IT CLEAN



Minnesota Pollution Control Agency





# UMRSWPP – SWP Planning

Inclusion in local planning efforts provides opportunity for

- WD/WMO
- Cities,
- Counties,
- Other taxing authorities such as LIDs

Location within a drinking water protection area can/should increase priority level in most grant opportunities.

Highlight surface water as a drinking water resource in all applicable One Watershed One Plans

Pass-through Implementation grant dollars for projects in highest priority areas

# Intake vs. source water protection

## Intake protection

- Acute
- Spill response
- Emergency notifications (State Duty Officer)
- Tank inventory
- REMM – time of travel

## Source water protection

- Long-term watershed health
- Partnerships with WDs, SCWDs, Counties, WMOs
- Development impacts
- Agricultural practices
- Alignment of CWA and SDWA

