

WATER RESOURCES MANAGEMENT POLICY PLAN – UPDATE

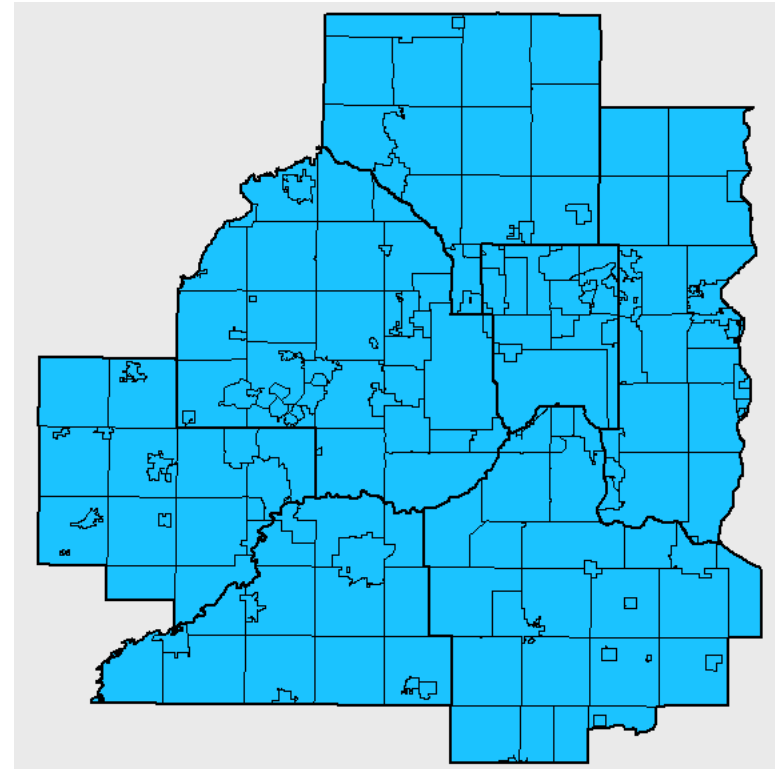
Environment Committee – September 11, 2012



Council Authority

Minnesota Statutes, Chapter 473

Requires the Council to prepare a comprehensive development guide for the Metropolitan Area that includes system plans for transportation, aviation, regional recreation open space, and wastewater treatment.



Current Regional Policy Framework

Metropolitan Development Guide

2030 Regional
Development
FRAMEWORK

Policy Plans

**WATER RESOURCES
MANAGEMENT**

**Transportation
and Aviation**

**PARKS AND OPEN
SPACE**

Current Regional Development Framework Policy Directives

Policy 1: Work with local communities to accommodate growth in a flexible, connected and efficient manner

Policy 4: Work with local and regional partners to reclaim, conserve, protect and enhance the region's vital natural resources.

Current Water Resources Management Policy Plan

- Water Supply
- Surface Water Management
- Wastewater
- Wastewater System Plan

Current Wastewater Policy

- Supply wastewater service to support orderly and economic development consistent with 2030 Regional Development Framework
- Provide cost effective and efficient use of infrastructure
- Not provide additional capacity to serve excessive I/I

Current Wastewater Policy

- Council will accept septage, biosolids and other hauled liquid waste at designated sites. All hauled liquid wastes from within the region will be accepted at the full cost of service.
- Council will use our review authorities to ensure systems are installed, managed, maintained and regulated.
- Communities are responsible for permitting of all private systems
- Council will allow connection to failing system where available capacity



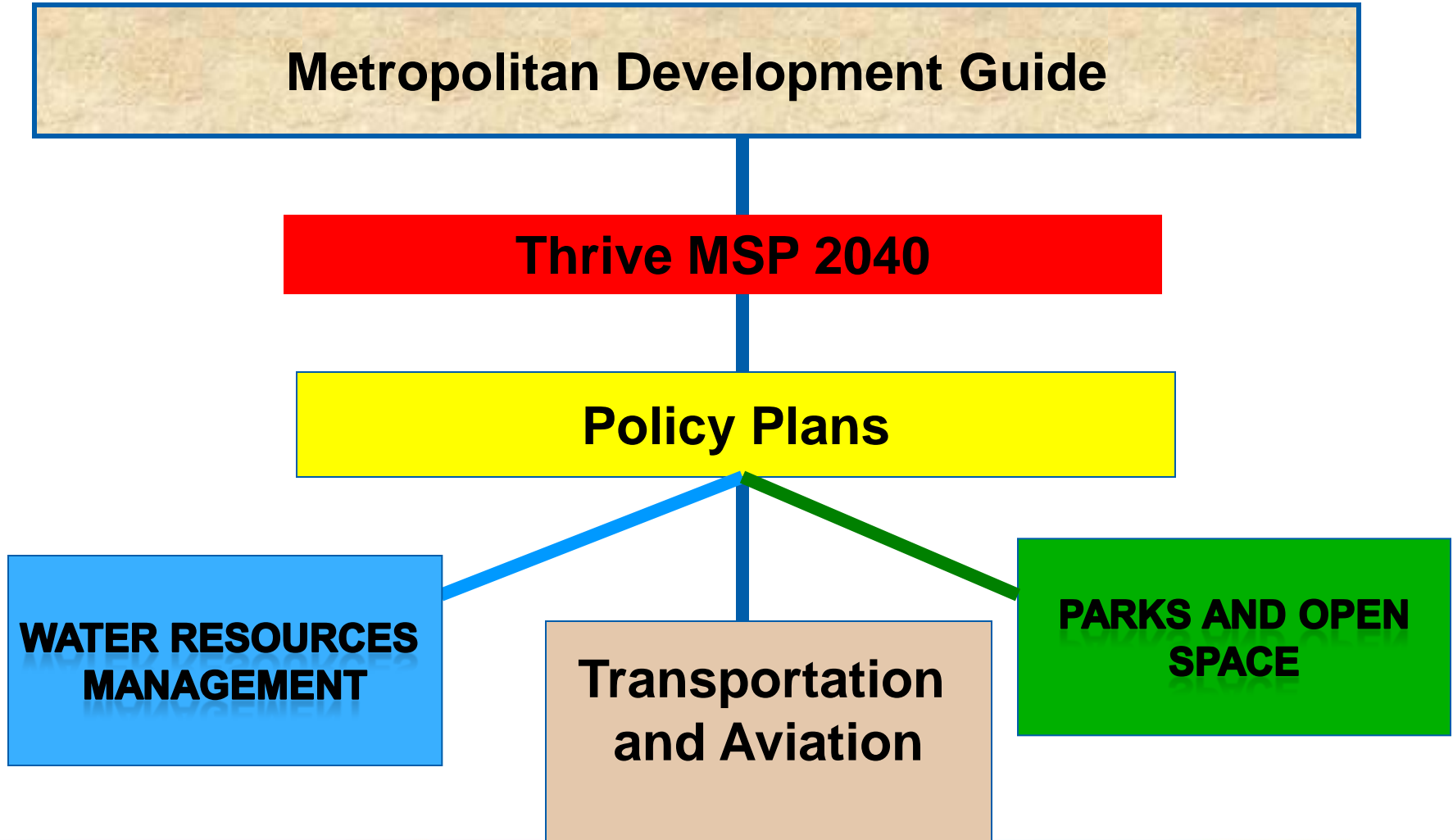
Current Surface Water Management Plan Policies

- Provide technical assistance and resource assessment information to assist others in their efforts to protect water resources
- Review plans and environmental documents to ensure locals fulfilling their nonpoint source reduction requirements and not impacting the Metropolitan Disposal System

Current Water Supply Policies

- Support the efficient use of water to ensure that supplies are adequate for the region's projected growth
- Work with regional partners to protect the water supply system

Proposed Regional Policy Framework



Definition of Sustainability

Water is sustainable when the use does not harm ecosystems, degrade water quality or compromise the ability of future generations to meet their own needs



Proposed Water Sustainability Policy for Thrive

Work with local and regional partners to provide for sustainable regional water resources through effective wastewater, storm water, and water supply management

Proposed Water Sustainability Strategy for Thrive

Provide cost effective, efficient, and high quality regional wastewater infrastructure and services



Proposed Water Sustainability Strategy for Thrive

Work to ensure adequate and high quality ground and surface water supplies to protect public health and support economic development by promoting the wise use of water through conjunctive use, conservation, reuse, aquifer recharge, and other practices



Proposed Water Sustainability Strategy for Thrive

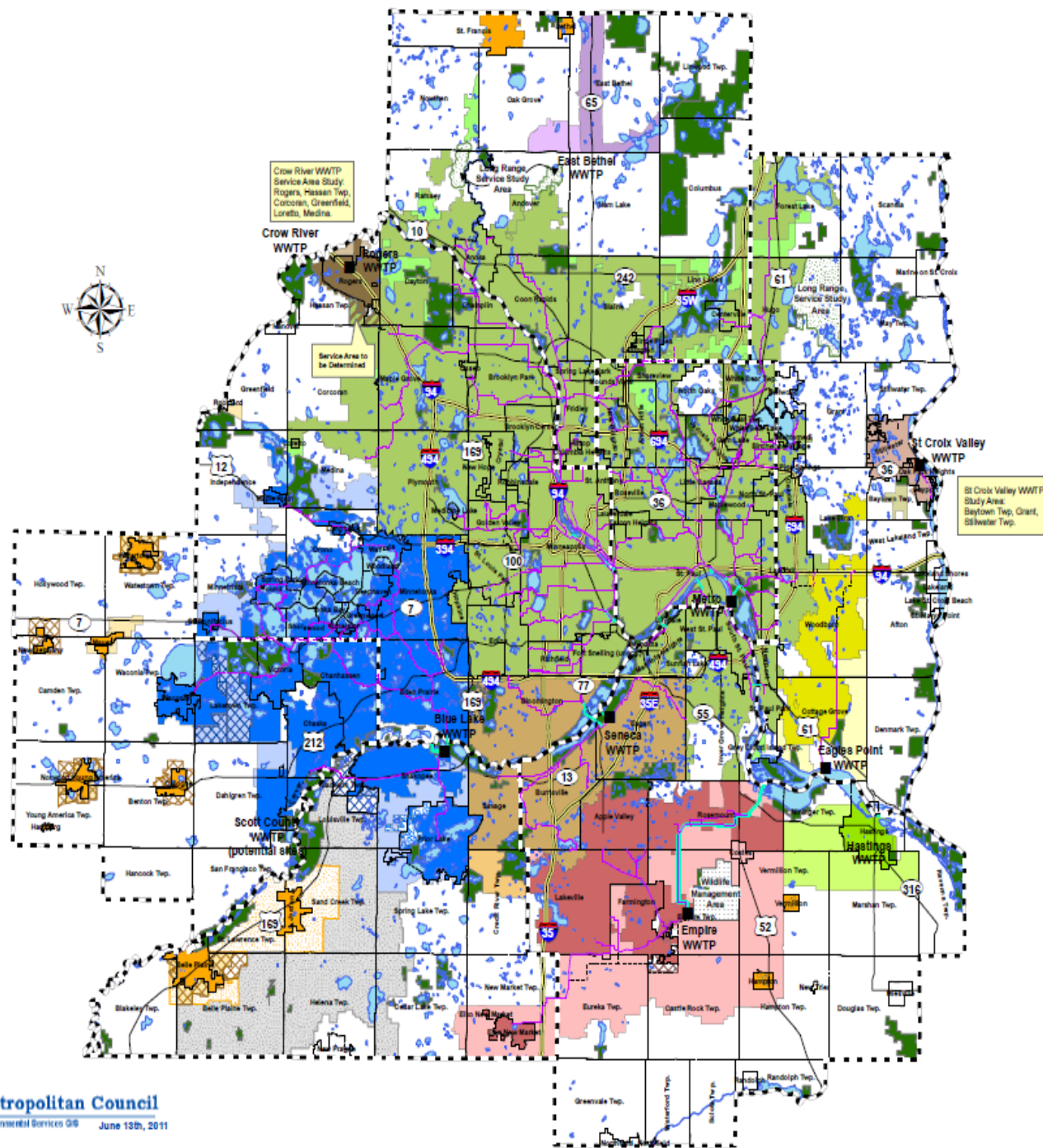
Work to preserve the quality and quantity of the region's water resources (rivers, streams, lakes, and wetlands) to support habitat and ecosystem health while providing for recreational opportunities, all of which are critical elements of our region's quality of life

Emerging Issues for WRMPP Update

Wastewater system is essentially built



Regional Wastewater System Long-Term Service Areas



- MCEs Treatment Plant
- Gravity
- Forcemain
- Siphon
- Outfall
- Proposed Interceptors
- ⬜ County Boundary
- ⬜ Community Boundary
- == Interstate
- US Highway
- State Highway
- Lakes and Rivers
- Regional Parks
- Rural Center
- Potential Rural Center
- Metro
- Potential Metro
- Blue Lake
- Potential Blue Lake
- SMSC Area
- Scott Co. Urban Expansion
- Scott Co. Rural Center Expansion
- Seneca
- Potential Seneca
- Empire
- Potential Empire
- Eagles Point
- Potential Eagles Point
- St. Croix Valley
- Potential St. Croix
- Hastings
- Potential Hastings
- Rogers
- Potential Rogers
- East Bethel
- Potential East Bethel
- Future WWTP Site

- | | |
|-----------------------------|------------------------------|
| Pre-2030 Orderly Annexation | Post 2030 Orderly Annexation |
| ■ Rural Center | ■ Rural Center |
| ■ Blue Lake | ■ Blue Lake |
| | ■ Empire |

Emerging Issues for WRMPP Update

New MS4 permit requirements and implications for growth

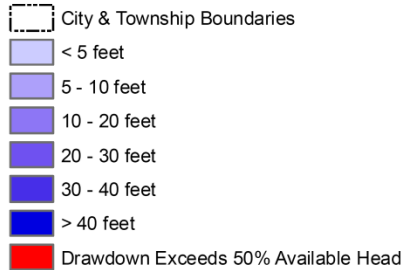


Emerging Issues for WRMPP Update

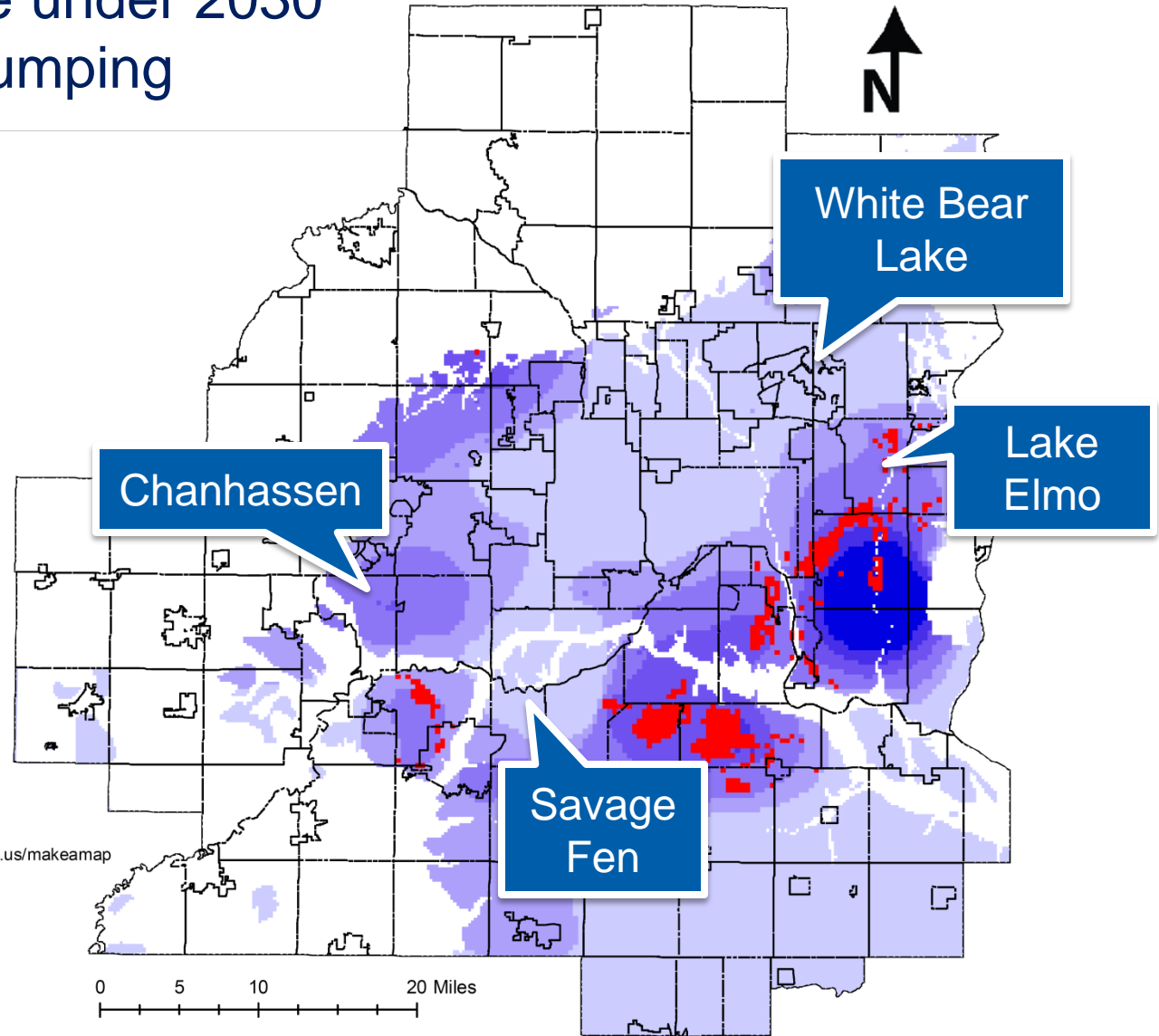
Water supply will be a limiting factor to growth



Aquifer Decline under 2030 Avg. Annual Pumping



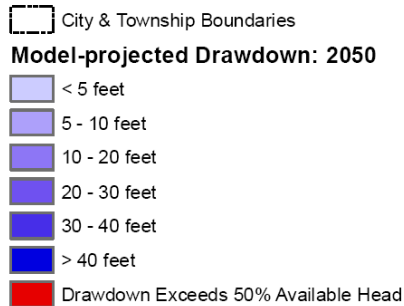
Note: These model results assume long-term average conditions and continued development of traditional water supplies. Summer conditions may exacerbate short-term drawdown.



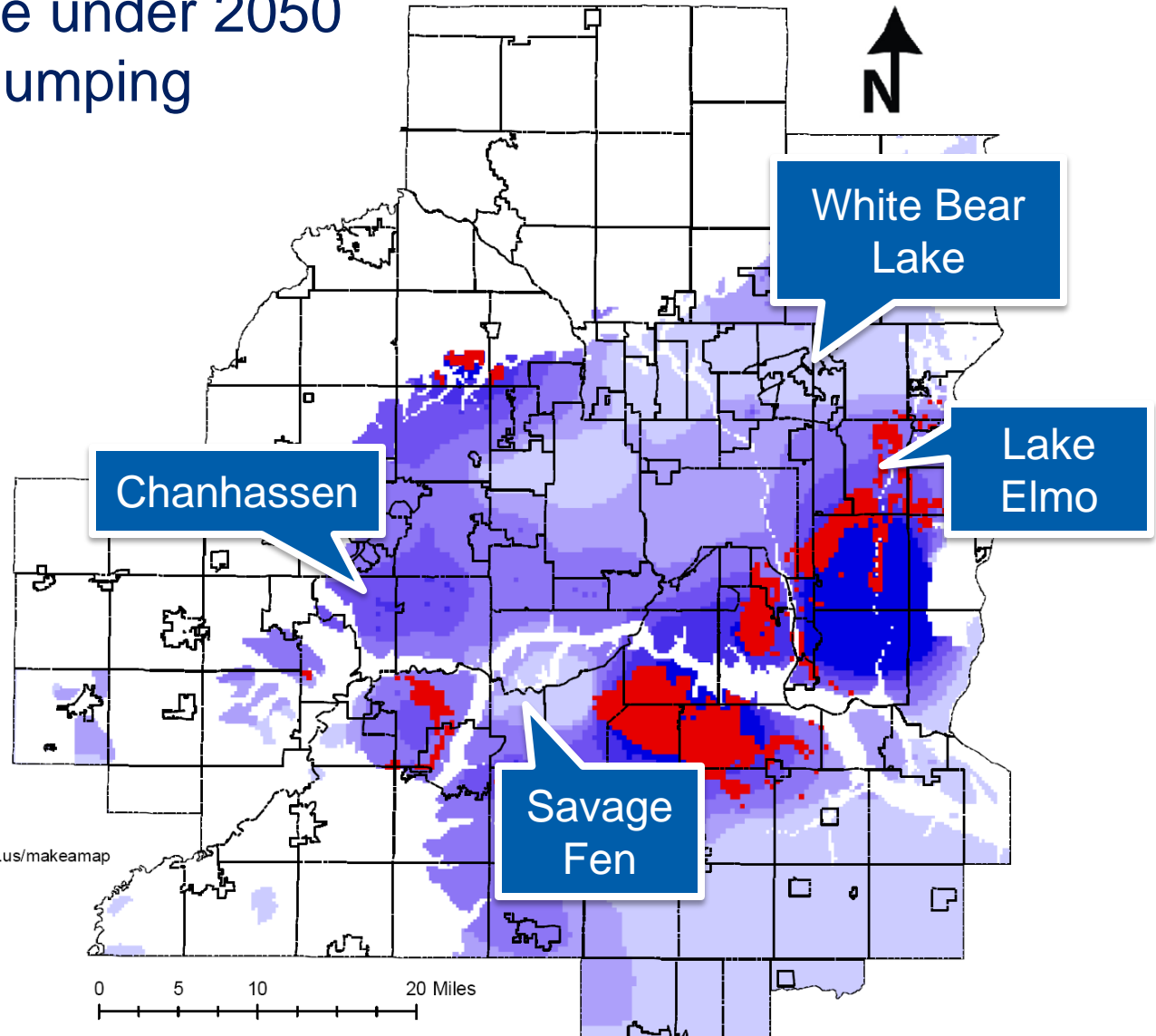
Metropolitan Council, 8/26/2009
View datasets online at <http://gis.metc.state.mn.us/makeamap>

Source:
Metropolitan Council

Aquifer Decline under 2050 Avg. Annual Pumping



Note: These model results assume long-term average conditions and continued development of traditional water supplies. Summer conditions may exacerbate short-term drawdown.

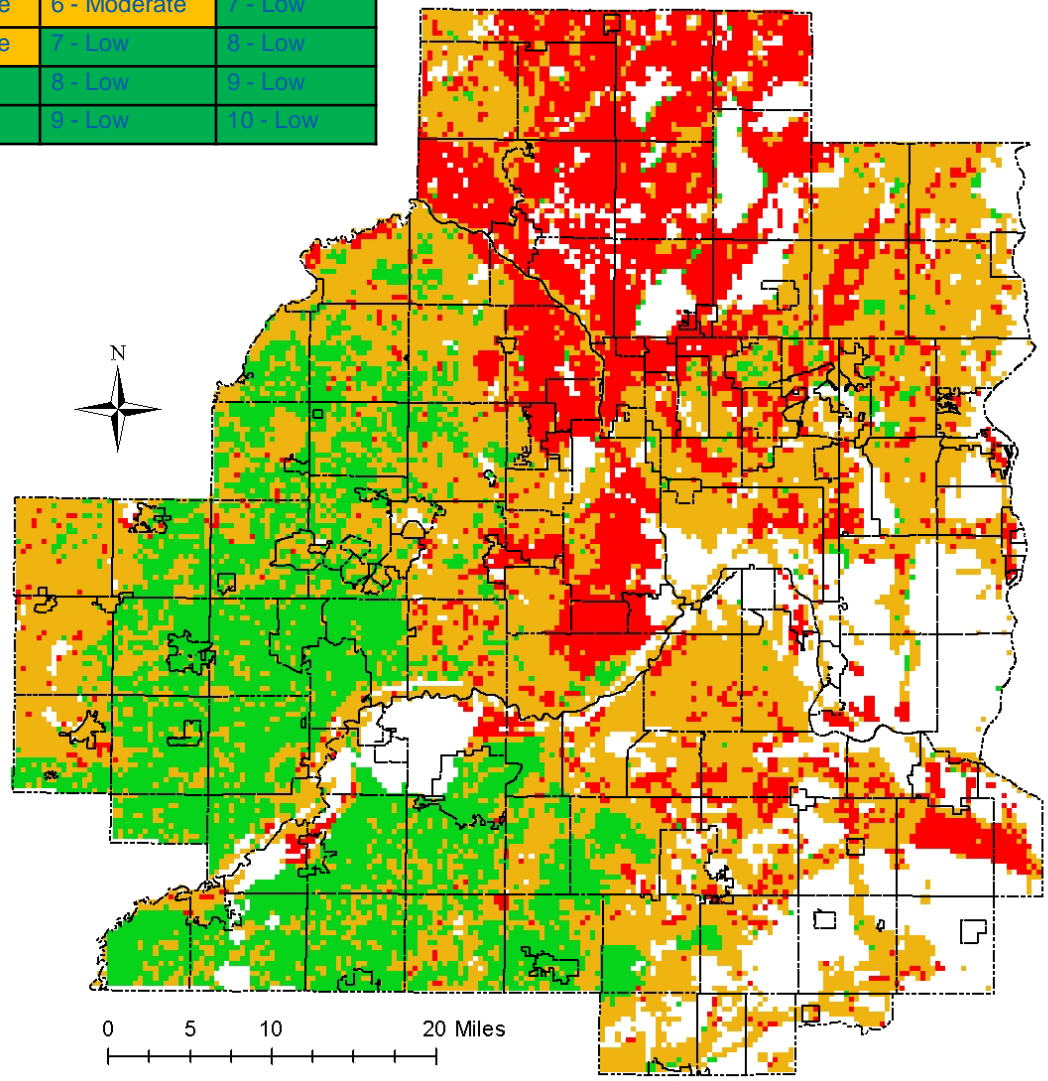


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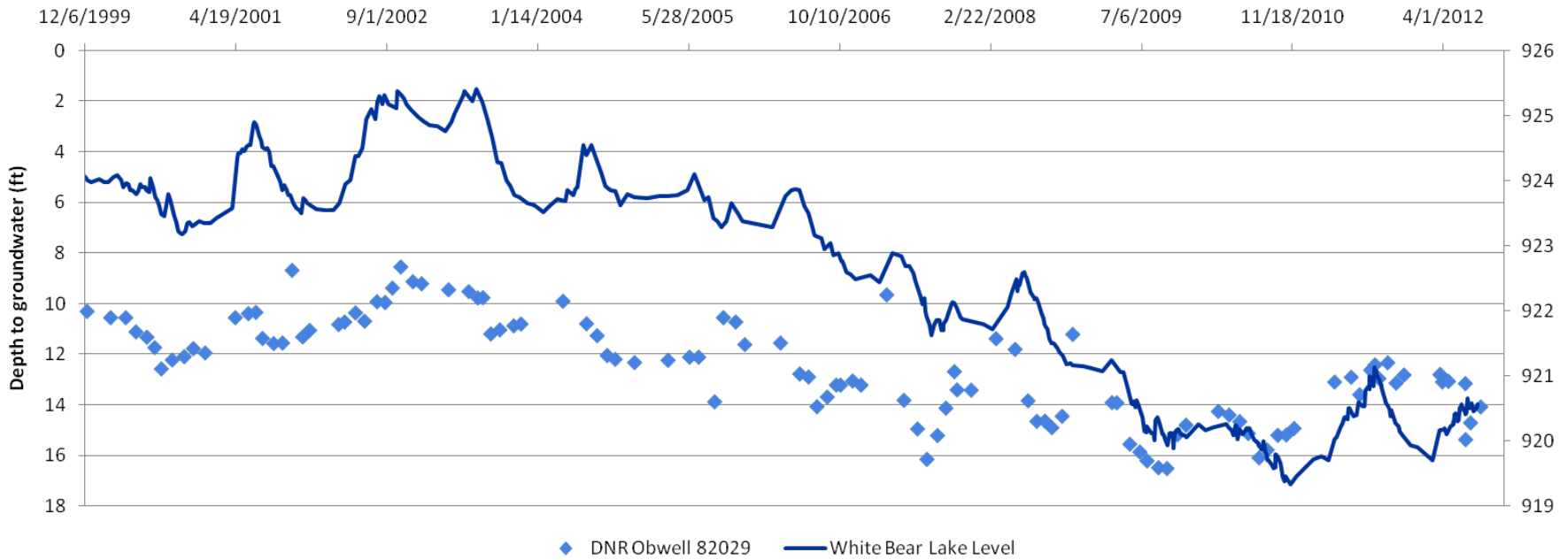
Source:
Metropolitan Council

	Travel Time from Land Surface to Uppermost Aquifer				
Recharge Rate	Immediate	Years	Decades	Centuries	None
Very High (Sand Plain)	2 - High	3 - High	4 - Moderate	5 - Moderate	6 - Moderate
Above Average	3 - High	4 - Moderate	5 - Moderate	6 - Moderate	7 - Low
Average Recharge	4 - Moderate	5 - Moderate	6 - Moderate	7 - Low	8 - Low
Below Average	5 - Moderate	6 - Moderate	7 - Low	8 - Low	9 - Low
None (Discharge Zone)	6 - Moderate	7 - Low	8 - Low	9 - Low	10 - Low

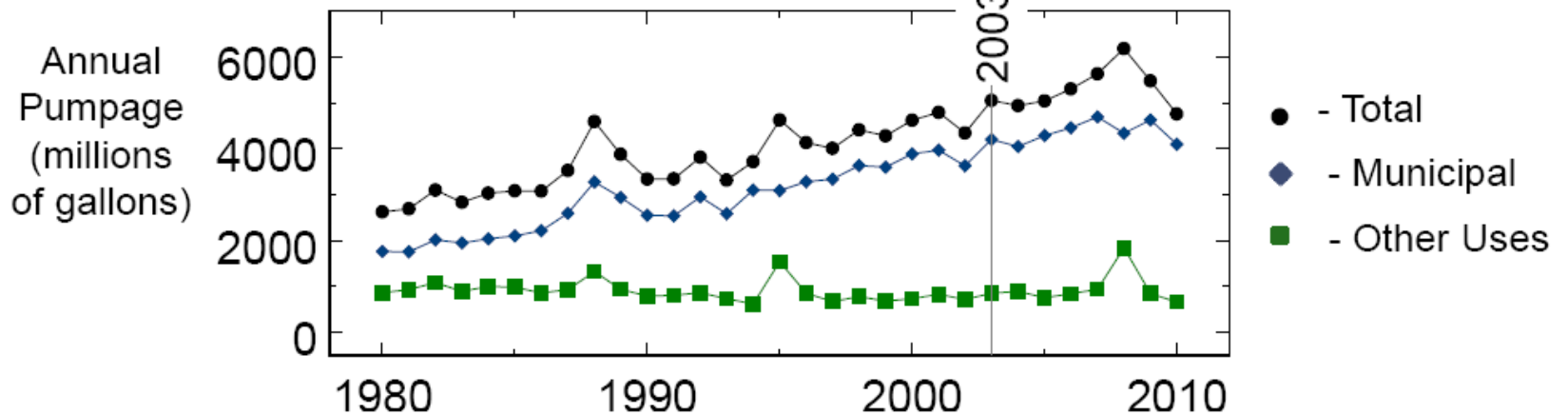
High
 Moderate
 Low
 Regional discharge, or not enough data to evaluate



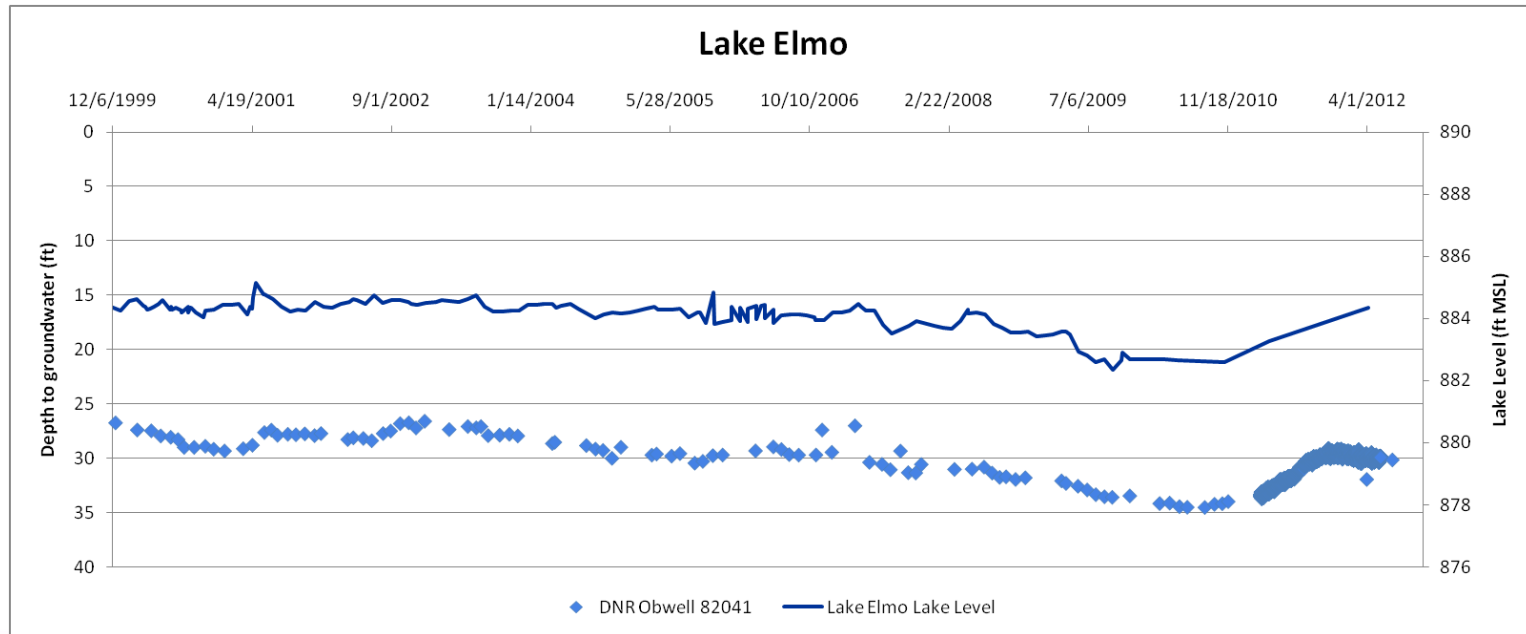
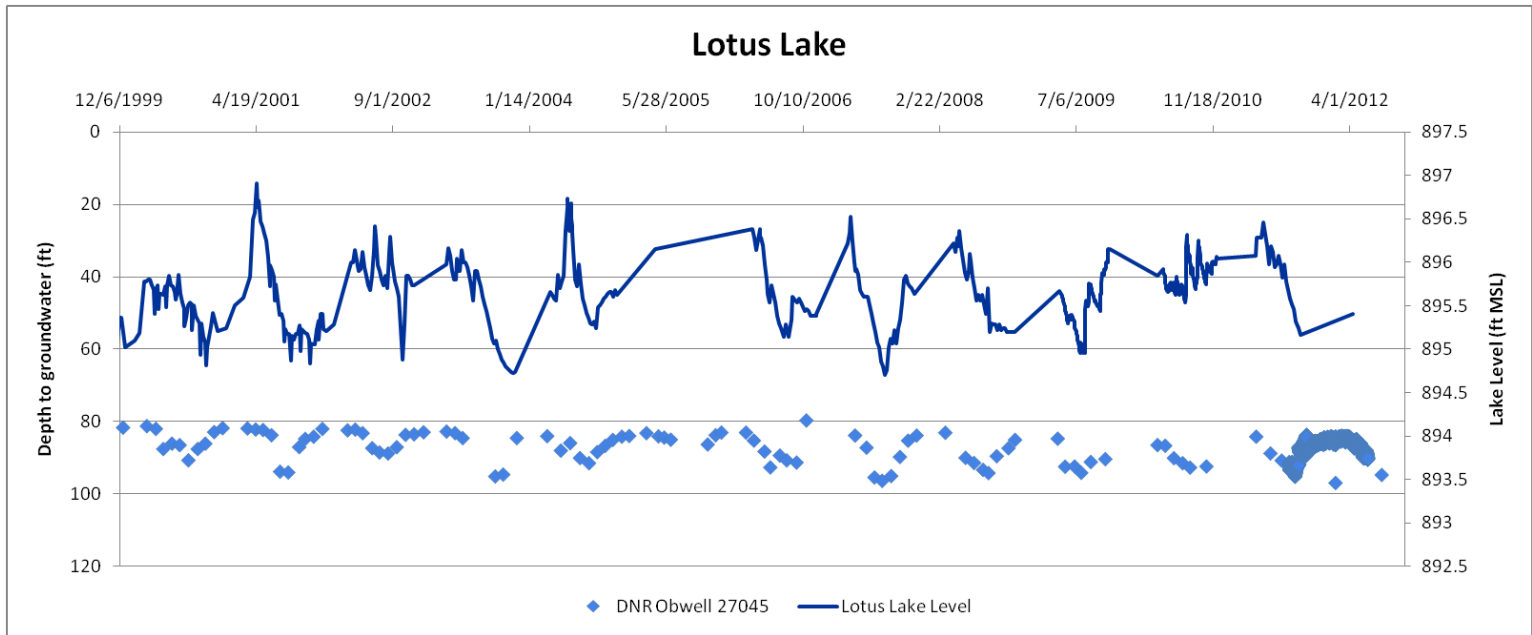
White Bear Lake



Pumpage By Use



OTHER LAKES



Next Steps

- Policy development for Thrive MSP 2040
- Issue identification for Water Resources Management Policy Plan
- Policy development for Water Resources Management Policy Plan
- Adopted Thrive MSP 2040 – February 2014
- Adopted Water Resources Management Policy Plan – May 2014