Master Plan Table of Contents (DRAFT 3/17/14)

List of Figures

List of Tables

Executive Summary

1. Introduction

- a. Area addressed by the Master Plan
- b. Council's Role in Water Supply Planning
 - i. 2005 Minnesota Statutes require Council water supply planning
 - ii. Water Resources Policy Plan
 - iii. Twin Cities Metropolitan Area Master Water Supply Plan
 - iv. Metropolitan Area Water Supply Advisory Committee
- c. MN Department of Natural Resources' Role in Water Supply Planning
 - i. Statutory responsibility for protecting waters of the state
 - ii. Permitting and local plans
 - iii. Grounwater Management Areas
- d. Responsibilities in Water Supply Planning
 - i. MN Department of Health
 - ii. Communities and Water Supply Utilities
 - 1. Emergency supplies
 - 2. Meeting current and future day-to-day needs
 - iii. Watershed Management Organizations
 - iv. Counties
 - v. Private industry
- e. Need to Update Master Plan
- f. Goal of the Master Water Supply Plan
 - i. Sustainability Goal
 - ii. Minnesota Statute Definition of Sustainability
- g. Master Plan update Preparation, Coordination, Outreach and Adoption
- h. Criteria for consistency with the Master Water Supply Plan (review checklist for docs)

2. Metro Region Water Resources Settings

- a. Hydrologic Characterization of the Metro Region, including Water Balance
- b. Population and Growth
- c. Water Sources
- d. Water Demand and Supply Municipal and non-municipal
- e. Water Quality
- f. Water Supply Issues of Concern
- 3. Metro Region Sustainable Water Supply Management Objectives (from water supply policies in Water Resources Policy Plan)

- a. Regional (and subregional?) Targets/Benchmarks (per capita water use, aquifer levels, etc)
- b. Potable water supplies are adequate for the region's population and projected growth
 - i. Water conservation measures are promoted
 - 1. Water Conservation Toolbox is maintained
 - 2. Projects are implemented
 - ii. Land use and cooperative water use practices minimize impacts on aquifers
- c. The quantity and quality of the region's source water is protected and enhanced
 - i. The use, capacity, quality and vulnerability of the water supply is assessed
 - ii. Areas with high potential for recharge are identified
 - iii. Best management practices for stormwater
 - iv. Wastewater reuse is investigated and, when cost-effective, implemented
- d. Sub-regional water supply infrastructure investments shall be cost-effective
 - i. Criteria are developed to identify water supply projects with regional benefit
 - ii. Cost-benefit analyses are supported
 - iii. Funding mechanisms are identified for regionally-beneficial projects
 - iv. Equitable cost-sharing structures are promoted
- e. Water supply challenges and limitations are addressed through collaboration
 - i. Sub-regional groups will address water supply limitations
 - ii. GMAs, wellhead protection plans, permits, and projects will be collaborative
 - iii. Technical assistance to LGUs will be provided

4. Monitoring Water Supply Sustainability

- a. Measureable Criteria (used to evaluate any non-recommended alternatives proposed)
 - i. Groundwater Elevation
 - ii. Groundwater Quality
 - iii. Per Capita Water Use
 - iv. Implemented projects
 - v. Surface Water and Groundwater Interaction
 - vi. River Sustainability (flow, quality)

5. Implementation Plan

- a. Regional Management Actions (From Management Objectives)
- b. Financing Mechanisms
- c. Equitable Cost-sharing Structures
- a. Implementation Schedule
- b. Future Re-evaluation of Master Plan

6. Sub-regional Management strategies- Managing an Uncertain Future (water supply sustainability varies by subregion)

- a. Delineation Criteria
- b. Sub-region Name
 - i. Summary of Sub-regional Issues (including need for emergency back-ups)
 - ii. Summary of Alternatives to Address the Issues

- iii. Costs of Alternatives
- c. Sub-regional goals/quantitative objectives

7. Tools to Support Water Supply Management

- a. Metro Model 3
- b. Recharge Maps
- c. Conservation Toolbox
- d. Stormwater Reuse Guide
- e. MN TAP for Industrial or Commercial Use