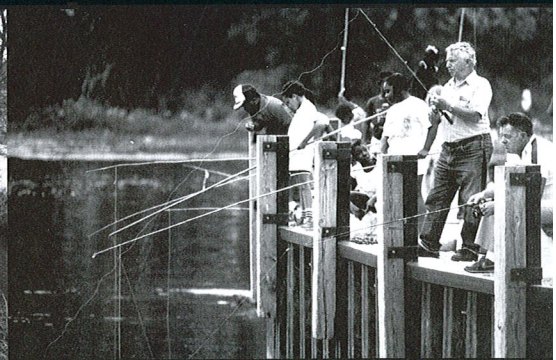


2030

Water Resources Management Policy Plan



Water resources for future generations



economic vitality

Water and the region's economic vitality

Three majestic rivers. Nine-hundred and fifty lakes. Extensive wetlands. A 1,000-foot-deep aquifer system. The Twin Cities metropolitan area is blessed with abundant water resources. When many places around the U.S. and the world are facing actual and potential water shortages, this region offers its residents a reliable supply of high quality water from within its seven-county border.

Nonetheless, the region cannot afford to be complacent or careless about its water resources. The Metropolitan Council projects that the region will grow by 471,000 households, nearly one million people and 563,000 jobs between 2000 and 2030. Wise stewardship of our resources is required.

The Council's commitment to environmental stewardship is translated into the policies and implementation strategies contained in its updated *Water Resources Management Policy Plan (Water Plan)*. The Council will continue to provide high quality, affordable wastewater collection and treatment services while guiding growth in a manner that protects water resources. The Council will also identify water supply and water quality challenges, and address them by working with all interested partners.

One of the Council's primary strengths is its regional perspective, which takes into account the interrelationships of land use, growth patterns, transportation, and water resources use and protection. This integrated perspective is the foundation of the Council's *2030 Regional Development Framework*, from which the new *Water Plan* evolved.

Ensuring a plentiful water supply

Regional water demand in 2004 totaled more than 1.3 billion gallons per day. That will only grow along with the region's economy and population. In addition, increased development creates more impervious surface (e.g., pavement and rooftops), decreasing the opportunity for groundwater recharge during rainfall and snowmelt. Water supply may also be threatened by competing demand between groundwater withdrawal and surface water protection, by drought, and by aquifer contamination.

The Council proposes, working with its regional partners, to develop a comprehensive water supply planning framework to evaluate water resources and plan for their efficient use. Currently most supplies are developed without an assessment of the potential impact on other users or natural resources. Furthermore, water supply capital investments are typically based on local interests without looking at regional interests. No funding mechanisms exist to support water supply research and planning projects that meet local needs while also providing regional benefits. A planning framework is needed, and the Council will take an active role in developing it. The Council will also continue to review local water supply plans, facilitate inter-community task forces, promote conservation, and investigate reusing wastewater effluent.

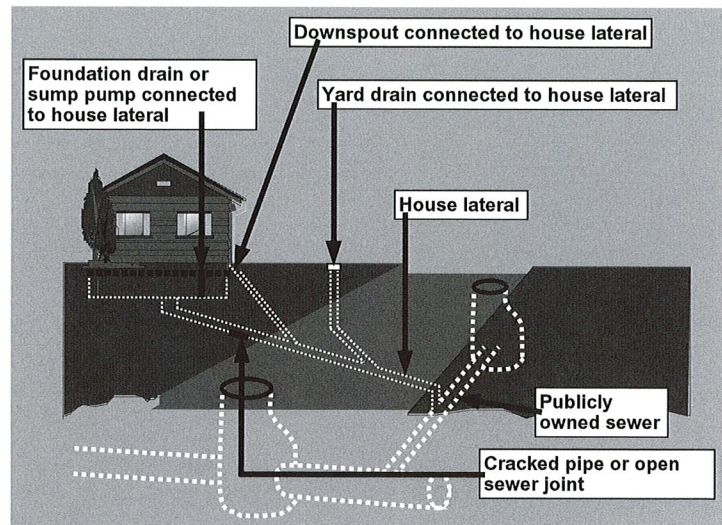


Preserving wastewater capacity for regional growth

The metropolitan wastewater collection and treatment system is critical to the region's future development. To keep costs within reason, metropolitan service is focused on the urbanized area of the region. In order to accommodate its projected population growth, the region in the next 25 years will need to invest \$3.7 billion to maintain, replace and expand its wastewater treatment facilities, including interceptors and treatment plants.

A major threat to the efficient use of existing and planned wastewater infrastructure is infiltration and inflow (I/I) of clear water into wastewater conveyance pipes, especially during major rainfall events. Infiltration occurs when groundwater seeps into sewer pipes through cracks, leaky joints or deteriorated manholes. The far larger problem, however, is inflow.

Sources of Infiltration/Inflow



Inflow occurs in direct proportion to rainfall. The typical source is water from rain leaders, basement sump pumps (designed to capture water that enters basements) or foundation drains illegally connected directly to a sanitary sewer pipe. A sump pump can contribute 7,200 gallons of clear water to the wastewater system in 24 hours, the equivalent of the normal daily flow from 26 homes.

This clear water entering wastewater pipes consumes capacity in the system needed for future growth in the region. For example, during a heavy rainstorm, the normal 200 million gallons a day (mgd) of wastewater flowing to the Metro Plant in St. Paul can more than triple to 700 mgd or more. Excess clear water is also a financial burden on residents, since the Council charges communities for the amount of wastewater they contribute to the treatment system. More than half of the region's 103 sewered communities currently show a significant response to rainfall events.

The updated *Water Plan* details how the Council will work closely with communities to reduce I/I to reasonable amounts so that the system continues to have adequate capacity to serve future growth. The Council will:

- Establish I/I goals for all communities discharging wastewater into the metropolitan disposal system.
- Require communities served by the metropolitan disposal system to include an I/I reduction program in their comprehensive plan.
- Potentially limit increases in service to communities with ongoing excessive I/I.
- Starting in 2007, institute a surcharge program to provide funding for I/I reduction efforts.
- Starting in 2013, institute a demand charge for communities that do not meet their I/I goals.

Another policy change is that the Council will consider acquiring and operating local wastewater treatment plants in rural growth centers where the community requests it and enough growth is projected to make Council involvement economically feasible. The plan establishes criteria whereby the Council can evaluate such requests, and also outlines circumstances where the Council might share the costs of system improvements with local communities.

Protecting the quality of water

The updated *Water Plan* puts an increased emphasis on control of nonpoint source pollution – urban and agricultural runoff. The U.S. Environmental Protection Agency estimates that more than 90 percent of the pollution of the nation's waterways is from nonpoint sources. Point source controls alone cannot adequately begin to address the pollution attributed to nonpoint sources.

The *Water Plan* proposes that if the surface water management section of a community's local comprehensive plan lacks a strong emphasis on managing nonpoint source pollution, the Council could find the local plan to be inconsistent with regional policies. Such a finding, called a "system impact," would require modification of the local plan.

The Council will continue to work in partnership with local governments, watershed organizations, and other public and private entities on a variety of efforts to reduce nonpoint source pollution, including:

- Ongoing monitoring of water quality in the region's lakes, rivers and streams.
- Technical assistance to help the Council's partners institute best management practices that reduce stormwater runoff, prevent erosion and flooding, and maintain or improve water quality.
- Review of local comprehensive plans, watershed management plans, local surface water management plans, environmental permits and other documents to ensure that communities are fulfilling their nonpoint source pollution reduction requirements and therefore reducing the impacts on the region's wastewater system.

About the Metropolitan Council

The Metropolitan Council is a 17-member body appointed by the governor. It was created by the Legislature in 1967 to ensure "the coordinated, orderly and economical development" of the seven-county Twin Cities metropolitan area – consisting of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties.

In addition to its planning functions, the Council operates a regional transit system that carries about 150,000 passengers a day, provides wastewater collection and treatment services for 103 communities, and oversees a regional parks system that attracts more than 30 million visitors a year.

