



## Legislative Water Commission

Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

---

September 26, 2016

### Meeting Minutes

#### Members Present

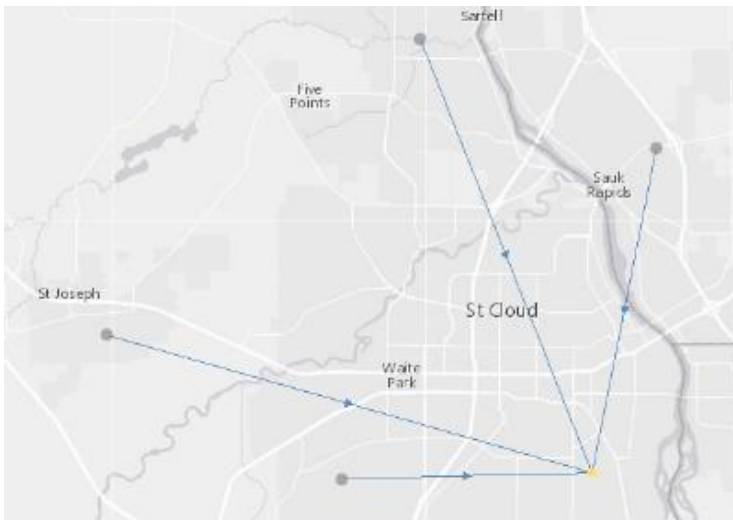
Representative Paul Torkelson, Chair  
Senator Bev Scalze, Co-chair  
Representative David Bly  
Senator Gary Dahms  
Representative Peter Fischer  
Senator Matt Schmit

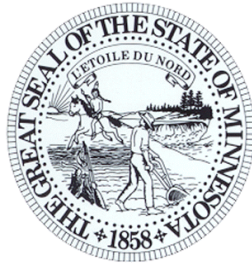
#### Members Absent

Representative Clark Johnson  
Senator Roger Chamberlain  
Representative Rod Hamilton  
Senator Charles Wiger  
Senator Carrie Ruud  
Representative Matt Dean

In the absence of a quorum, the presentations to the LWC on Minnesota's aging water infrastructure began at 9:05 a.m.

1. State Auditor Rebecca Otto demonstrated how to use the new, statewide [Infrastructure Stress Transparency Tool](#), which was developed using self-reported (unaudited) wastewater and drinking water data that was already residing with various state agencies. With funding from a \$19,000 University of MN grant, the data was integrated to provide access to infrastructure age and fiscal data from 853 cities (of which 600 are smaller than 2,500 people) The tool uses a dashboard to visually distinguish young (<30 years), middle-aged (30-50 years), and old (>50 years) wastewater sewers and facilities and to show the relative system size (by miles of sewer). The tool also shows where a facility provides services for multiple jurisdictions, like the St Cloud Wastewater Treatment Plant:



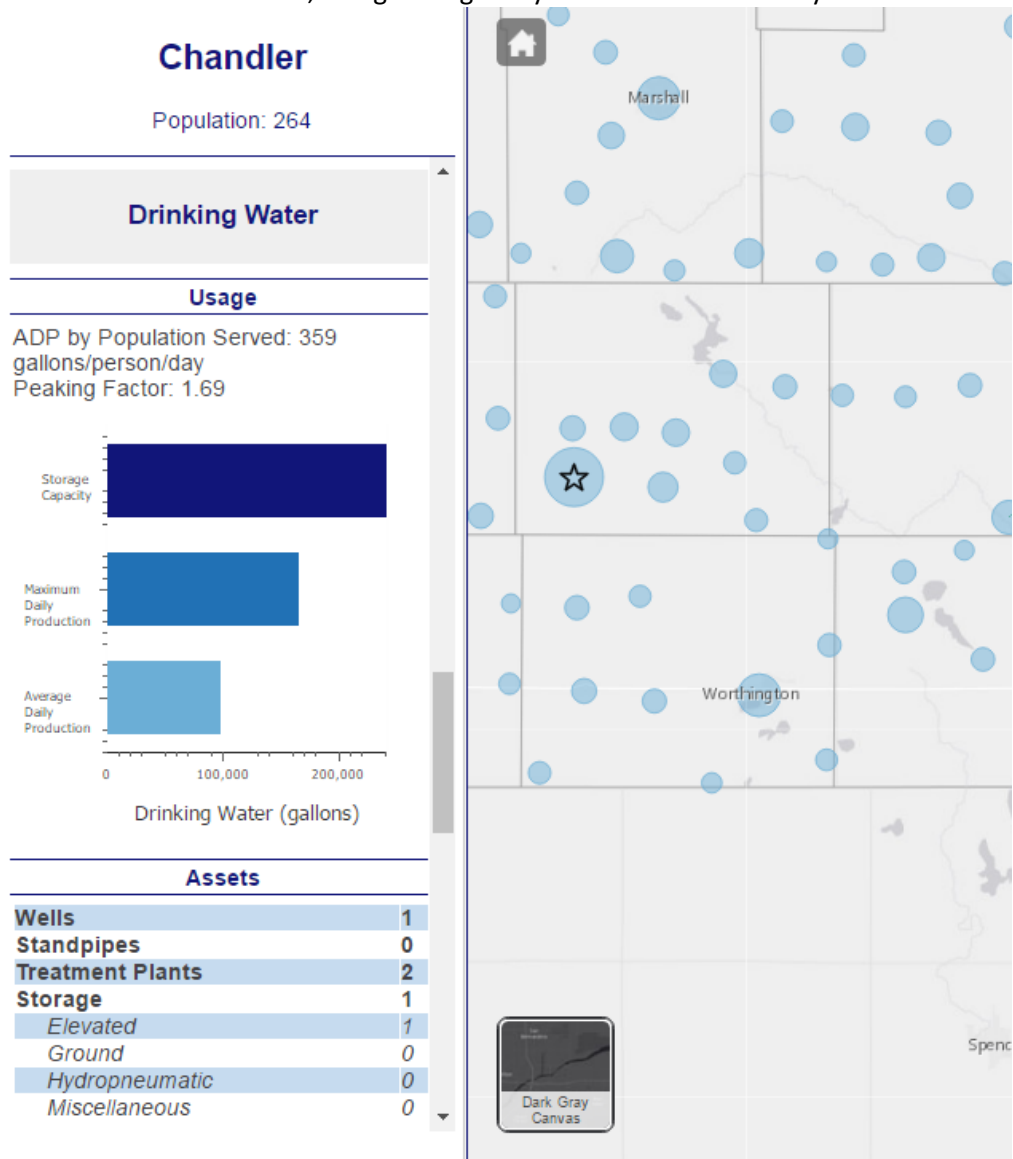


# Legislative Water Commission

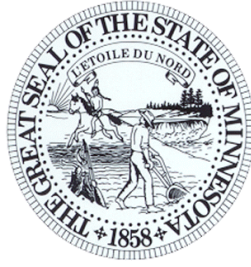
Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

Information on a city's maximum and average daily water production and water storage capacity can also be displayed on the tool (see the following example). The larger the circle, the more water that is produced. In smaller cities, a larger usage may be the result of nearby industries.



Age of water lines is not available at this time.

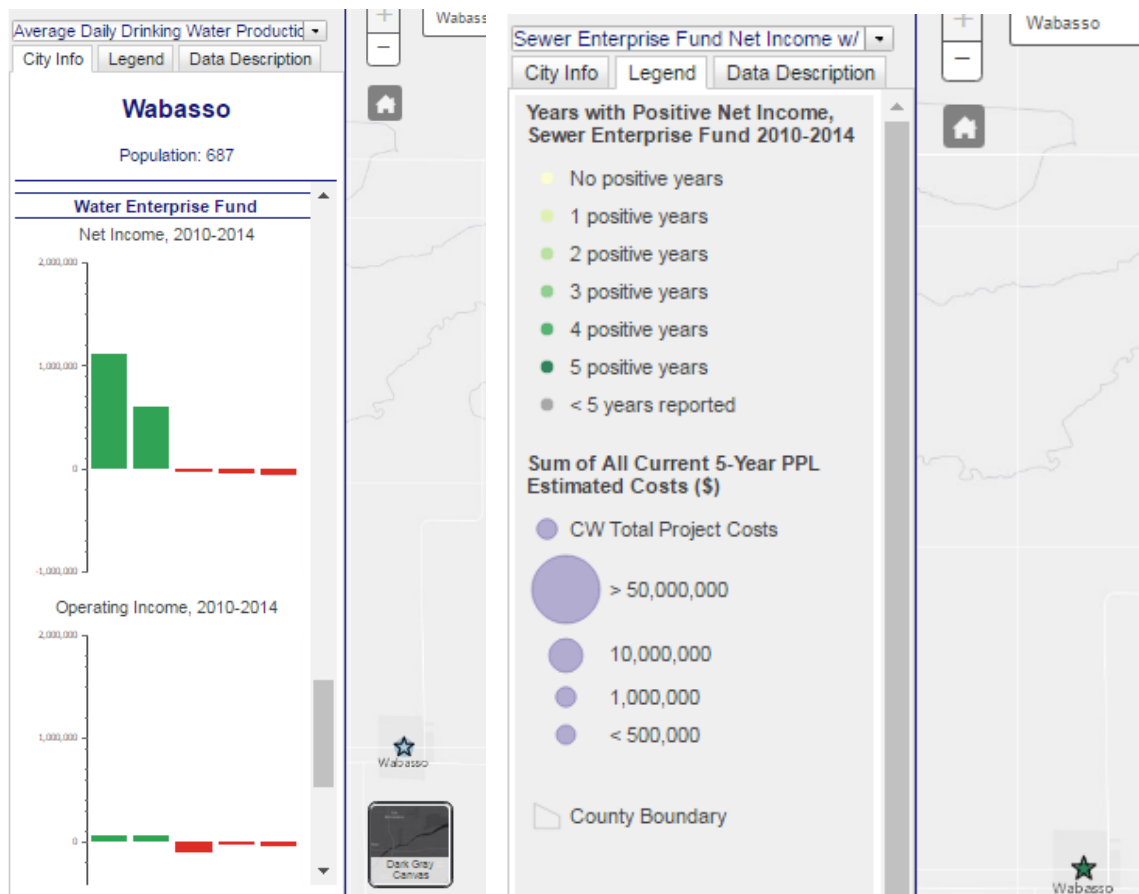


## Legislative Water Commission

Barb Huberty, Director

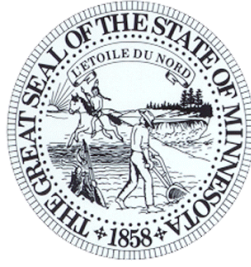
95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

Fiscal information about water and sewer enterprise funds is also displayed on the tool. For water funds, net income, operating income (with and without depreciation), and whether any priority project list (PPL) projects have been completed is available. For wastewater funds, an assessment of years with positive net income is shown along with PPL contributions.



Metadata can be accessed to identify the source and age of the data incorporated into the tool.

Another grant has been obtained to hire to U of MN graduate students to enter additional information, such as service districts and searchable filters like legislative districts and counties. LWC members suggested that adding rate information and filtering between small and large cities would be useful.



## Legislative Water Commission

Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

---

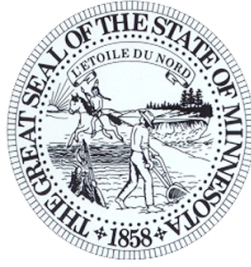
Rep Fischer asked whether it would be possible to segregate industrial vs residential water supply use and whether they report on system reinvestment. Ms Otto explained that water use is not shown in that way not and that it is not a real time map, so only the most recently reported data can be seen. Sen Scalze asked whether replacement investments (i.e., retained earnings) are shown. Ms Otto said they are not and that even cities showing budgets “in the green” are not displaying the full story because the amount of deferred maintenance or replacement is not shown. She further explained that small communities struggle with a lack of resources and that fair rate information is needed. Rep Torkelson asked whether pollutant trading is shown, either cities with excess capacity or those needing it. Ms Otto said they will look into adding that.

2. Jeff Freeman, Director of the Public Facilities Authority (PFA) gave an overview of the state water funding programs and issues. He indicated that PFA works with Minnesota Pollution Control Agency (MPCA), which develops the Clean Water (wastewater and stormwater) project priority list (PPL), and the Minnesota Department of Health (MDH), which develops the Drinking Water PPL. MPCA and MDH staff also complete technical reviews of proposed projects. The PFA board is comprised of 6 state commissioners and the Commissioner of the Department of Employment and Economic Development is the chair. PFA administers 3 revolving loan funds and several other grant & loan programs. In addition to providing local financing, PFA helps local governmental units understand the funding process, program requirements and local responsibilities.

Each year, PFA receives federal Clean Water and Drinking Water capital grants and 20% state matching funds to capitalize its revolving loan programs; it can also sell up to \$1.5B in tax-exempt, AAA-rated revenue bonds. It has \$2.3B in assets and receives no state general funds for administration, which is funded by loan repayment fees. They have a small staff and pay the MPCA and MDH staff for their work on these programs.

The Clean Water infrastructure program funds have provided \$2.9B in loans since 1990 and have never had a project default. Currently their loan programs have an interest rate of 1%, which is below the market rate. They have calculated the interest savings to cities to be \$662M since 1990. There are 4 programs within the Clean Water (wastewater and stormwater) program:

- Clean Water Revolving Fund (loans); lends \$94M/yr
- Wastewater Infrastructure Funding (WIF) grant program; because grants are based on affordability criteria and affordability is tied to economies of scale, most grants go to smaller and rural communities; WIF grants include a requirement for applicants to start a replacement fund of \$0.50/1,000 gallons



## Legislative Water Commission

Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

- 
- Point Source Implementation Grants (PSIG) program, funded with MN Legacy Act Clean Water Funds, for treatment facility upgrades to reduce discharges of specific pollutants
  - Small Community Wastewater Treatment Program (technical assistance grants & loans) for unsewered communities whose lots are too small for individual septic system replacement

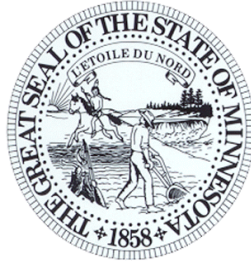
Mr Freeman stated that sewer rates vary substantially throughout the state. In the metro area, they are about \$20/month, but in Greater MN, they can vary from \$40 to \$70/month. He explained that during their fall 2016 listening sessions, they learned the extent to which systems are beyond their design life and how cities need more help with delivering essential services. The 2016 \$167M bonding proposal had been intended to help address that need.

Mr Freeman shared a graph depicting the amount of project financing, federal cap grants and state matching funds that have been provided since 2005. The variability is due to city demand, economic factors, and federal funding amounts. He also provided a list of loan totals by fiscal year, along with the average interest rate applied and interest savings achieved. The green spreadsheet handout shows the 2017 Clean Water PPL, with the gray shaded boxes depicting funds already awarded or committed. The project rankings are based on age and condition of infrastructure; the majority of the money is used for replacement (vs. expansion or treatment projects). The 2017 Intended Use Plan will include only "carry over" projects that had been in the 2016 list and are ready for construction. Some projects are not fully funded, but the money is reserved for them ((e.g., Jackson, MN). The PPL is a 5 year window of projects; cities apply when they are planning to seek money within 5 years. The blue spreadsheet handout is the 2017 Drinking Water PPL, primarily funding rehabilitation and new drinking water needs, such as nitrate treatment.

PFA loan officers evaluate the revenue status of the applicants, the current and future operations and maintenance costs, and the applicant's ability to repay the debt service. They provide technical financial assistants, whereas the systems are the local government's responsibility.

Mr Freeman explained that asset management systems are needed by cities that have a systematic infrastructure inventory and condition ratings to maximize component life and develop capital improvement plans to replace aging components before they fail. It is new for state government to be thinking about asset management. They are working with the MN Rural Water Association to develop and pilot a spreadsheet template for asset management that is manageable by small cities.

Rep Fischer asked if there is a project backlog due to a lack of funding. Mr Freeman said that each year, the fundable range within the Revolving Loan Funds covers about 75% of the PPL projects. The



## Legislative Water Commission

Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

---

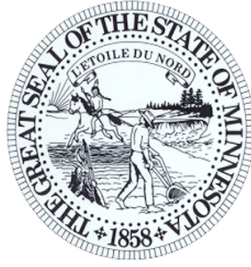
limiting factor is that many cities can't proceed with a project with just loans; they need a mix of grants and loans (but no one gets a 100% grant) and so wait for a funding package they can afford.

Rep Fischer asked how long the wait is for receiving grants. Mr Freeman said that all funding follows the PPLs. There is no WIF funding for drinking water, but that drinking water projects tend to be more affordable than wastewater. Wastewater grant funding runs out before the loan funding.

Rep Torkelson asked if there were opportunities to make wastewater treatment more affordable without risking environmental damage. Mr Freeman shared that cities can look at improving operational efficiencies, maximizing component life, phasing projects, regionalization (which need close proximity because pipe extensions are expensive), and sharing operators and administrators. Phased projects retain the same PPL priority ranking. The shortage of operators to manage a sophisticated system is a concern.

Rep Torkelson asked whether there are any proposed changes in federal support for these programs. Mr Freeman said that federal funding goes up and down; after years of declining support, support appears to be increasing and they expect it to continue, but the federal government has gotten out of the grant business.

3. Rebecca Flood, MPCA Assistant Commissioner, described the state's Clean Water Infrastructure Needs Survey findings and the fall 2016 infrastructure listening sessions input. She explained that after the federal Clean Water Act was passed in 1972, funding for infrastructure projects came from the federal government (75%), state government (15%) and local government (10%). The federal grant funding was phased out in the mid-1990's. Ms Flood explained that since 1998, EPA has mandated completion of the Water Infrastructure Needs Survey every 2 years to collect data on MN's 600 wastewater treatment facilities and their collection systems. Results of this survey show there is a need for a \$4.2B investment to replace/upgrade wastewater infrastructure over 20 years, with 40% of that total needed for sewer system rehabilitation, 30% for secondary treatment, 9% for new collection, 9% for new interceptors, 7% for infiltration/inflow and 5% for advanced treatment. Rep Torkelson asked whether she had this same breakdown by small vs large cities. Page 1 of the "Future Wastewater Infrastructure Needs and Capital Costs" report provided in member packets compares Metropolitan Council needs to Greater MN needs, but MPCA does not have a breakdown of small vs large cities throughout the state. Ms Flood went on to explain that the majority of the Minneapolis and St Paul sewer systems are over 50 years old and that, in general, aging sewer systems in Greater MN and the suburban metropolitan area are less of a problem due to age or system size.



## Legislative Water Commission

Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

---

During the fall of 2016, several state agencies led infrastructure listening sessions throughout the state and learned that aging infrastructure is their #1 concern. Along with this, concerns were also expressed about high costs, more flexibility, workforce issues, and policy changes. With support from the Coalition of Greater MN Cities, HF3739 (Hancock) and SF 3409 (Koenen) were introduced in 2016 to appropriate General Fund money to the MPCA to assess wastewater rates and current and future statewide wastewater infrastructure needs; to MDH to assess water rates and current and future statewide water infrastructure needs; and to PFA for a detailed study of total wastewater, sanitary sewer, and drinking water infrastructure needs. The bills did not receive hearings.

Further, they learned that cities want to add pollutant trading to their tool box and MPCA is developing guidance on this; finding partners is an issue. Cities also understand that GIS/modeling is needed but it is expensive develop asset management systems. The state was urged to work more comprehensively to address drinking water, wastewater and stormwater infrastructure and to understand their link to local road rehabilitation.

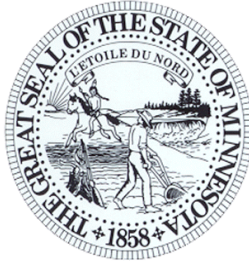
Ms Flood indicated there was broad support from the listening sessions for 5 policy changes:

- a. Look at agricultural nonpoint sources
- b. Reconsider wastewater reuse
- c. Ban flushable wipes (not just labeling changes); 10 cities are already involved in a class action lawsuit; MN's Senate hearing on a flushable wipes bill last year was the first in the nation
- d. Water conservation education
- e. Allow slow, incremental rate increases

Ms Flood closed by outlining legislative and non-legislative responses to the listening session input, including the passage of a bill to provide regulatory certainty to communities that upgrade biological nutrient removal processes to reduce phosphorus and nitrogen limits in exchange for capping those limits for up to 20 years.

Rep Fischer asked how small communities could best be helped. Increasing grant opportunities, adopting the proposed policy changes, assisting cities in developing asset management systems, facilitating water reuse and water quality training are all options. He followed up by asking how quickly the water reuse efforts could be moved forward. The Interagency Water Reuse Workgroup will finish their work and submit a report in June 2017; they have just begun the stakeholder





## Legislative Water Commission

Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

---

process. Ms Huberty added that DNR is looking at creating a general permit for stormwater irrigation projects.

Rep Torkelson asked whether standards for small communities could be modified, requirements made easier, or apply a cost-benefit approach. Ms Flood indicated that they have hired a municipal liaison to help small cities and that there is a variance process allowed under the Clean Water Act that could be used for problem pollutants.

Sen Scalze mentioned the large amount of aging infrastructure in Minneapolis and St Paul and wonders whether Met Council is using asset and rate management to address it. Ms Flood indicated that Met Council manages the treatment and the cities own the sewers, each being responsible for their own portion. Changing that would take a statutory change.

Rep Torkelson wondered whether money should be appropriated for MPCA to complete a composition study of sewer clogs to identify whether flushable wipes are the primary problem. Ms Flood said there are some other products that are also found in clogs, but that the national studies would not be expected to be different than MN conditions.

4. Randy Ellingboe, Manager of MDH's Drinking Water Protections Section, described the state's drinking water infrastructure needs. The EPA-required Drinking Water Infrastructure Needs survey is completed every 4 years and has identified a \$7.4B need over 20 years for water storage facilities (14%), treatment facilities (0.02%), water sources (8%), transmission and distribution (77%) and other issues (1%). MDH has seen an increase in the demand for loans (~\$39M/yr); in 2017 they have 331 projects totaling \$559M on the PPL. The breakdown by project type is: water storage facilities (9%), treatment facilities (47%), water sources (3%), transmission and distribution (30%) and other issues (11%). In addition to the PFA administered funding sources, cities can also seek funds from private lenders when rates are low, from federal rural development funds or use a pay-as-you-go process. WIF and PSIG are new areas for drinking water, but grants are limited.

Mr Ellingboe reminded attendees that infrastructure also includes valves, pressure monitors and other components in addition to pipes and treatment facilities. He indicated water main breaks pose special challenges for hospitals and businesses if there is a shut down; that winter breaks are difficult to repair, and that breaks can allow contaminants to enter the system, creating a public health risk, not just an inconvenience.





## Legislative Water Commission

Barb Huberty, Director

95 State Office Building St. Paul, MN 55155-1201 Phone: (651) 284-6431 Fax: (651) 297-3697 TDD (651) 296-9896

---

Other water supply challenges include: an increasing need for treatment facilities, adding wells to increase water supply, addressing unregulated contaminants and contaminants of emerging concern in addition to the Safe Drinking Water Act list of 100 contaminants, lead in tap water (not source water), protecting the health of those who drink from private supplies (20% of MN), helping smaller communities with limited staff and financial resources, paying to remove contaminants introduced by others, and creating sustainable utilities.

Rep Bly asked about the recent large storm events that are overwhelming water systems. Mr Ellingboe indicated that both flooding and drought are pressing needs that will need future investment. He mentioned that EPA has a Climate Resilience Evaluation and Awareness Tool (CREAT) to help water utilities assess risk, plan and adapt to climate change and that Faribault has utilized it.

Rep Fischer had several questions:

- a. Wastewater needs are at \$4.2B and drinking water needs are at \$7.4B; what portion of these needs are covered by enterprise funds? MDH will provide an answer at a later date.
- b. What is driving the increased need for drinking water projects? Age and treatment (e.g., of nitrate and radium).
- c. What percent of pipes still contain lead? Unknown.
- d. Is lead testing done in the pipes or the homes? In the home. Water mains don't have lead, both public and private service connections and plumbing fixtures can have lead. MDH estimates that of the 1.5M to 2M service lines, only 80,000 to 100,000 (0.005%) still have full or partial lead content. The last survey EPA did on this issue was in 1991.

The presentations ended at 11:15 a.m.