



Dima El-Gamal
Capital Improvement Planning Director
9300 W. Jefferson, Suite 470
Detroit, Michigan 48209
Phone: 313-224-4739
Email: dima.el-gamal@glwater.org

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Timothy Hawkins
Director of Public Works & Facilities
City of Dearborn
2951 Greenfield
Dearborn, MI 48120

Re: FY2027-2031 CIP- Discussion Draft #1 Comments

Dear Mr. Hawkins:

Thank you for taking time to review the Great Lake Water Authority's (GLWA) FY 2027-2031 Capital Improvement Plan Discussion Draft 1. In general, we agree with your sentiment that more needs to be done to address the aging transmission main infrastructure within the City of Dearborn and the entire GLWA system. However, the magnitude of the need is tremendous, and the assessment of transmission mains is very challenging.

We value your feedback and will endeavor to evaluate and address your comments as noted below.

Comment:

"It seems that a large amount of funds is being proposed to be spent at the water treatment facilities and a limited amount on the transmission system. These funds for the transmission system seemed to be directed to those counties that are named other than Wayne County."

GLWA Response:

It should be noted that GLWA's Linear System Integrity Program (LSIP) is a relatively new program. It has been underway for roughly four years. Prior to that time, a proactive condition assessment program had not occurred. Since that time, we stood up the LSIP, including a prioritization process, and began addressing the highest risk transmission mains based on that prioritization. The city or county where the transmission main was located has no impact on the risk associated with the pipe.

Currently, the LSIP is performing condition assessments of approximately 20 miles of Prestressed Concrete Cylinder Pipe (PCCP) transmission main per year. Historically, because PCCP failed more catastrophically than other types of mains, these areas were prioritized higher. This initial start of the program was considered a "lean" program in an attempt to understand the level of effort a comprehensive program may entail. On October 8, 2025, a presentation was made to the GLWA Board of Directors discussing options for a more comprehensive transmission main renewal strategy with the intent of explaining the need for additional funding to expand the program. The expansion of this program is currently being considered and is not included in the CIP at this time.

As it relates to the FY 2027-2031 Draft 1 CIP investment categories, this CIP reflects investments of 47 percent in treatment (approximately \$523 M), 31 percent in transmission (approximately \$346 M), and 22 percent in pumps and storage (approximately \$250M). In addition, it should be noted that 45 percent of water system CIP investments will occur within Wayne County directly.

FY2027-2031 Water System Transmission CIP By Location

Location	FY 2027-2031	Percent
Wayne County - Outside Detroit	66,173,521	19.10%
Wayne County-City of Detroit	39,415,677	11.38%
Macomb County	2,609,889	0.75%
Multiple Counties	223,295,174	64.46%
Oakland County	14,929,080	4.31%
Grand Total	346,423,341	100.00%

Comment:

“Over the past year there have been breaks on the transmission system, including southwest Detroit and most recently in Novi. Yet, we do not hear GLWA proposing any type of inspection of the existing transmission system especially those mains located in the neighborhoods and based on the age.

Here in Dearborn, we have nearly 32 miles of transmission main that runs throughout our community including a 72-inch main within one of the older neighborhoods just outside Springwells Treatment Plant. This 72-inch main is well beyond 50 years old and more than likely beyond its useful life. Yet, GLWA has no plans to have this main inspected for possible problems. GLWA seems more concerned to fix the problems in western Oakland County with looping the 14 Mile Road transmission main then worry about the possibility of a catastrophic failure of a 72-inch main within an older neighborhood.”

GLWA Response:

GLWA manages over 800 miles of transmission mains in the regional water system. Approximately 132 miles or 16 percent of the transmission mains have exceeded their expected useful life. In addition, it is estimated that approximately 127 miles of transmission main are candidates for decommissioning. It is estimated that the cost of decommissioning and replacement of mains exceeding their expected useful life by 2035 is \$1.2 Billion. This is a steep price tag that currently cannot be addressed from charges alone. GLWA is currently having conversations with State and Federal legislators to attempt to obtain long-term, sustainable funding sources to address this significant need. As stated previously, ongoing conversations with GLWA’s Board of Directors have brought awareness of the need and associated increased budgets for a comprehensive renewal strategy.

n the meantime, because sufficient funding is not available to address all of these needs immediately, a robust risk methodology is used to prioritize condition assessments and renewals. It should be noted that transmission main age is only one contributing factor in determining the overall priority.

The recent catastrophic transmission main failure in southwest Detroit was atypical in its mode of failure. Typically, steel transmission main failures occur from corrosion causing blow holes, leaks at joints or appurtenances or by relatively small splits in the metal. This pipe failed along the longitudinal weld which caused a 10-foot split in the pipe. Results of the metallurgical analysis reveal that the pipe failed due to welding defects and corrosion causing significant thinning of the external weld of the longitudinal seam.

Because of this new failure mode and because of the significant human suffering that occurred, GLWA has reacted in three primary ways.

- ## Planned Inline Leak Detection

- Earlier in 2025, GLWA teams worked with you to identify the GLWA transmission mains within the City of Dearborn that are your highest priorities for condition assessment activities. These are the transmission mains that you provided.

Pipe Group	Pipeline Name	Length (mi)	Length in Dearborn (mi)	% in Dearborn
151	72", Wisconsin, Aviation, Detroit	7.40	0.24	3%
321	66", Blesser, Dearborn	1.45	1.45	100%
361	54", Paul, Dearborn	1.66	1.66	100%
255	72", Diversey, Dearborn	2.26	2.25	99%
356	54", Alber, Dearborn	2.17	2.17	100%
355	66", Hemlock, Dearborn	3.03	3.03	100%

As discussed above, Pipe Groups 151 and 321 will be first addressed by performing leak detection. It is thought that performing the inline leak detection will not identify the condition of the weld, but will generally identify the condition of the main. As leaks are investigated and repaired, a more detailed assessment of the main can be made. In addition, if the pilot discussed above is successful in identifying deterioration of the weld, this technology would be considered for these two pipelines. Condition assessments of these two transmission mains are currently being planned within existing budgets. Your other priorities will be considered as the program progresses and based on GLWA's overall risk prioritization.

Please see page 32 of the CIP to find a list of all transmission main replacements, redundant main installations, and the overall Linear System Integrity Program (CIP 170600) with specific transmission main condition assessments identified.

I want to summarize by saying that we share your thoughts that the aging transmission mains are in need of a more robust and programmatic replacement program, and we are seeking additional funding from a variety of places for that purpose. We are actively pursuing that funding through both an increased investment over several years through budgets and long-term sustainable funding through the state or federal government. Additionally, we are actively ramping up our internal capacity to effectuate an increase in program delivery with the intent to reach a comprehensive transmission main renewal strategy.

I trust that your comments on FY 2027-2031 Draft 1 have been addressed. If you have additional questions or would like to discuss any of these matters in greater detail, please do not hesitate to contact me. Your feedback is greatly appreciated and valued.

Best regards,



Dima S. El-Gamal, PhD, PE, LEEDAP

CC:
Jody D. Caldwell
Cheryl Porter