



**Department of Public Works  
Engineering Division**  
W240 N3065 Pewaukee Road  
Pewaukee WI 53072  
Phone: 262-691-0804

**PUBLIC WORKS COMMITTEE  
MEETING NOTICE AND AGENDA  
Wednesday, December 10, 2025  
3:00 PM**

Pewaukee City Hall Common Council Chambers  
W240N3065 Pewaukee Road, Pewaukee, WI

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1. Call to Order and Pledge of Allegiance
2. Public Comment - Please limit your comments to two minutes. If further time for discussion is needed, please contact your District Alderperson prior to the meeting.
3. Discussion and Action Regarding the Minutes
  - 3.1 Discussion and possible action to adopt October 23, 2025 meeting minutes.
4. Water and Sewer Division
  - 4.1 Presentation, discussion, and possible action on the Water Supply Service Area Study.
5. Public Comment - Please limit your comments to two minutes. If further time for discussion is needed, please contact your District Alderperson prior to the meeting.
6. Adjournment

Magdelene Wagner  
Director of Public Works  
December 10, 2025

**NOTICE**

It is possible that members of other governmental bodies of the municipality may be in attendance to gather information that may form a quorum. At the above stated meeting, no action will be taken by any governmental body other than the governmental body specifically referred to above in this notice.

Any person who has a qualifying disability under the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible format must contact the DPW Main Office at (262) 691-0804 by 12:00 p.m. the Tuesday prior to the meeting so that arrangements may be made to accommodate your request.

City of Pewaukee - New Agenda Item

Agenda Language:

Discussion and possible action to adopt October 23, 2025 meeting minutes.

Sub Item Agenda Language:

Background Provided By:

Background:

Please review and approve the minutes from the October 23, 2025 meeting.

Fiscal Impact:

Recommended Motion:

Approve the minutes.

In Attendance:

Mayor Steve Bierce, Alderman Jerry Wamser, Michael Kreiter, James Blackwood

Absent:

David Swan

Also In Attendance:

Director of Public Works M. Wagner, Chief Engineer-Utilities R. Wirtz, Chief Engineer-Streets & Development M. Gabbey, Utility Manager J. Mueller, Utility Assistant Manager R. Kincaid, Utility Billing Specialist R. Reed

1. Call to Order and Pledge of Allegiance

The Public Works Committee meeting was called to order at 4:00 PM and called to stand for the Pledge of Allegiance.

2. Public Comment - Please limit your comments to two minutes. If further time for discussion is needed, please contact your District Alderperson prior to the meeting.

No public comments were received.

3. Discussion and Action Regarding the Minutes

3.1 Discussion and possible action to adopt the September 4, 2025 meeting minutes

**Motion was made and seconded (J. Wamser, S. Bierce) to approve the September 4, 2025, meeting minutes.** Motion passed unanimously.

4. Water and Sewer Division

4.1 Discussion and possible action regarding the Water Supply Service Area Plan Draft Section #4, 7, & 8.

Ms. Mueller presented the information on the Water Supply Service Area Plan draft sections. She noted that detailed chapters had been provided in the meeting packet, with highlighted points pertinent to the study. The study outlines the background on the city's pumping system, contamination issues, and the need to determine a future direction for the water utility. Ms. Mueller reported that the public information meeting held the previous night was well attended and covered much of the same material presented to the Council. She anticipated that the complete study would likely come before the Council in December. At this stage, she explained they had not yet reached the detailed dollars and cents phase of the study, but that level of detail would be arriving soon.

During discussion, Mayor Bierce commented that the report was not very uplifting,

and Alderman Wamser added that the public meeting had not been encouraging either. Ms. Mueller acknowledged they were "between a rock and a hard place," with no inexpensive solutions available. Various water supply options were discussed, including the possibility of staying on the groundwater system. She said this option could potentially require 10 additional well sites in the future. Another option under consideration was considering Lake Michigan as a water supply, utilizing the infrastructure of the City of Waukesha. Ms. Mueller also mentioned the idea of partnering with other municipalities.

Alderman Wamser expressed a preference for addressing the City's water issues locally rather than partnering with Waukesha. Ms. Mueller discussed the necessity of exploring all available options before bringing forward any recommendations to the Council. Additionally, Ms. Wagner suggested investigating partnerships with municipalities in areas with less contamination, given that significant costs would be involved regardless of the solution chosen. Ms. Mueller further discussed the challenges posed by increasingly stringent EPA regulations, with new contaminants being identified regularly, which continue to create ongoing issues for water systems. The ultimate goal, as she stated, is to provide a guiding document on pricing for at least the two most viable options by December for Council consideration. This document would encompass both the groundwater and Lake Michigan options, with necessary considerations for infrastructure and potential partnerships laid out succinctly for further discussions.

#### 4.2 Discussion on the project update for the Gun Club Lift Station replacement project

Mr. Kincaid reported that the Gun Club Lift Station project has been completed, and the road reopened, much to the relief of many community members. The site itself, now that the project has been wrapped up, looks much improved.

During construction, the team encountered some unexpected challenges, most notably an issue with generator sensors. However, these technical issues have been resolved, and the site received the necessary staff training to run the updated lift station effectively. Mr. Kincaid also shared that there had been additional tasks to adjust the parameters and settings, as well as training sessions to ensure that everything was operating smoothly. Furthermore, additional work involving the force main was required, which was not initially anticipated, but they have surmounted those obstacles.

The lift station has been operational for approximately two weeks and is successfully pumping waste toward Brookfield as it should be. Mr. Kincaid mentioned that the facility had experienced a couple of minor issues with electronics but, by and large, it operates as expected. The demolition of the old structure is complete, and the site transitioned to a visually appealing, fully functional station.

When asked about the road closure duration, Mr. Kincaid clarified that the closure lasted around two months and was extended from the original timeline due to a road failure. A sinkhole had appeared, prompting compaction tests and filling back in with a flowable fill to ensure stability above the underground facilities. The road officially reopened around October 6, 2025.

Alderman Wamser commented the completed project looked good, noting it was

higher than the old one, which could provide better protection from any potential flooding issues. Mr. Kincaid invited committee members to tour the facility and witness firsthand its substantial improvements. He described the lift station as 40 feet deep with essential plumbing and infrastructure located in the lower level—details not immediately visible from the surface but critical for function.

#### 4.3 Discussion and possible action on the status update PFAS Pilot Study Well #8

Ms. Mueller provided an update on the PFAS pilot program at Still River well, noting that the system was working as expected, though they were experiencing challenges with iron in the well water. An additional column had been added to the pilot test for iron pre-treatment before the water goes through the PFAS media. Ms. Mueller stated that the contractor was pleased with the results of the new iron removal pre-treatment system.

The pilot test is scheduled to continue through early spring 2026, with a typical nine-month testing process. At that point, the team will evaluate whether this treatment system is suitable for long-term implementation.

In response to questions from Mayor Bierce, Ms. Mueller confirmed that the system has been highly effective, with no detectable PFAS levels in the effluent water. She explained that the system uses resin-filled columns similar to those in water softeners, containing different layers of media. The first column removes iron, while the second captures PFAS. The PFAS stays trapped in the media, which must be replaced and disposed of at specialized facilities through incineration or landfilling.

Ms. Mueller also noted that the Village of Pewaukee had installed a temporary PFAS treatment plant on one of its contaminated wells, with an expected media lifespan of three years. For their own system, they plan to keep the treatment operations within the existing building footprint, requiring some excavation in the garage area to maintain the architectural character of the neighborhood.

### 5. Engineering Division

#### 5.1 Discussion and possible action regarding possible tree replanting within the City's right-of-way

Ms. Wagner provided information about tree replanting efforts within the City's right-of-way, explaining that this item was requested in response to ongoing tree removals without replacements. She referenced the 2022 tree inventory of city-owned properties, including parks and rights-of-way, which identified potential planting areas but may not have fully accounted for utility conflicts.

Ms. Wagner noted that the City has historically focused on removing hazardous trees to address liability concerns, with limited investment in tree maintenance or new plantings. She outlined several considerations for future street tree planning, including:

- Conflicts with existing utilities
- State laws permitting utilities to use the right-of-way

- Maintenance requirements such as pruning and leaf collection
- Clear zone requirements for roadway safety

She highlighted that some areas, such as Lindsay Road, could accommodate trees but may conflict with future trails or utility extension plans. Ms. Wagner recommended updating the City's tree ordinances, which are outdated and focus primarily on Dutch Elm disease, without addressing more current issues like the Emerald Ash Borer. She also emphasized the need for tree species diversity, noting the City currently has a high concentration of maple trees.

Ms. Wagner confirmed that current replanting efforts qualify the City for Tree City USA designation.

Mayor Bierce expressed support for tree planting, stating that while development over the past decades has led to significant tree loss, the City has a responsibility to the people who live here to maintain a healthy urban canopy. Alderman Wamser agreed and noted that staff would need proper education for tree care and maintenance.

Ms. Wagner suggested several options, including staff training, hiring a part-time position, or contracting with a consultant. In response to a question from Mr. Blackwood about requiring trees in new subdivisions, Ms. Wagner clarified that such requirements are currently left to the discretion of developers.

Budget considerations were discussed, with Ms. Wagner noting that no funding is currently in the 2026 budget, but allocations could be made later or funded through contingency resources.

**Motion was made and seconded (J. Wamser, M. Kreiter) to recommend to the Common Council the creation of a tree replanting policy.** Motion passed unanimously.

## 5.2 Discussion and possible action regarding changing fees charged for City-owned boat launches

Ms. Wagner provided an update on boat launch fees, noting that the city currently charges \$7 per launch and \$50 plus tax for a seasonal permit. She reported that the DNR recently updated its regulations, increasing the maximum allowable fees based on boat size.

Ms. Wagner recommended that the City charge the maximum allowable fees, as follows:

- \$13 per launch for boats under 20 feet (resident and non-resident)
- \$17 per launch for resident boats 20–26 feet
- \$25.50 per launch for non-resident boats 20–26 feet (150% of resident rate)
- Seasonal permits priced at 10 times the daily rate (\$130 for boats under 20 feet)

She noted that launch fee revenues have declined from approximately \$12,000 annually to around \$5,000, citing largely an increase in "phantom payments" where

empty envelopes are deposited in the payment box. The Sheriff reported the payment box now requires collection far less frequently than in previous years.

Ms. Wagner outlined plans to replace the launch in 2026 with a new concrete launch due to damage from heavy commercial use. The project will include extending the launch, replacing the piers, installing cameras to identify individuals responsible for damage, and implementing a digital payment system.

The committee discussed enforcement methods, and Ms. Wagner explained that license plate recognition cameras would be installed, allowing for automatic verification of payments. Enforcement at the Oak Street kayak launch would be more challenging since kayaks are not registered and that site has no parking area.

Mayor Bierce suggested extending the fee system to winter users to help offset costs. Ms. Wagner clarified that there is a separate section in the municipal code for winter recreation. The committee also discussed the possibility of implementing fees for the Oak Street kayak launch but acknowledged enforcement challenges.

**Motion was made and seconded by (J. Blackwood, M. Krieter) to forward the proposed boat launch fee adjustments to the Common Council.** Motion passed unanimously.

### 5.3 Discussion and possible action to create a policy for sidewalk installation, maintenance, and replacement for the City of Pewaukee

Ms. Wagner outlined the need for a formal sidewalk policy, explaining that as the City begins incorporating sidewalks into new subdivisions, it is important to establish clear and consistent guidelines. She provided an overview of policies from surrounding communities, noting that most place responsibility for snow removal and maintenance on adjacent property owners, with required snow clearing timeframes ranging from 12 to 84 hours. A few communities, such as Brookfield and Germantown, handle sidewalk maintenance directly. Ms. Wagner added that residents along Northview Road were previously told that the City would maintain that sidewalk, though policies could be updated with proper notice.

Mayor Bierce expressed support for assigning snow-clearing responsibility to property owners, and the committee agreed on a 72-hour timeframe following snowfall for sidewalks to be cleared.

The committee also discussed sidewalk installation and repair policies. Ms. Wagner proposed that in new developments, the developer would be responsible for installation costs, and neighborhoods requesting sidewalks in existing areas would be responsible for associated costs.

Mayor Bierce raised concerns about the need for public hearings for sidewalk repairs, suggesting a more streamlined process in which the City identifies necessary repairs and assesses the costs directly to property owners.

**Motion was made and seconded (M. Kreiter, J. Wamser) to forward a draft sidewalk policy to the Common Council.** Motion passed unanimously

6. Public Comment - Please limit your comments to two minutes. If further time for discussion is needed, please contact your District Alderperson prior to the meeting.

No public comments were received.

7. Adjournment

**Motion was made and seconded (M. Kreiter, J. Blackwood) to adjourn the meeting at 5:16 p.m.** Motion passed unanimously.

Respectfully Submitted

Magdelene Wagner  
Director of Public Works

DRAFT

## City of Pewaukee - New Agenda Item

### Agenda Language:

Presentation, discussion, and possible action on the Water Supply Service Area Study.

### Sub Item Agenda Language:

### Background Provided By:

Magdelene Wagner/Jane Mueller

### Background:

Over the last year, the Water Utility has been working on a Water Supply Service Area Plan which is reviewing the City's water supply for the community through 2075. This study is required by Wisconsin Department of Natural Resources (WDNR) under State Statute NR854 to be submitted by December 31, 2025 for their review. The Committee has reviewed 2 technical memos related to this study over the last several months.

Staff have also held two public information meetings which each had approximately 25-30 attendees.

The consultant, Strand Associates, has provided the draft slides which will be presented to the Committee at the meeting. A public hearing, which will be held at the Common Council meeting on December 15, 2025, will follow as required by the statute. The report will then be filed with the WDNR. This is the first step in a larger study for the City on supply alternatives. Our study will continue as we refine the alternatives in 2026 based on the guidance/direction we receive from the Committee and the Council.

### Fiscal Impact:

### Recommended Motion:

Recommend approval of the service area plan recommended alternative to Common Council.

# Water Supply Service Area Plan

City of Pewaukee Public Works Committee

December 10, 2025





## Water Supply Service Area Plan (WSSAP) Addresses WDNR Requirements and City's Long-Term Concerns

- WDNR requirement: service population >10,000
- City's concerns
  - PFAS regulations impact shallow wells
  - Radionuclides impact deep aquifer wells
  - Limited land available for new wells
  - New water quality regulations every 20-25 years
- Understand viability of switching to Lake Michigan source now, before investing millions of dollars in the groundwater system

# Strand Associates, Inc.® Overview

- Founded in Wisconsin in 1946
- 12 offices nationwide
- National experts are local
- Depth of similar water supply projects
- Team overview



## Project Manager

Mike J. Forslund, P.E.

2025 Fuller Award Winner  
– the highest water industry  
award in the state



## Senior Project Engineer

Ben W. Wood, P.E.

Awards for individual and project  
achievements, locally and nationally

“**Dedicated** to Helping  
our Clients **Succeed** Through  
**Excellence** in Engineering”

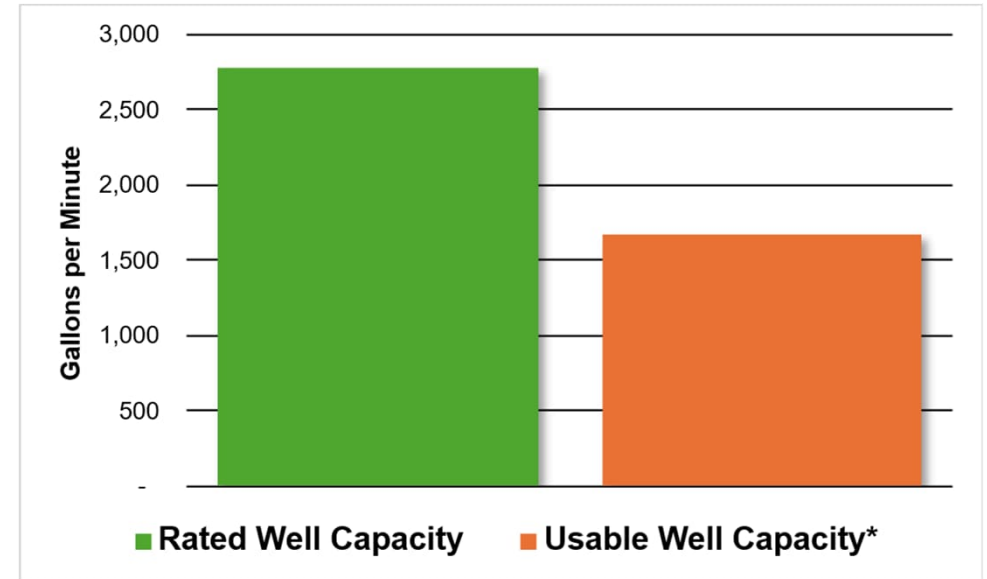
RANKED **17<sup>th</sup>**  
IN THE  
**MIDWEST**  
**TOP DESIGN FIRM** 2025  
by Engineering News-Record Midwest

# Today's Agenda

- Groundwater Regulations
- Alternatives Overview
  - Groundwater
  - Local surface water bodies
  - Lake Michigan via Waukesha
- Public Information Meetings' Influence on Alternatives
- Evaluation of Viable Alternatives
  - Non-monetary
  - 50-year life cycle cost
- Summary of Study Findings
- Decisions Needed

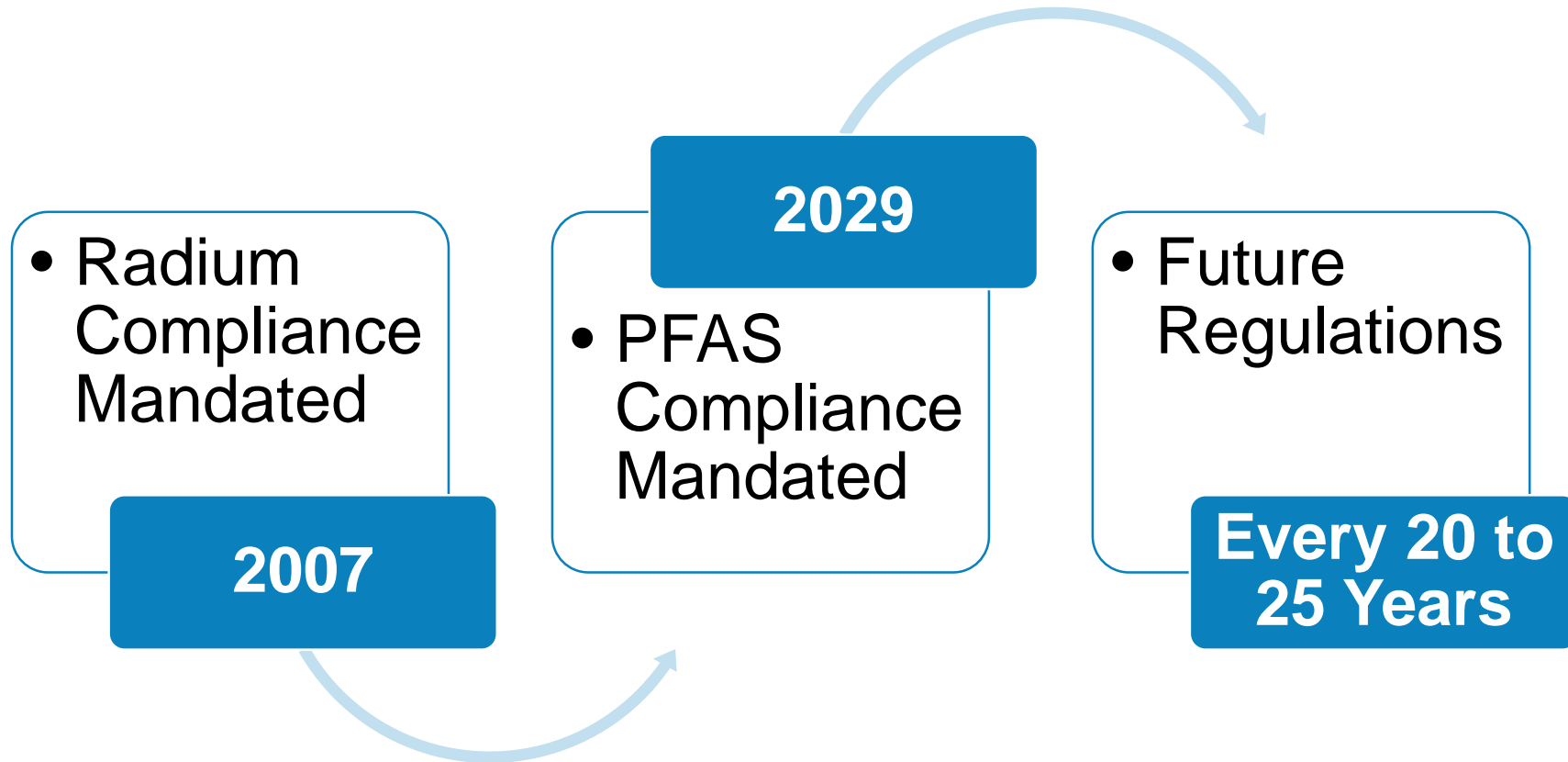
# Groundwater Regulations Are Impacting Usable Well Capacity

- Existing system capacity is reduced due to water quality concerns
  - 3 shallow wells over the limit for PFAS (must comply by 2029)
  - 1 well under order to be abandoned due to radionuclides
- Current and future drinking water regulations will require new treatment infrastructure in the near-term and long-term



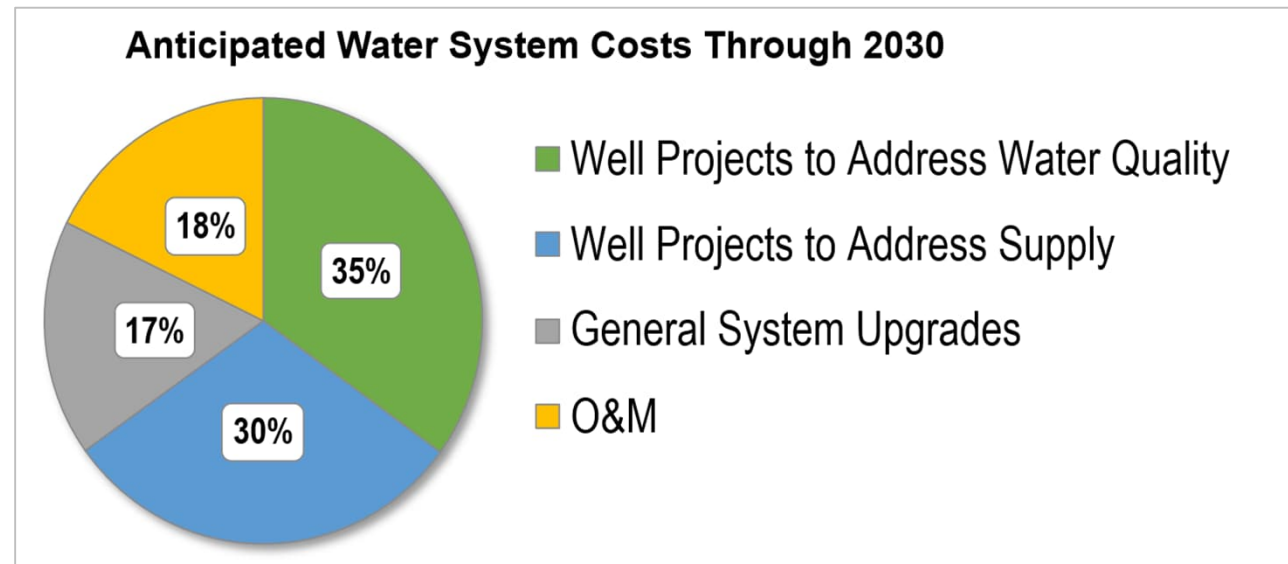
**\*Approximately 40 percent of current well capacity will become unusable without significant investment in new treatment infrastructure**

# New Water Quality Concerns Will Not End with PFAS

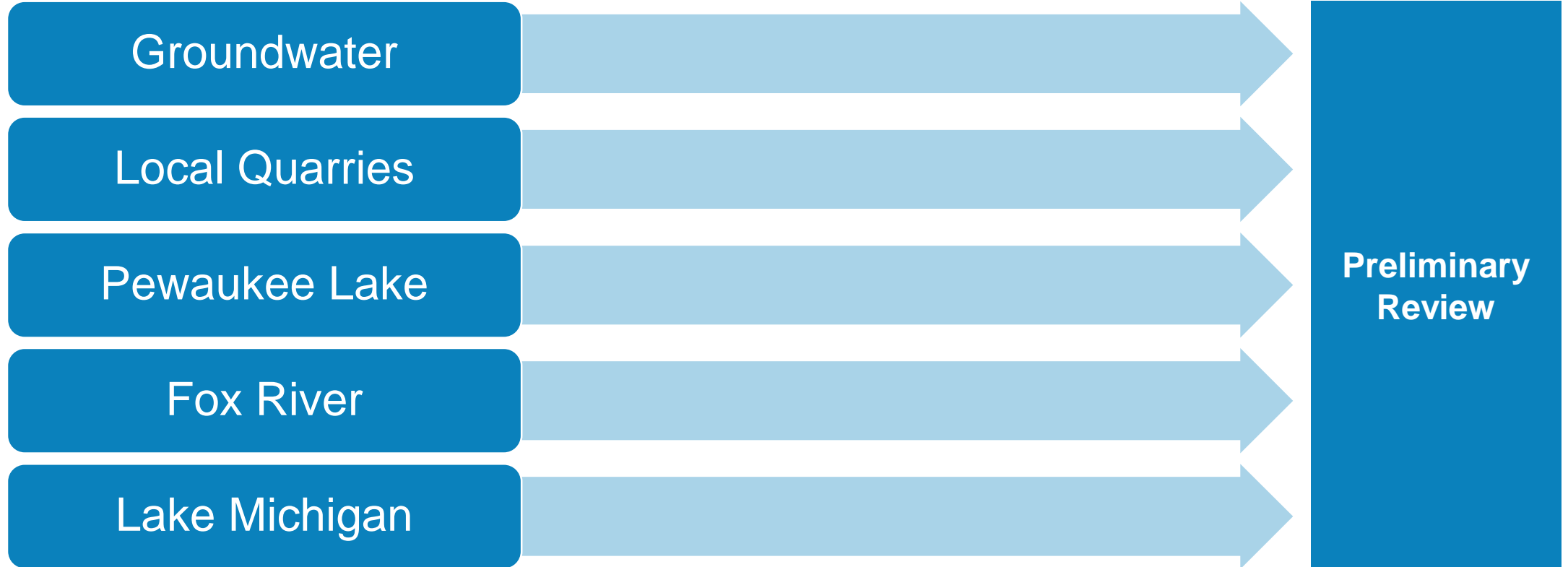


# Significant Looming Costs Necessitate Study of Water Supply Alternatives

- Over \$50 million needed to address water quality and quantity in the next 5 years
  - Includes advanced treatment and new wells
  - 65% of total anticipated water utility costs incurred

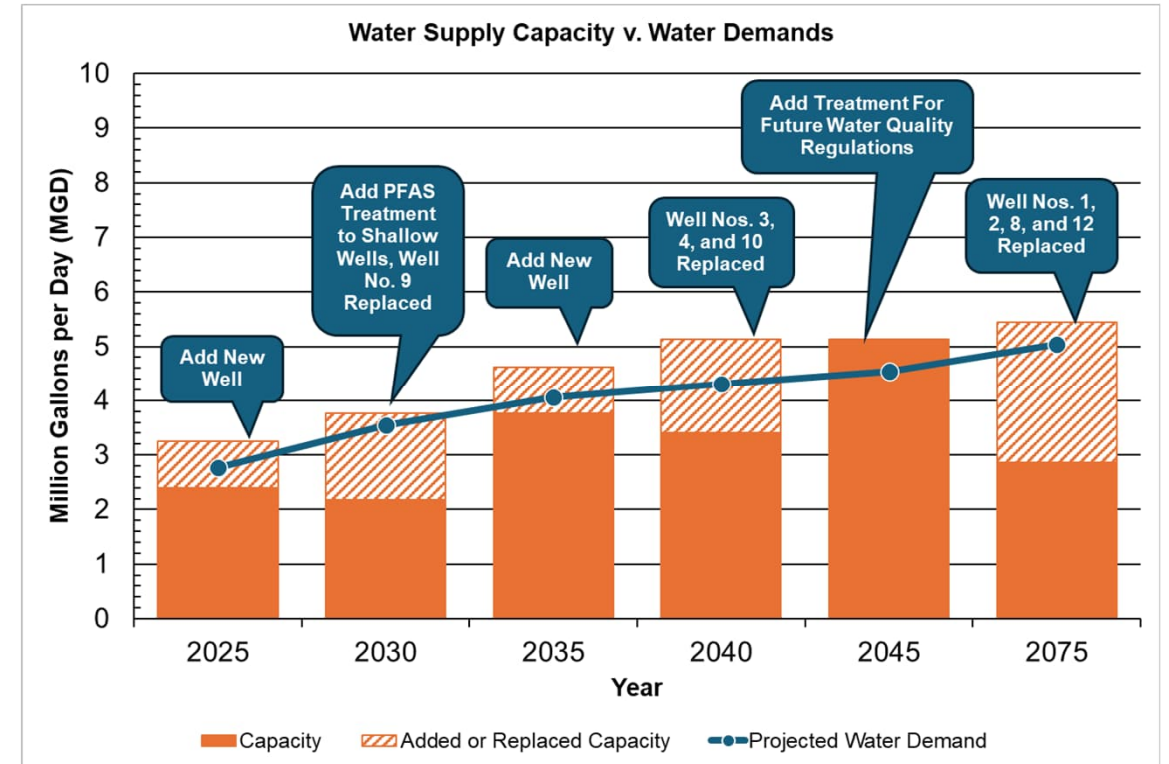


# Options to Address Water Quality and Capacity Concerns: New Treatment or New Water Source



# Continued Use of Local Groundwater Supply

- Add capacity and treatment as needed
- Infrastructure needed
  - 8 new wells, **pending adequate space**
  - Added PFAS treatment now
  - New future advanced treatment



# Local Surface Water Supply

- Local Quarries
  - Primary reasons not considered feasible:
    - Potential adverse affects on the Fox River
    - Concerns regarding source water ownership
    - Similar PFAS contamination concerns as shallow aquifer well supply
- Fox River
  - Primary reasons not considered feasible:
    - Potential adverse affect to the Fox River
    - Supply significantly affected by drought
- Pewaukee Lake
  - Primary reasons not considered feasible:
    - Current recreational water
    - Potential adverse affects on minimum lake level
    - Supply subject to seasonal fluctuations

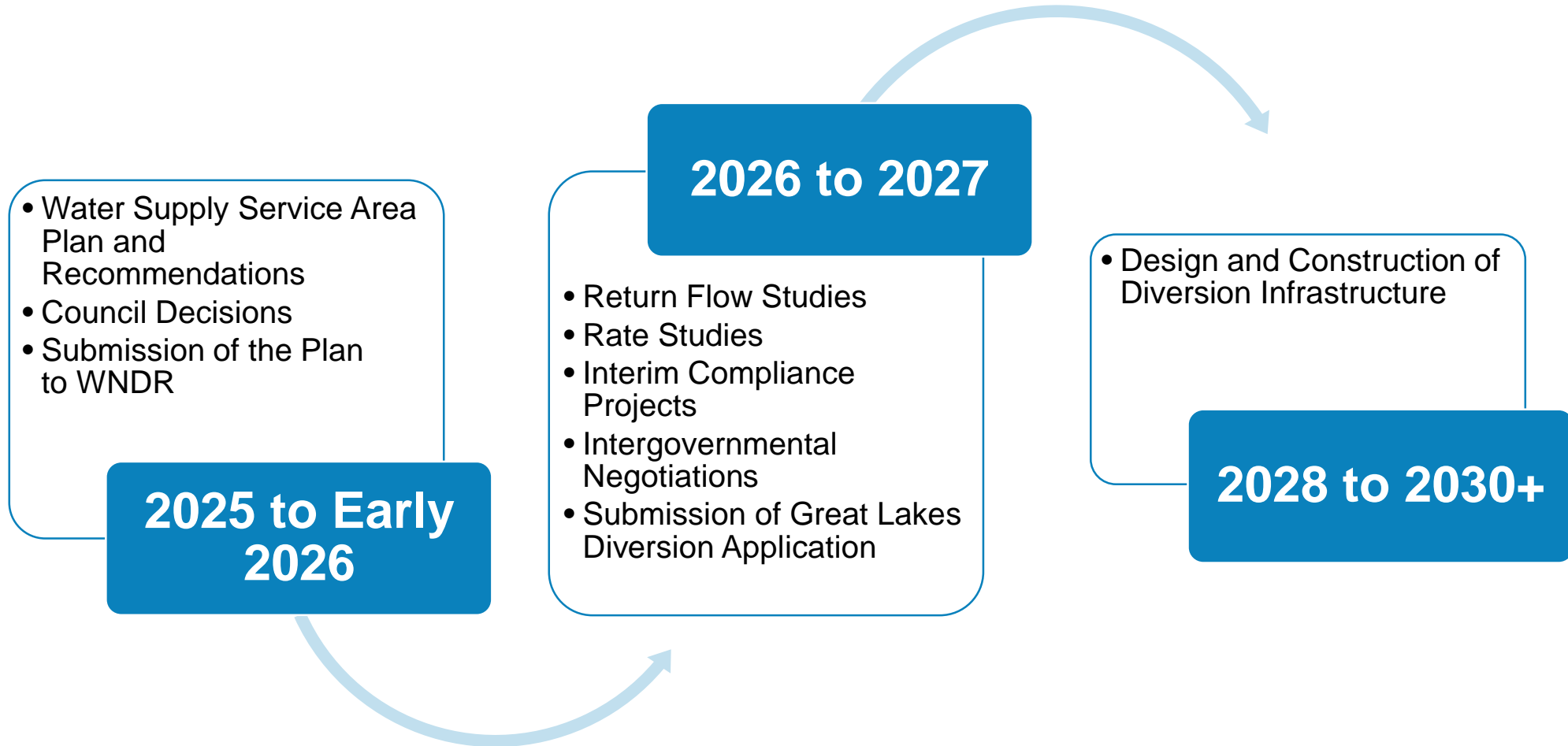


# Lake Michigan Supply via Great Lakes Diversion

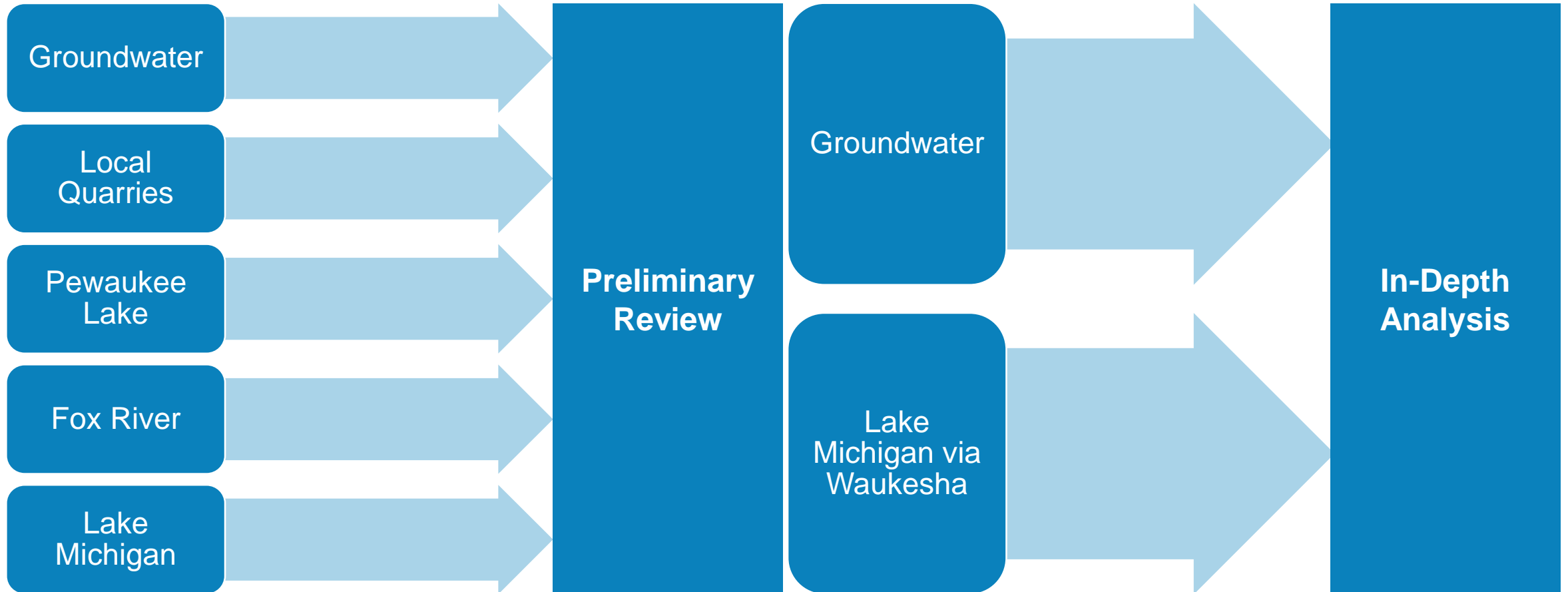
- Purchase from Waukesha Water Utility
- Infrastructure needed
  - PFAS interim compliance until a Diversion can be achieved
  - 1 pump station and 2 metering stations
  - Additional water storage
  - Various water main improvements



# Anticipated Steps to Pursue a Great Lakes Diversion



# Water Supply Alternatives After Preliminary Review



## Public Participation and Public Comments



PIM No. 1, April 30, 2025: Definition of the Problem Statement



PIM No. 2, October 22, 2025: Water Source Supply Options and Preliminary Findings

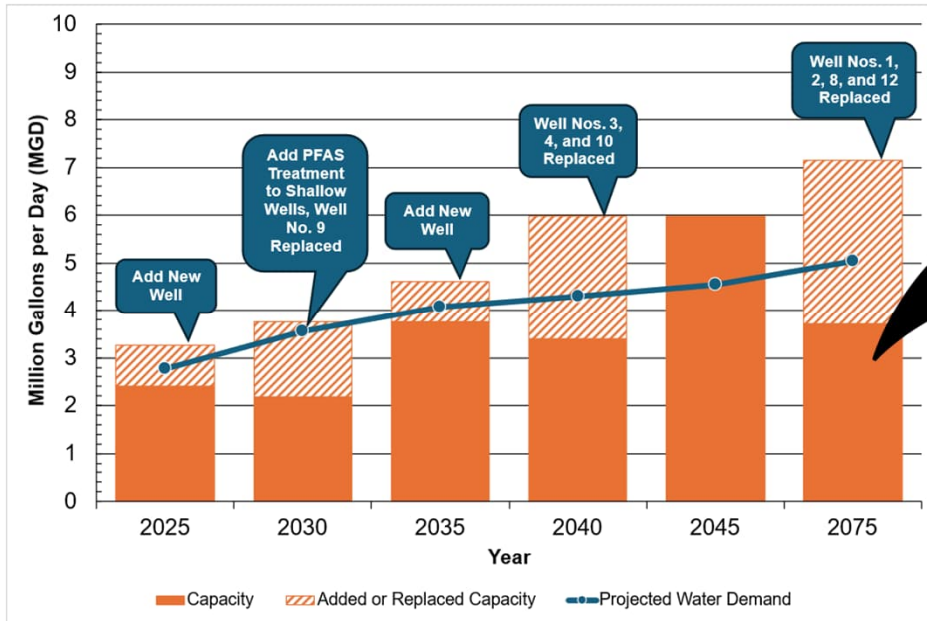


Public Hearing

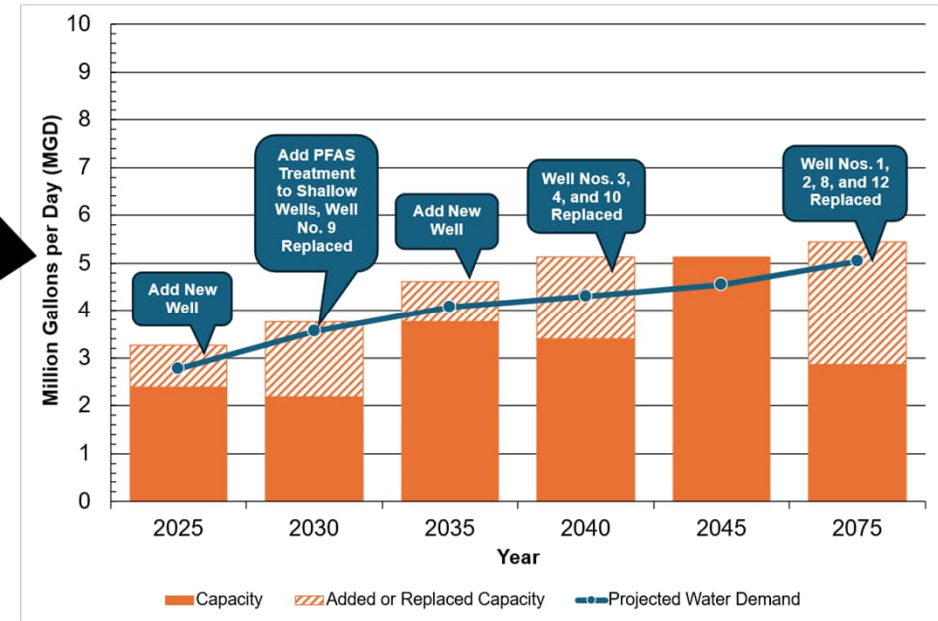
**Public Information Meetings  
No. 1 and 2 allowed us to  
gather valuable comments**

# Comment: Number of Wells Proposed During the Planning Period

Previously:  
Replacing wells 1:1 resulted in over-capacity

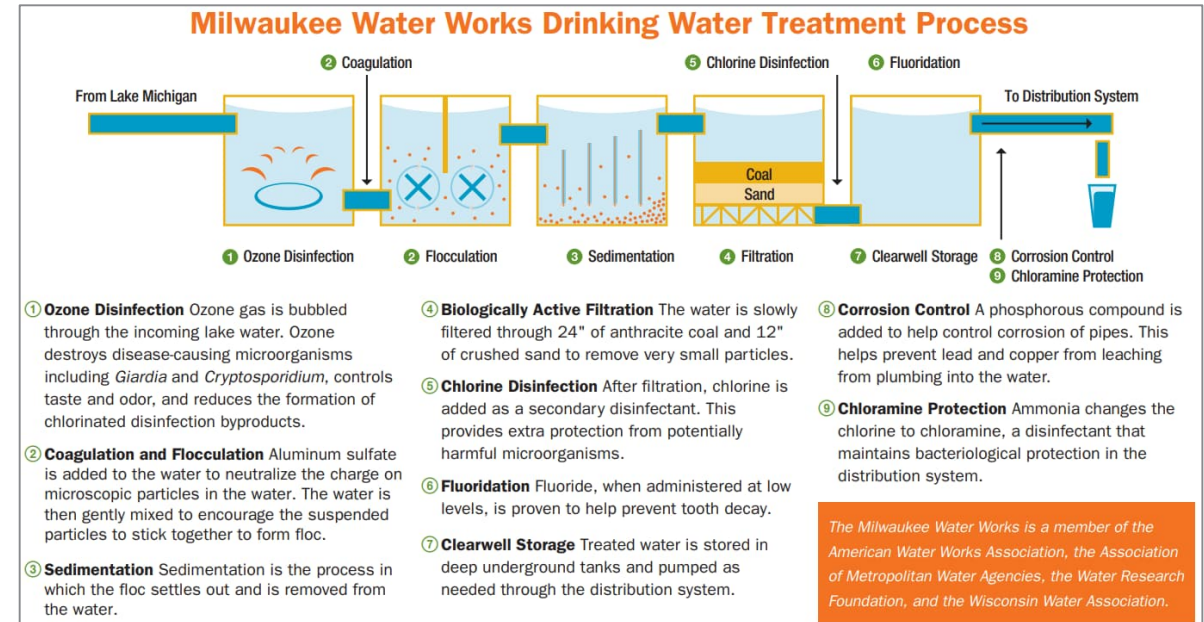


Revision:  
Reduced number of new wells from 10 to 8



# Comment: Milwaukee Water Works (MWW) Water Quality

- Major upgrades by MWW since 1993
  - Over \$500 Million in system improvements and increased testing to protect public health
- Upgrades installed between 1994 and 1998
  - Continuous turbidity screening
  - Intake extension by 4,200 feet
  - New deeper filters
  - Ozone disinfection
- No bacteria or pathogens detected in treated water in 25+ years
- MWW currently serves nearly 867,000 people in 16 communities across Milwaukee, Ozaukee, and Waukesha Counties



# Comment: Utility Control and Supplier-Purchaser Structure if Lake Michigan Water is Purchased

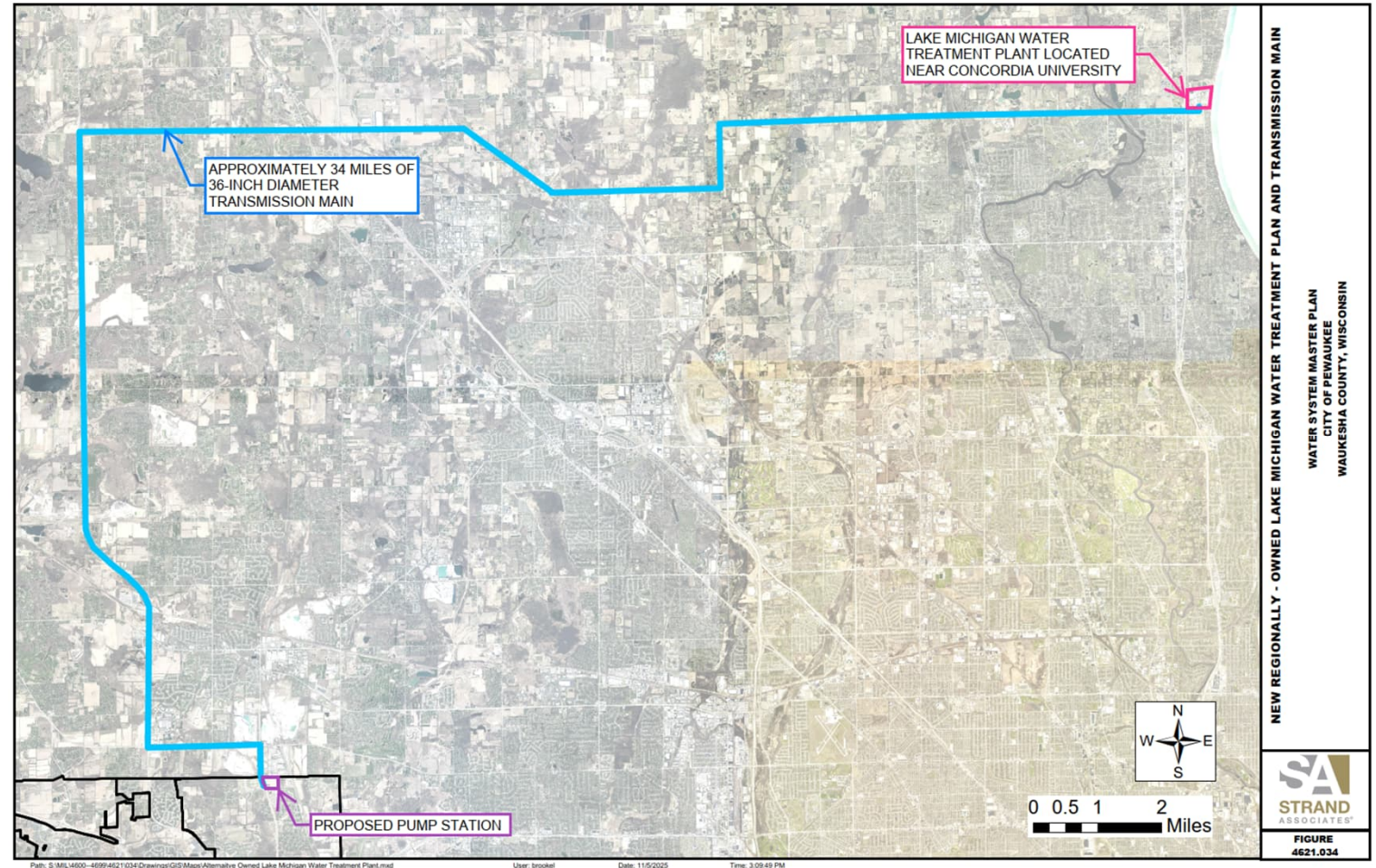
- Rates are determined by the Public Service Commission (PSC)
  - Based on the actual production and distribution costs
- PSC reviews that you pay your fair share
  - Audited annually
- PSC approval is required before rate changes and major projects
- Pewaukee's current usage = 1.4% of the water MWW distributes
  - Cost for treatment would be distributed proportionally



**PSC Mission Statement:** *“The Public Service Commission of Wisconsin (PSC) ensures safe, reliable, affordable, and environmentally responsible utility services and equitable access to telecommunications and broadband services.”*

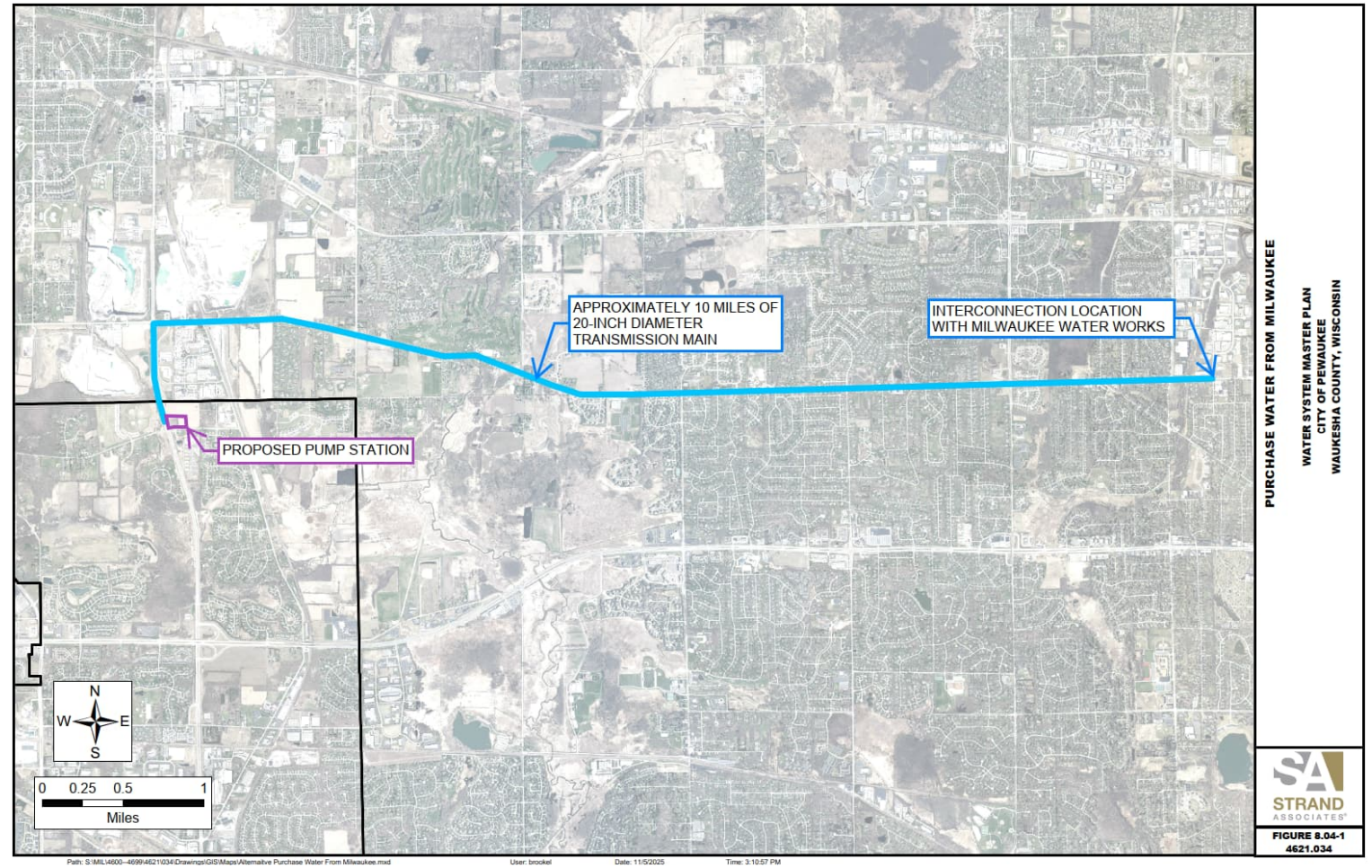
# Comment: Explore Option For New Water Treatment Plant and Regional Joint Water Authority

- Total opinion of probable construction cost (in 2025 USD): **\$916 Million**
- Primary reasons not considered feasible:
  - Complexity of intergovernmental negotiations
  - Not conducive to desired timeline
  - Cost prohibitive



# Comment: Explore Option to Purchase Lake Michigan Supply from Milwaukee Water Works

- Connect at western end of Milwaukee Water Works' system (Lisbon Road)
- Emergency interconnect with Waukesha



## Comment: Interim Compliance Plan (Projects) if Lake Water is Pursued

- Interim Compliance Plan will require agency coordination
- Anticipated interim compliance projects:
  - Temporary PFAS Treatment at Well No. 8
  - Drill Well No. 13
- Well Nos. 8 and 13 (Still River Facility) can be used as emergency supply if a Diversion is pursued



# Financial Evaluation of Viable Alternatives

- 50-Year life cycle costs were developed for the three viable alternatives:
  - Groundwater supply
  - Lake Michigan supply via Waukesha
  - Lake Michigan via Milwaukee

# Assumptions – Opinions of Probable Construction Costs (OPCCs)

Alternative	Groundwater	Purchase from Waukesha	Purchase from Milwaukee
<b>Capital Improvements</b>			
Annual Inflation Rate	3.0%	3.0%	3.0%
<b>Cost Opinion Variables</b>			
Technical Services	18%	18%	18%
Construction Contingency	30%	30%	30%
Capital Interest Rate	5%	5%	5%
Capital Payback Period	20 years	30 years	30 years

*Note: OPCC's for this study are defined as Class 5 estimates based on the American Association of Cost Engineers (AACE) Cost Estimate Classification system – Practice No. 56R-08 - As Applied in Engineering, Procurement, and Construction for the Building and General Construction Industries. The accuracy of the cost estimates increases as project definition becomes more clear. With the current level of project definition ranging between 0 to 2 percent the cost estimate accuracy would be Class 5 with a Low Range of -20% to -30% and High Range of +30% to +50%. The range is provided so the PM and team leads can choose the percentage that is most applicable to their project.*

# Assumptions – Operational and Maintenance (O&M) Costs

Alternative	Groundwater	Purchase from Waukesha	Purchase from Milwaukee
<b>O&amp;M Costs</b>			
Anticipated <b>Percent Change</b> from Existing O&M per gallons pumped	0%	0%	0%
O&M Annual Escalation Rate	3%	3%	3%

# Assumptions – Wholesale Purchase Rates

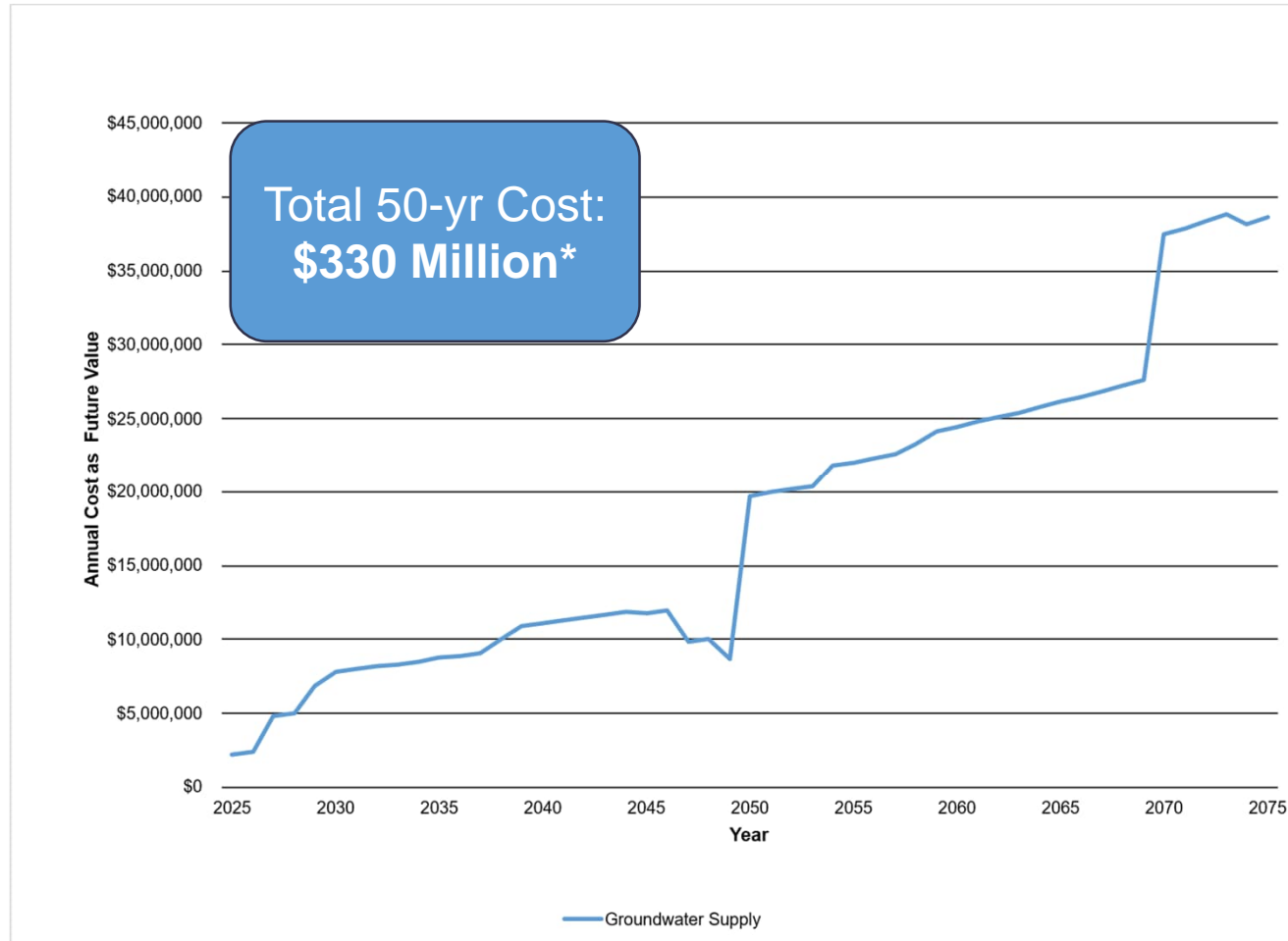
Alternative	Groundwater	Purchase from Waukesha	Purchase from Milwaukee
<b>Water Purchase Rates</b>			
Estimated Wholesale Purchase Rate* (\$/kgal)	N/A	\$5.83	\$1.62
Wholesale Annual Escalation Rate	N/A	2.0%	2.0%

*\*Note: Wholesale purchase rates used in this study are estimates. Estimated purchase rate from Waukesha was provided by Waukesha Water Utility Water on October 24, 2025. Actual rates are established by the Public Service Commission of Wisconsin (PSCW). No rate studies have been conducted as a part of this evaluation.*

# Assumptions – Unit Costs

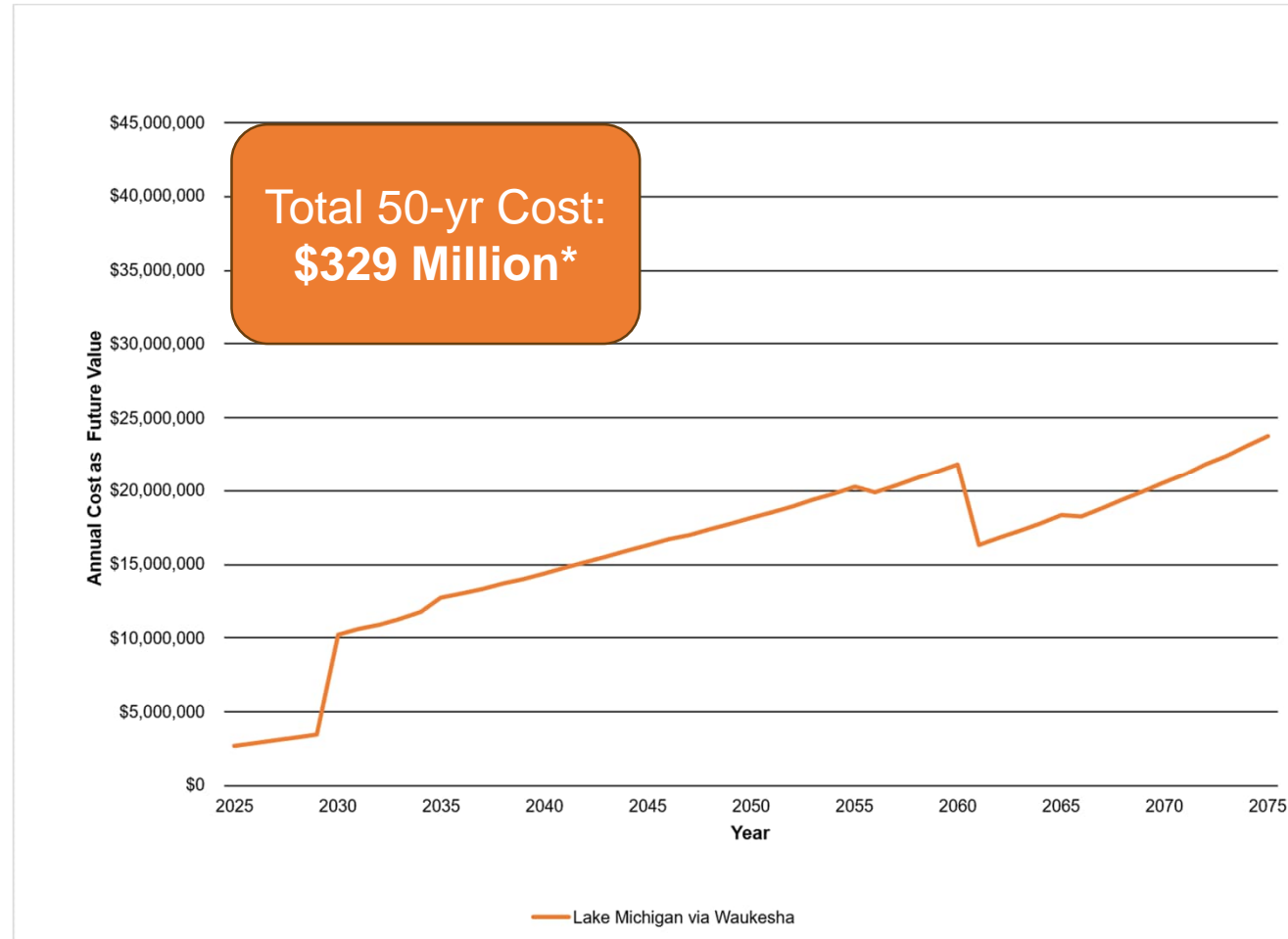
Type	Unit Cost
<b>Water Main</b>	
12-in PVC, Open Trench, Full Road Reconstruction	\$425 /LF
16-in PVC, Open Trench, Full Road Reconstruction	\$475 /LF
20-in Di, Open Trench, Full Road Reconstruction	\$1,200 /LF
<b>Deep Aquifer Wells</b>	
0.5 MGD Well With Advanced Treatment	\$5,300,000
<b>Interconnect Stations</b>	
Booster Pump Station	\$7,400,000
Secondary Metering/PRV Station, Above Ground	\$1,000,000
<b>Storage</b>	
4.3 MG Standpipe	\$4,700,000
1.0 MG Water Tower	\$4,000,000

# 50-Year Life Cycle Costs, Groundwater Supply



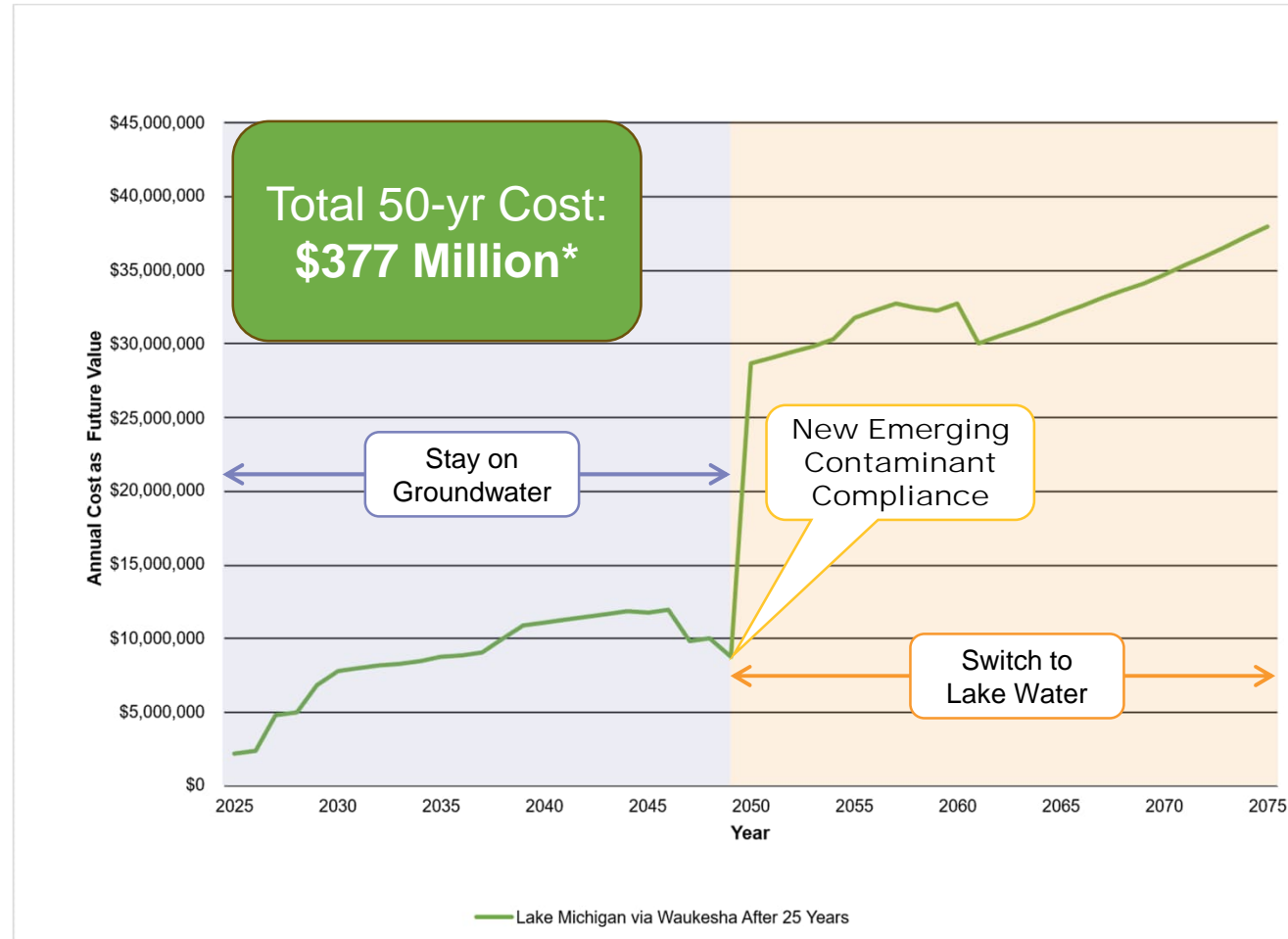
*\*Presented in 2025 Dollars*

# 50-Year Life Cycle Costs, Lake Michigan Supply via Waukesha



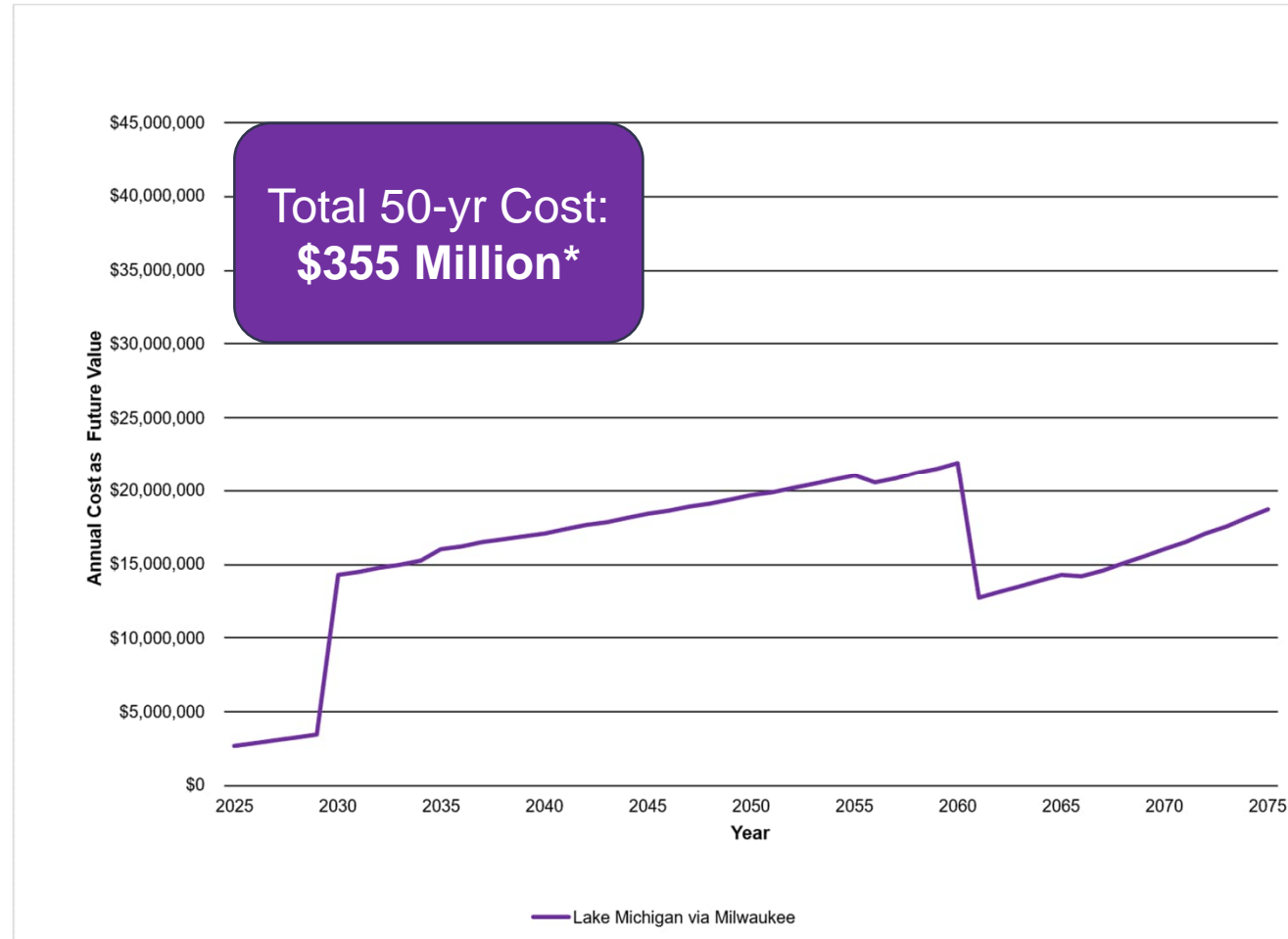
*\*Presented in 2025 Dollars*

# 50-Year Life Cycle Costs, Lake Michigan Supply via Waukesha in 25 Years



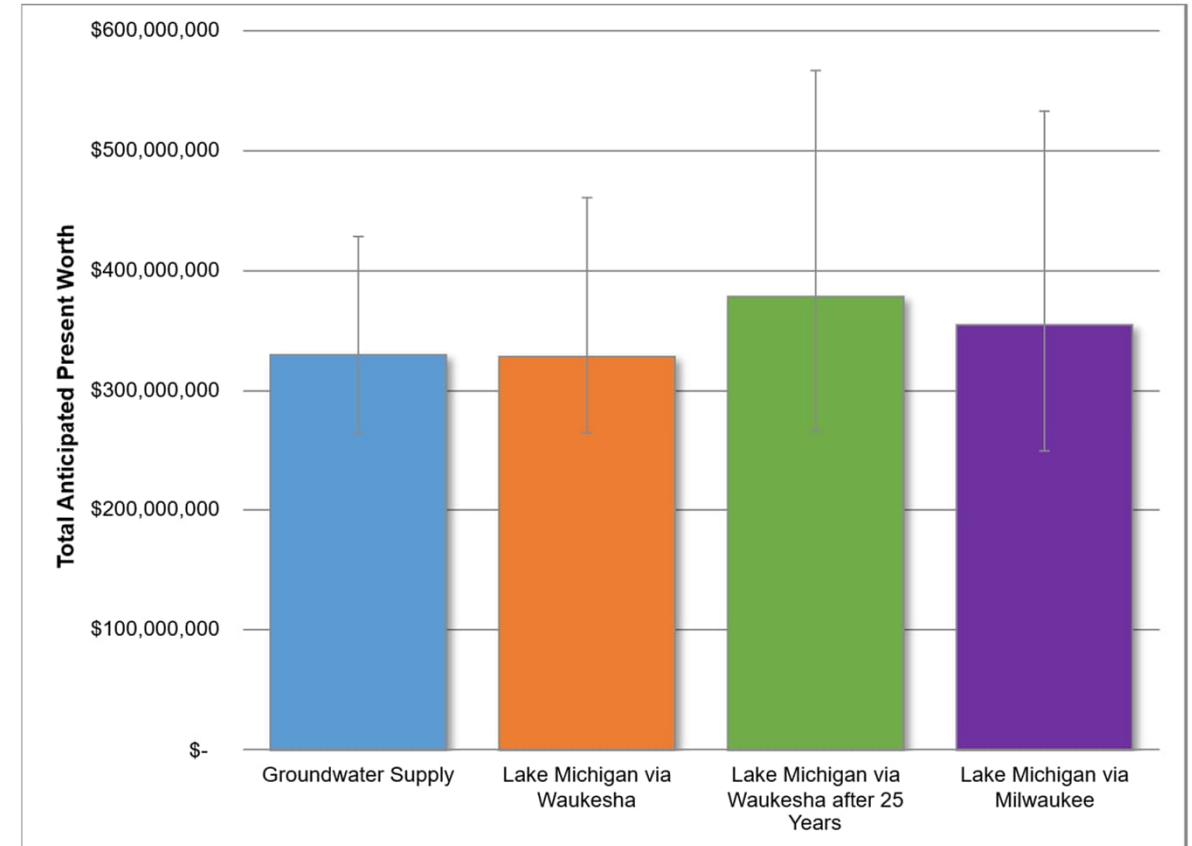
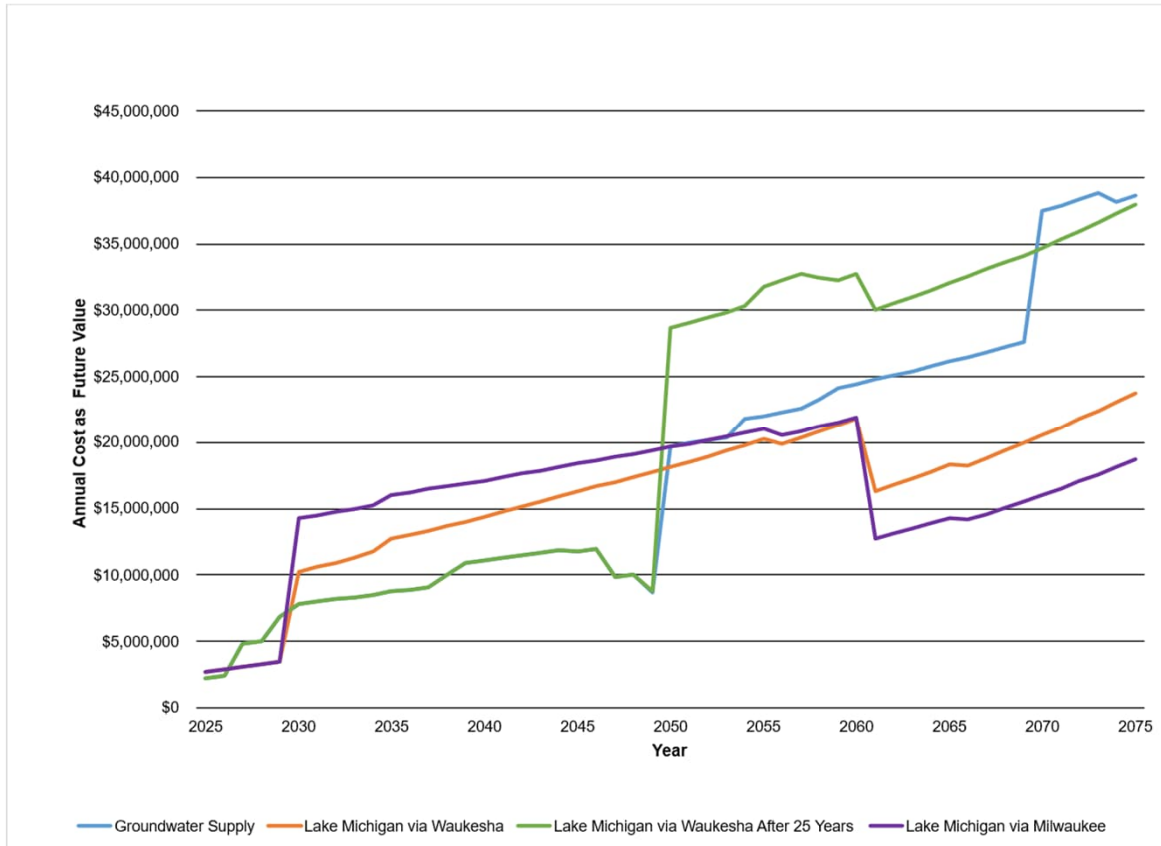
*\*Presented in 2025 Dollars*

# 50-Year Life Cycle Costs, Lake Michigan Supply via Milwaukee (Lisbon Rd.)



*\*Presented in 2025 Dollars*

# Summary of 50-Year Life Cycle Costs



# Non-Monetary Evaluation of Viable Alternatives

## Environmental Factors

Impact on Groundwater Resources and Aquifer Drawdown

Impact on Aquatic habitats

Criteria Weight: 15

## Long-Term Sustainability

Impacts from Drought

Utility Autonomy

Criteria Weight: 30

## Public Health Factors

Resiliency Against Emerging Contaminants

Treatment Required to Meet Primary and Secondary Drinking Water Standards

Criteria Weight: 30

## Implementability

Operational Complexity

Construction Complexity

Land Acquisition

Agency and Intergovernmental Coordination

Criteria Weight: 25

## Environmental Factors, Criteria Weight: 15

Alternative	Reasoning	Criteria Rating
Groundwater Supply	<ul style="list-style-type: none"><li>• Some risk of aquifer drawdown</li><li>• Some impact to wetlands and water bodies due to aquifer drawdown</li></ul>	<b>67%</b>
Lake Michigan Supply	<ul style="list-style-type: none"><li>• No risk of aquifer drawdown</li><li>• No anticipated adverse impacts on wetlands or water bodies</li></ul>	<b>100%</b>

# Long-Term Sustainability, Criteria Weight: 30

Alternative	Reasoning	Criteria Rating
Groundwater Supply	<ul style="list-style-type: none"><li>• Some supply impact from droughts</li><li>• City retains full autonomy of utility and utility assets</li></ul>	<b>80%</b>
Lake Michigan Supply	<ul style="list-style-type: none"><li>• No anticipated impacts from drought</li><li>• City retains some autonomy of utility and utility assets</li></ul>	<b>87%</b>

## Ability to Meet Public Health Requirements, Criteria Weight: 30

Alternative	Reasoning	Criteria Rating
Groundwater Supply	<ul style="list-style-type: none"><li>Existing treatment system is not resilient against emerging contaminants and requires significant improvements</li><li>Advanced treatment is required to meet drinking water standards</li></ul>	<b>33%</b>
Lake Michigan Supply	<ul style="list-style-type: none"><li>Existing treatment system is adequate to meet emerging contaminant concerns</li><li>Advanced treatment is required to meet drinking water standards</li></ul>	<b>62%</b>

# Implementability, Criteria Weight: 25

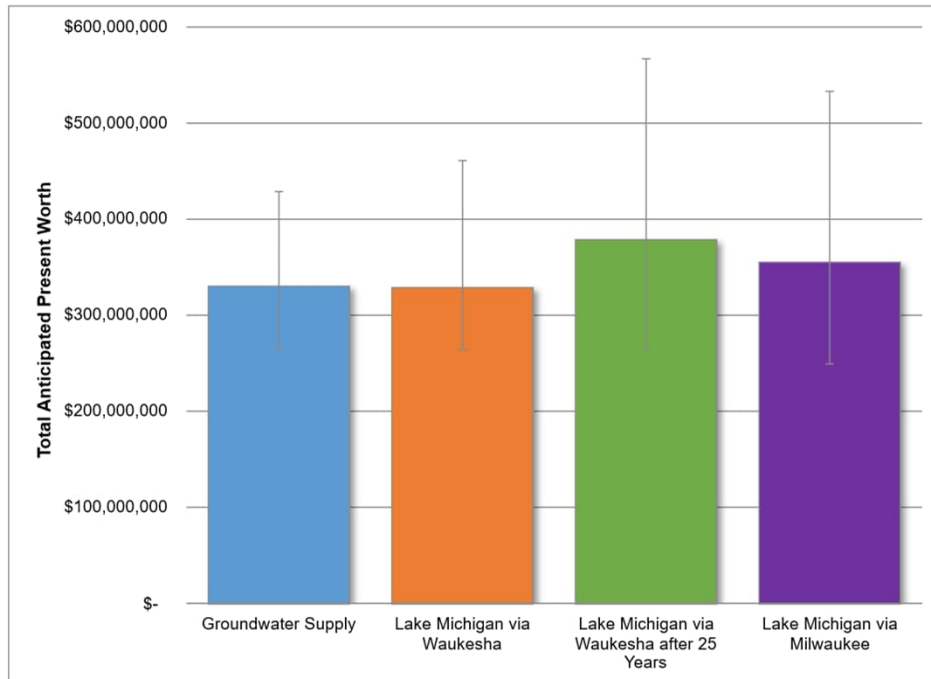
Alternative	Reasoning	Criteria Rating
Groundwater Supply	<ul style="list-style-type: none"> <li>• High number of facilities need to be operated with specialized treatment systems</li> <li>• Significant land acquisition is required, potentially outside of the existing municipal boundary</li> <li>• Local and state coordination required</li> </ul>	<b>43%</b>
Lake Michigan Supply	<ul style="list-style-type: none"> <li>• Minimal number of facilities need to be operated with minimal water treatment processes</li> <li>• Some land acquisition and construction required</li> <li>• Local, state, federal, and international coordination required</li> </ul>	<b>67%</b>

# Non-Monetary Evaluation Results

Criteria	Total Possible Score	Groundwater Supply Weighted Score	Lake Michigan Supply Weighted Score
Environmental Factors	15	<b>10</b>	<b>15</b>
Long-Term Sustainability	30	<b>24</b>	<b>26</b>
Public Health Factors	30	<b>10</b>	<b>19</b>
Implementability	25	<b>11</b>	<b>16</b>
<b>Total Score</b>	<b>100</b>	<b>55</b>	<b>76</b>

# Summary of Study Findings

- “Do nothing” is not an option
- There is no cheap alternative, but punting the decision into the future is the most expensive
- The recommendation comes down to non-monetary factors



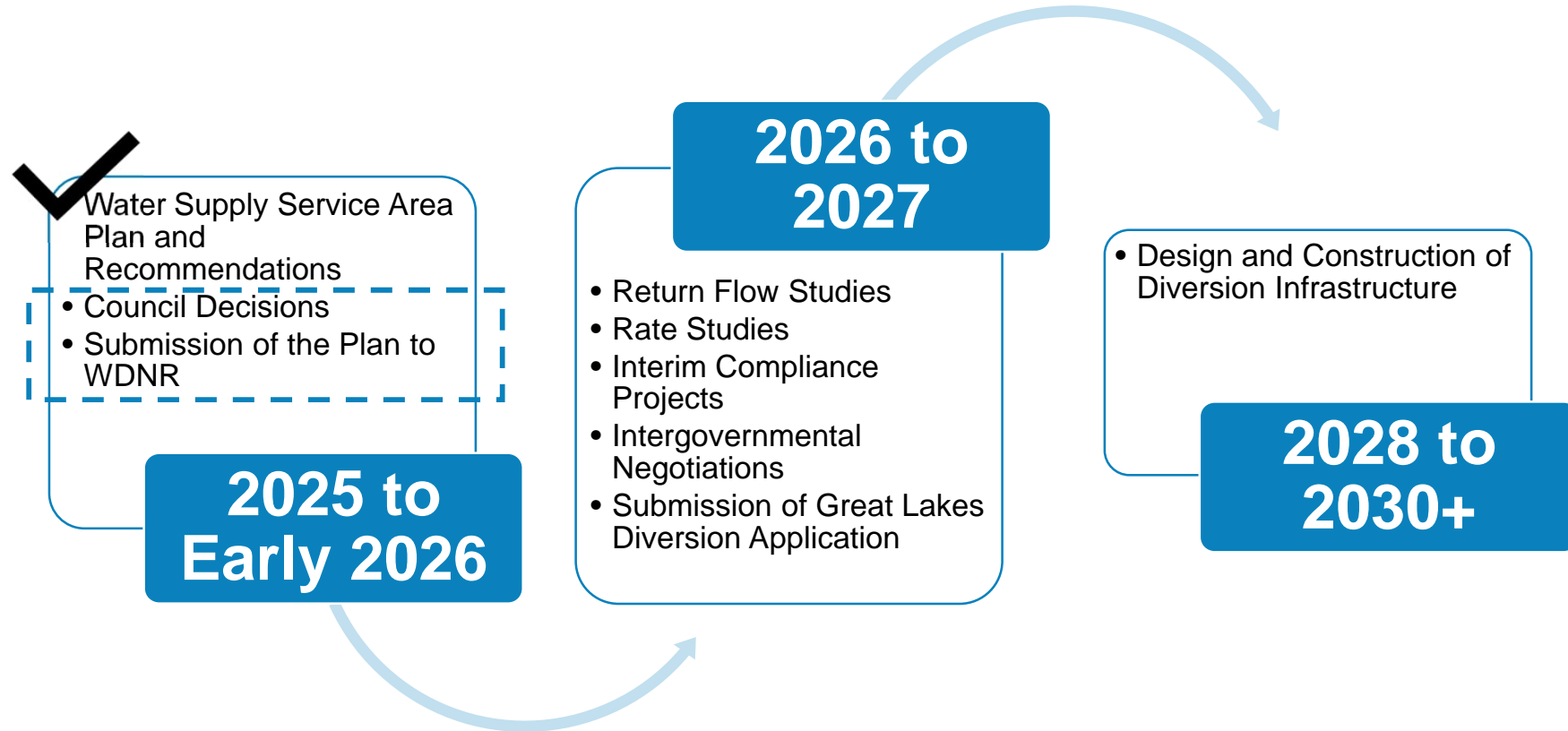
Groundwater Supply Non-Monetary Score	Lake Michigan Supply Non-Monetary Score
<b>55 / 100</b>	<b>76 / 100</b>



## What Now?

- WSSAP Public Hearing on December 15, 2025
- WSSAP Submission to WDNR by December 31, 2025
- A Great Lakes Diversion is a long process that requires local, state, federal, and international coordination – optimistically 5 years

# Looking Forward



# Direction Needed from City at this Time

- Interim compliance project engineering authorization
  - Still River PFAS Treatment (need to resume in January)
  - New Deep Aquifer Well to meet 5-yr demands (or explore interim capacity options)
- Additional study to explore concerns (2026)
  - Return flow impacts
  - Rate impacts
  - Supplier discussions
  - Water utility organization
  - Others

# Questions and Further Study

- What are your concerns?
- What information will help your decision making?



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