



# Waukesha Water Utility

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DAN DUCHNIAK, P.E., WWU GENERAL MANAGER



# Overview

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# Project Route

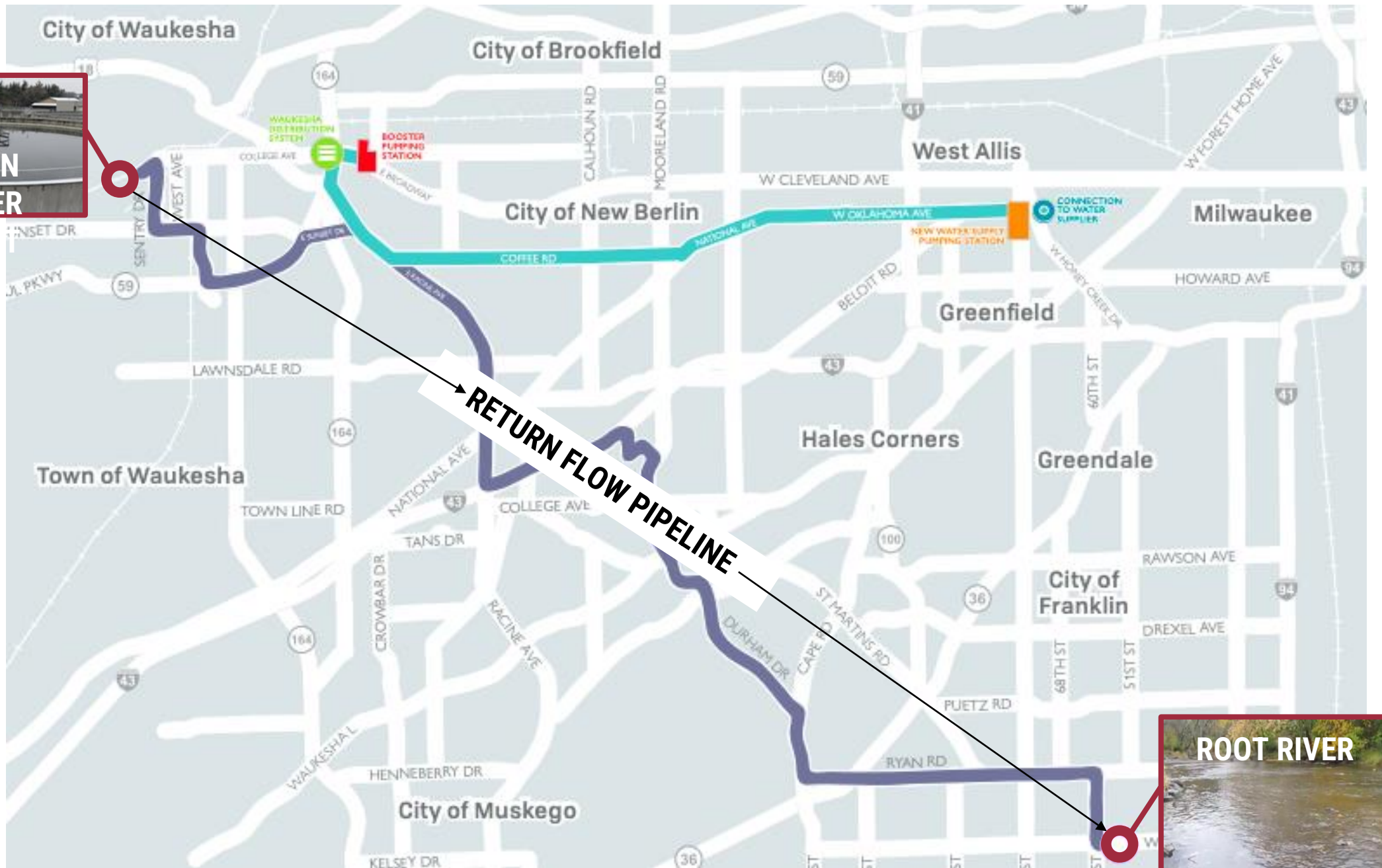
## WATER SUPPLY PIPELINE





# Project Route

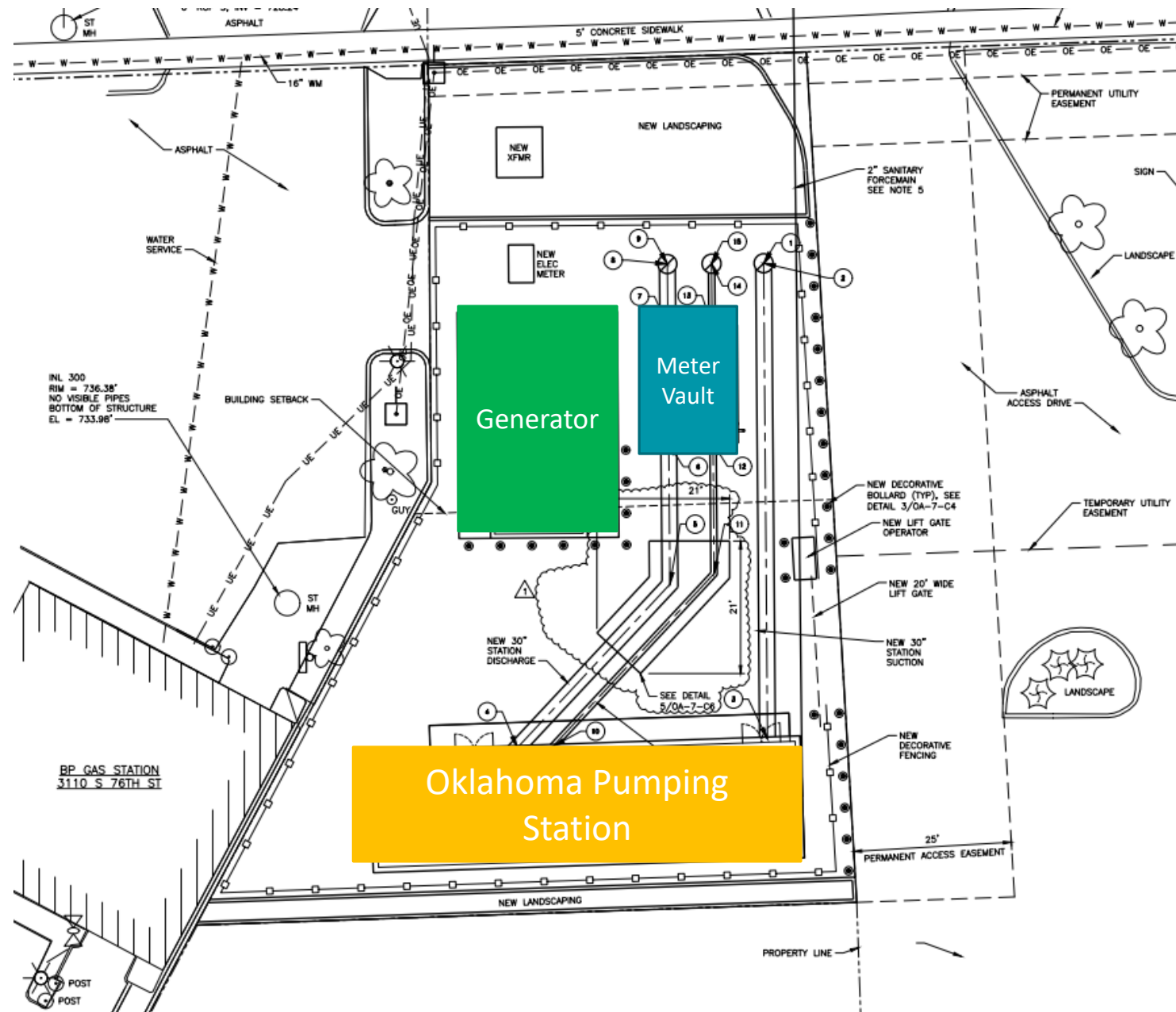
RETURN  
FLOW  
PIPELINE





# Milwaukee Booster Station

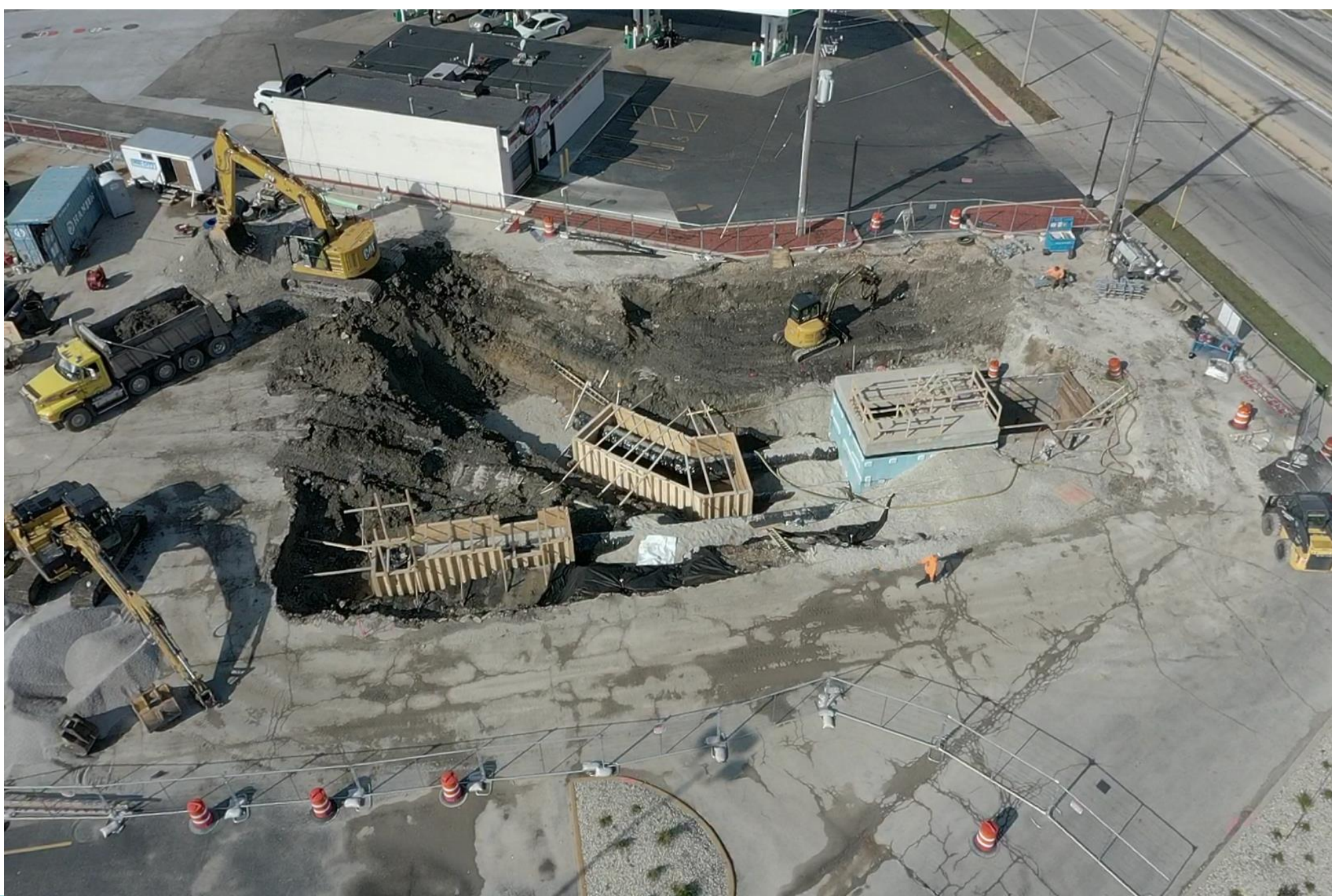
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# Pipeline Projects

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# Project Route

## WATER SUPPLY PIPELINE





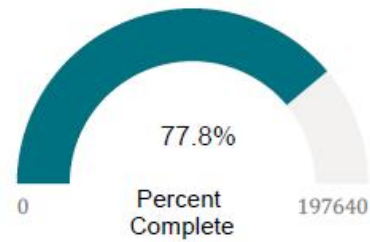
## PIPELINE PROGRESS

Multiple selections

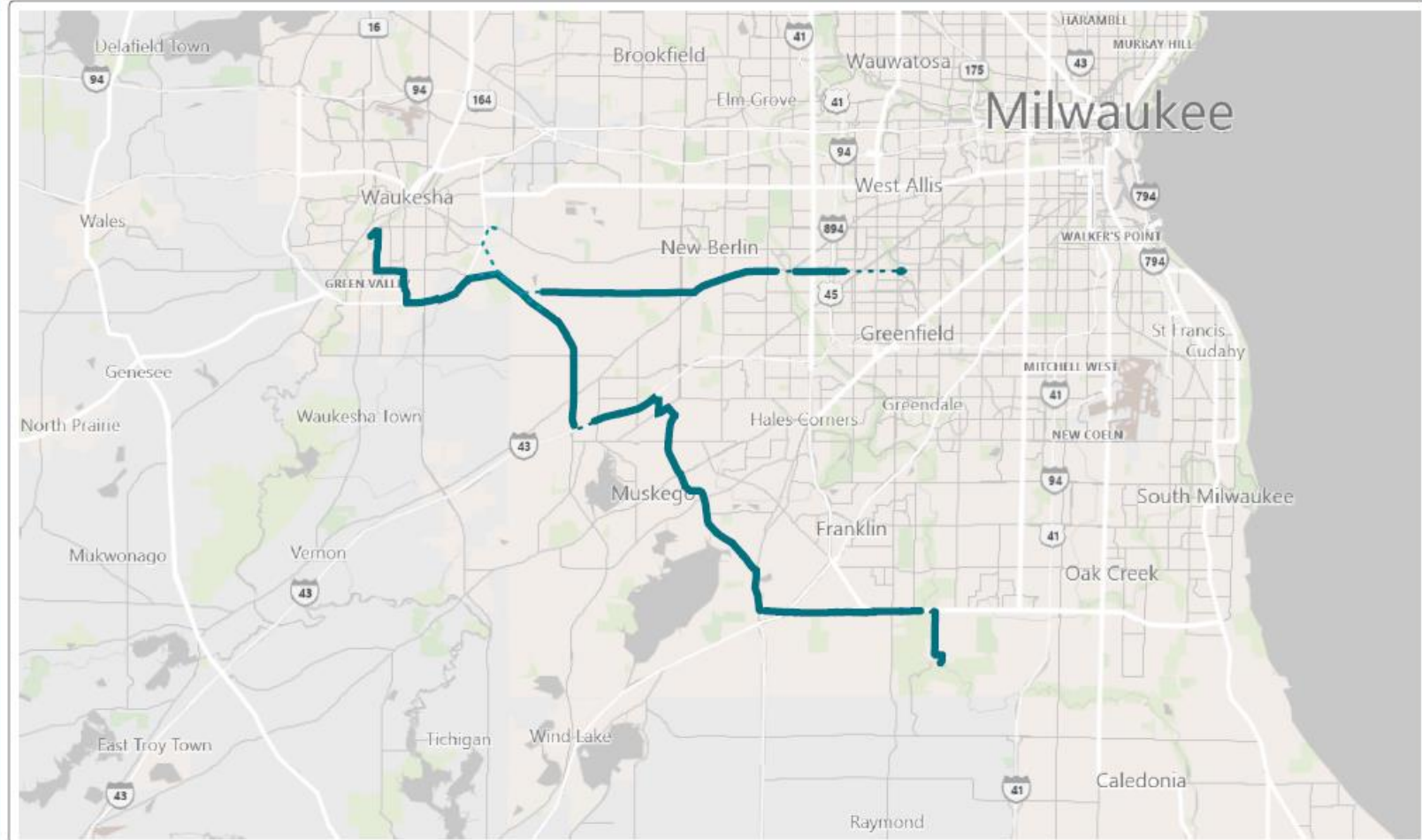


Data current through:

Weekly Report Ending  
Monday, October 03, 2022



153,741  
Pipe Progress (Linear Feet)



..... Pipeline Route

———— Pipe Installed

# Project Route

# Construction Progress





# Reservoirs and Booster Pumping Station

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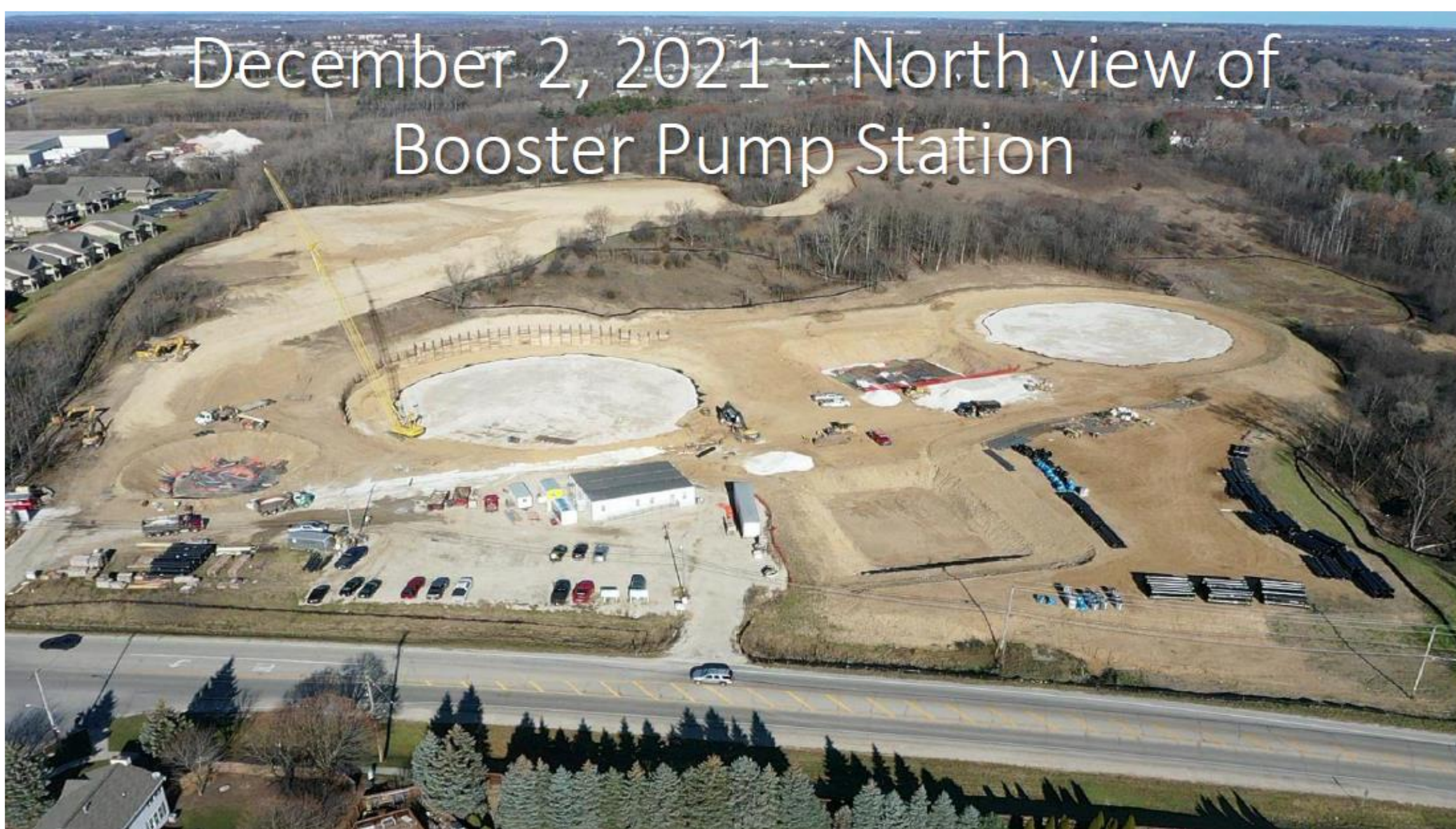
# July 27, 2021 – Clearing and Grubbing







# December 2, 2021 – North view of Booster Pump Station







August 2022







October 2022





# Return Flow Pump Station

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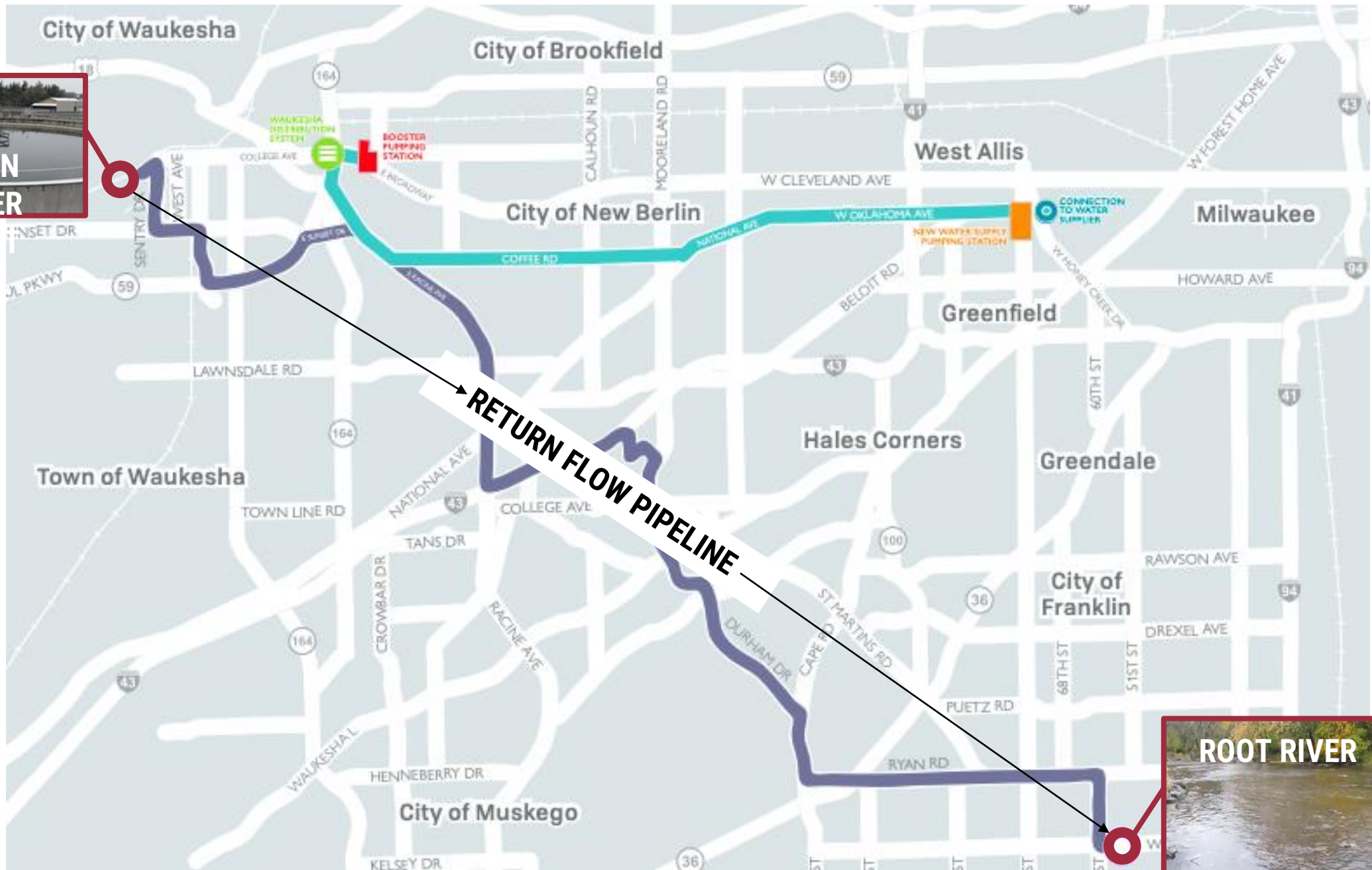
# Return Flow Pipeline

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# Project Route

RETURN  
FLOW  
PIPELINE





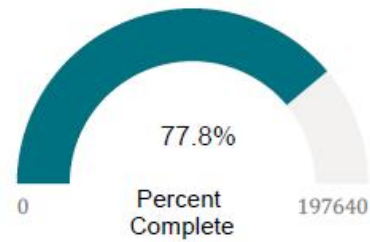
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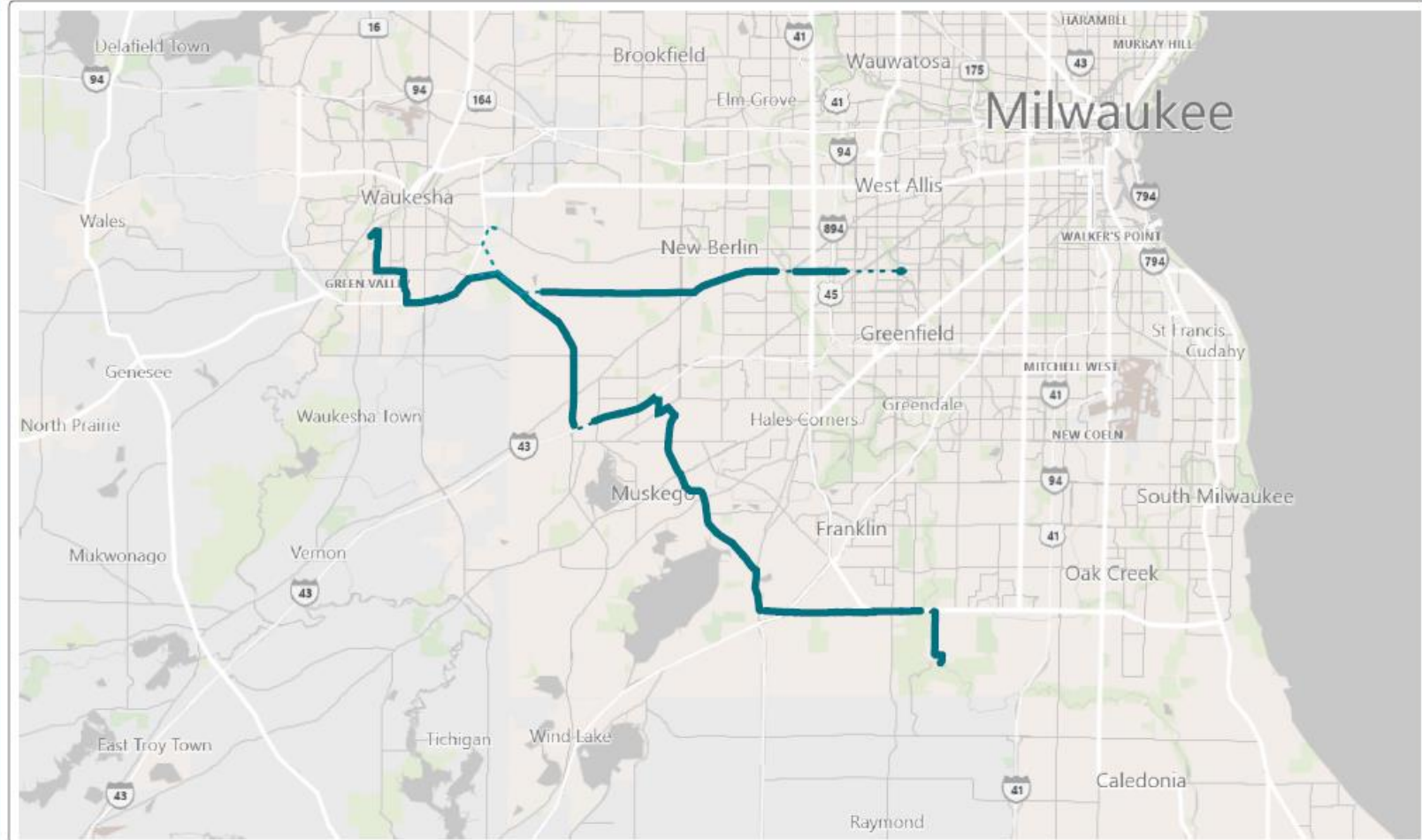


Data current through:

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Monday, October 03, 2022



153,741  
Pipe Progress (Linear Feet)



..... Pipeline Route

———— Pipe Installed

# Project Route

# Construction Progress





# Return Flow Discharge Station

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# Cost Projections

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# Cost Projections and Borrowing Terms

## Great Water Alliance Project

Water Supply Loans					
	Interest Rate	Loan Term	Loan Amount	Amount Borrowed	Balance
WIFIA Loan	1.160%	38 Years	\$ 137,100,000	\$ 70,811,889	\$ 66,288,111
Safe Drinking Water Loan - 2013	1.925%	20 Years	\$ 1,117,601	\$ 1,117,601	\$ -
Safe Drinking Water Loan - 2018	1.870%	20 Years	\$ 679,774	\$ 679,774	\$ -
Safe Drinking Water Loan - 2019B	1.980%	20 Years	\$ 8,863,261	\$ 8,863,261	\$ -
Safe Drinking Water Loan - 2019E	1.650%	20 Years	\$ 2,717,094	\$ 2,717,094	\$ -
			\$ 150,477,731	\$ 84,189,619	\$ 66,288,111
Grants					
					Grant Total
EPA Grant - Water Tower *				\$	530,000
Return Flow Loans					
	Interest Rate	Loan Term	Loan Amount	Amount Borrowed	Balance
Clean Water Loan 2020	1.931%	30 Years	\$ 55,549,871	\$ 55,549,871	\$ -
Clean Water Loan 2021	1.647%	30 Years	\$ 60,052,000	\$ 54,345,515	\$ 5,706,485
Clean Water Loan 2022 **	2.255%	30 Years	\$ 10,520,000	\$ 50,000	\$ 10,470,000
			\$ 126,121,871	\$ 109,945,386	\$ 16,176,485
Total Project Costs					
	Total Costs Incurred Through 9/30/2022	Costs Remaining - To Be Spent	Total Project Costs		
Water Supply	\$ 101,479,555	\$ 42,037,618	\$	143,517,173	
Return Flow	\$ 116,179,698	\$ 21,714,775	\$	137,894,473	
	\$ 217,659,253	\$ 63,752,393	\$	281,411,646	

\* Grant Funds Anticipated in 2023

\*\* Loan Closing October 26, 2022





# Issues Affecting Project Related Costs

1. Water Supplier changed from Oak Creek to Milwaukee
2. Booster Station Site moved from Minooka Park to Nike/Rempe Site
3. Pressure Reducing Station changed to Elevated Storage
4. Pandemic affected work schedule
5. Supply chain issues due to the Pandemic

Projections include increased Annual Operating and Maintenance Costs as well as Annual Main Replacements



# Water Rate Projections On Target

## 2016 Projections for Rates in 2027

2016 Projection: **Water** rates will triple to \$1200 per year by the end of the project (\$100 per month)

2022 Projection: Water and Return Flow rates will be \$1157 per year (\$96 per month) in 2027

## 2018 Projections for Rates in 2027

2018 Projection: Total water bills will be \$466 per quarter by the end of the project (\$155 per month).

2022 Projection: Total water bills will be \$1782 per year (\$149 per month) in 2027





Waukesha Water Utility / City of Waukesha  
Combined Utility Rate Projections  
2022 - 2027

Utility Billing Impact - Global View - Single Residential - October 2018						
	2022	2023	2024	2025	2026	2027
<u>Annual Billings</u>						
Return Flow	\$ 179	\$ 188	\$ 188	\$ 188	\$ 188	\$ 188
Water	455	523	627	753	903	949
Sewer	539	587	640	672	699	727
RF/Wtr/Swr	<u>\$ 1,172</u>	<u>\$ 1,298</u>	<u>\$ 1,455</u>	<u>\$ 1,612</u>	<u>\$ 1,790</u>	<u>\$ 1,863</u>
Monthly Average	<u>\$ 98</u>	<u>\$ 108</u>	<u>\$ 121</u>	<u>\$ 134</u>	<u>\$ 149</u>	<u>\$ 155</u>
Water Rate Increase %		15.0%	20.0%	20.0%	20.0%	5.0%
Overall Rate Increase %		10.7%	12.1%	10.8%	11.0%	4.1%



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<b>Water Rate Increase %</b>		<b>15.0%</b>	<b>20.0%</b>	<b>20.0%</b>	<b>20.0%</b>	<b>5.0%</b>
<b>Overall Rate Increase %</b>		<b>10.7%</b>	<b>12.1%</b>	<b>10.8%</b>	<b>11.0%</b>	<b>4.1%</b>

Utility Billing Impact - Global View - Single Residential - September 2022						
	2022	2023	2024	2025	2026	2027
<b>Annual Billings</b>						
Return Flow	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206
Water	429	429	601	842	951	951
Sewer	499	559	559	559	601	625
<b>RF/Wtr/Swr</b>	<b>\$ 1,134</b>	<b>\$ 1,194</b>	<b>\$ 1,366</b>	<b>\$ 1,607</b>	<b>\$ 1,758</b>	<b>\$ 1,782</b>
<b>Monthly Average</b>	<b>\$ 95</b>	<b>\$ 100</b>	<b>\$ 114</b>	<b>\$ 134</b>	<b>\$ 147</b>	<b>\$ 149</b>
<b>Water Rate Increase %</b>		<b>0.0%</b>	<b>40.1%</b>	<b>40.1%</b>	<b>12.9%</b>	<b>0.0%</b>
<b>Overall Rate Increase %</b>		<b>5.3%</b>	<b>14.4%</b>	<b>17.6%</b>	<b>9.4%</b>	<b>1.4%</b>

\*\*\* Sewer rate projections are DRAFT. Consultants are currently updating for 2023 presentation.





# In Summary, Total Water and Sewer Bill Projections:

Typical total water bills are projected to increase from the current \$95 per month on the following schedule:

- o For 2023, to \$100 per month (+5.3%).
- o For 2024, to \$114 per month (+14.4%).
- o For 2025, to \$134 per month (+17.6%).
- o For 2026, to \$147 per month (+9.4%).
- o For 2027, to \$149 per month (+14%).



# Thank You!

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