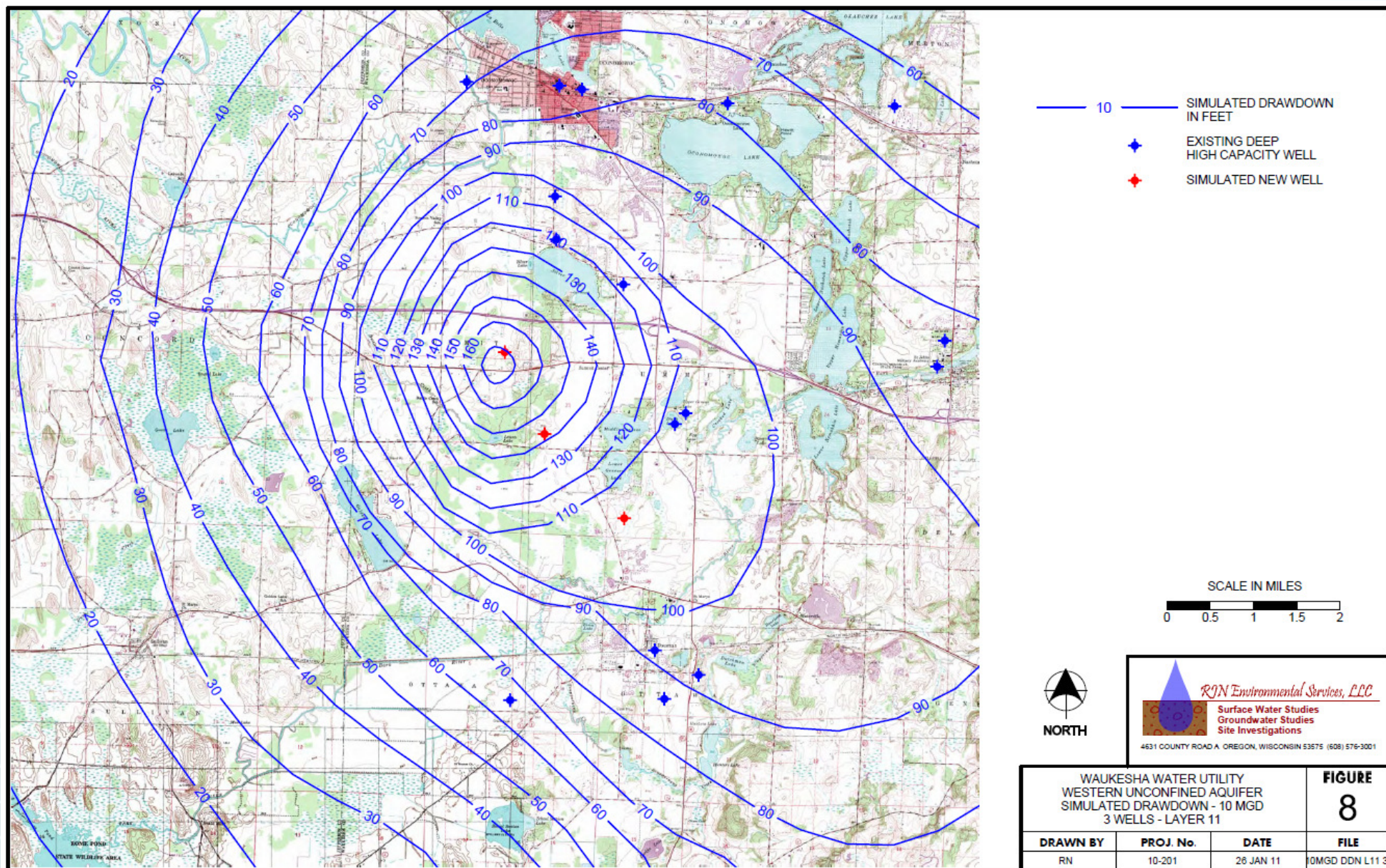
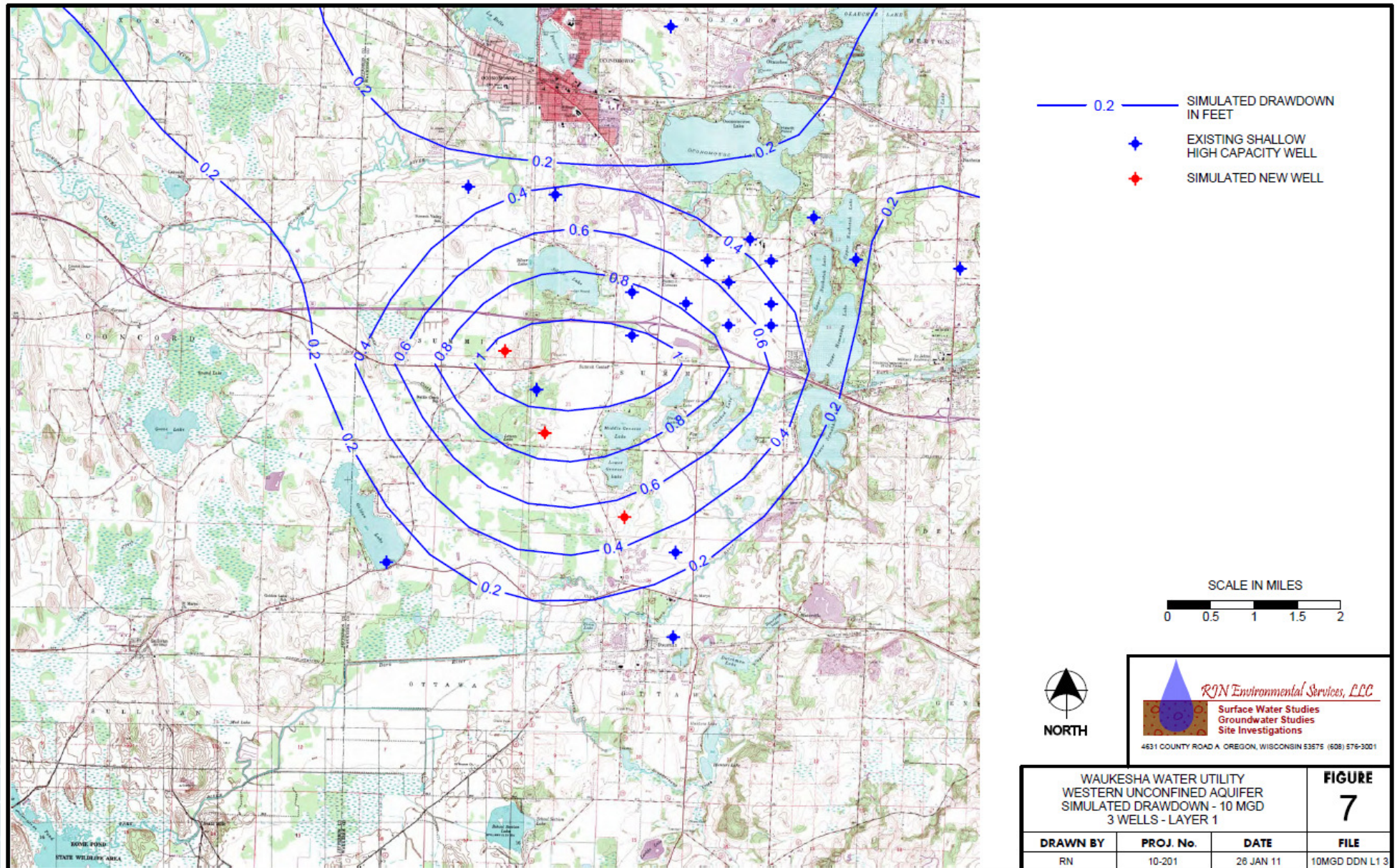


Western Unconfined Aquifer 10 MGD from 3 High Capacity Wells Deep Aquifer Impacts



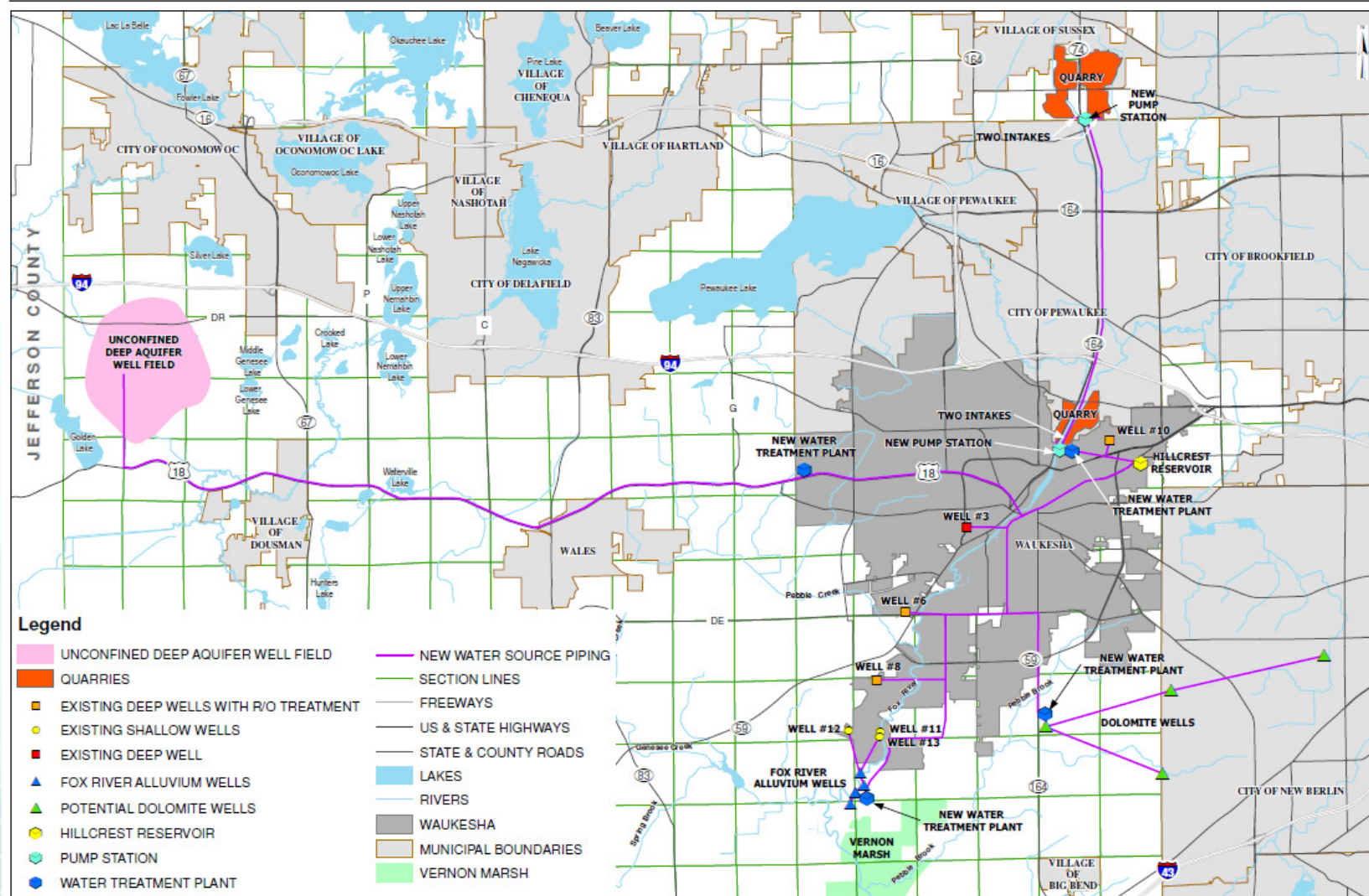
Western Unconfined Aquifer 10 MGD from 3 High Capacity Wells Shallow Aquifer Impacts



WATER SUPPLY ALTERNATIVE 4 – MULTIPLE SOURCE

\$319 MILLION

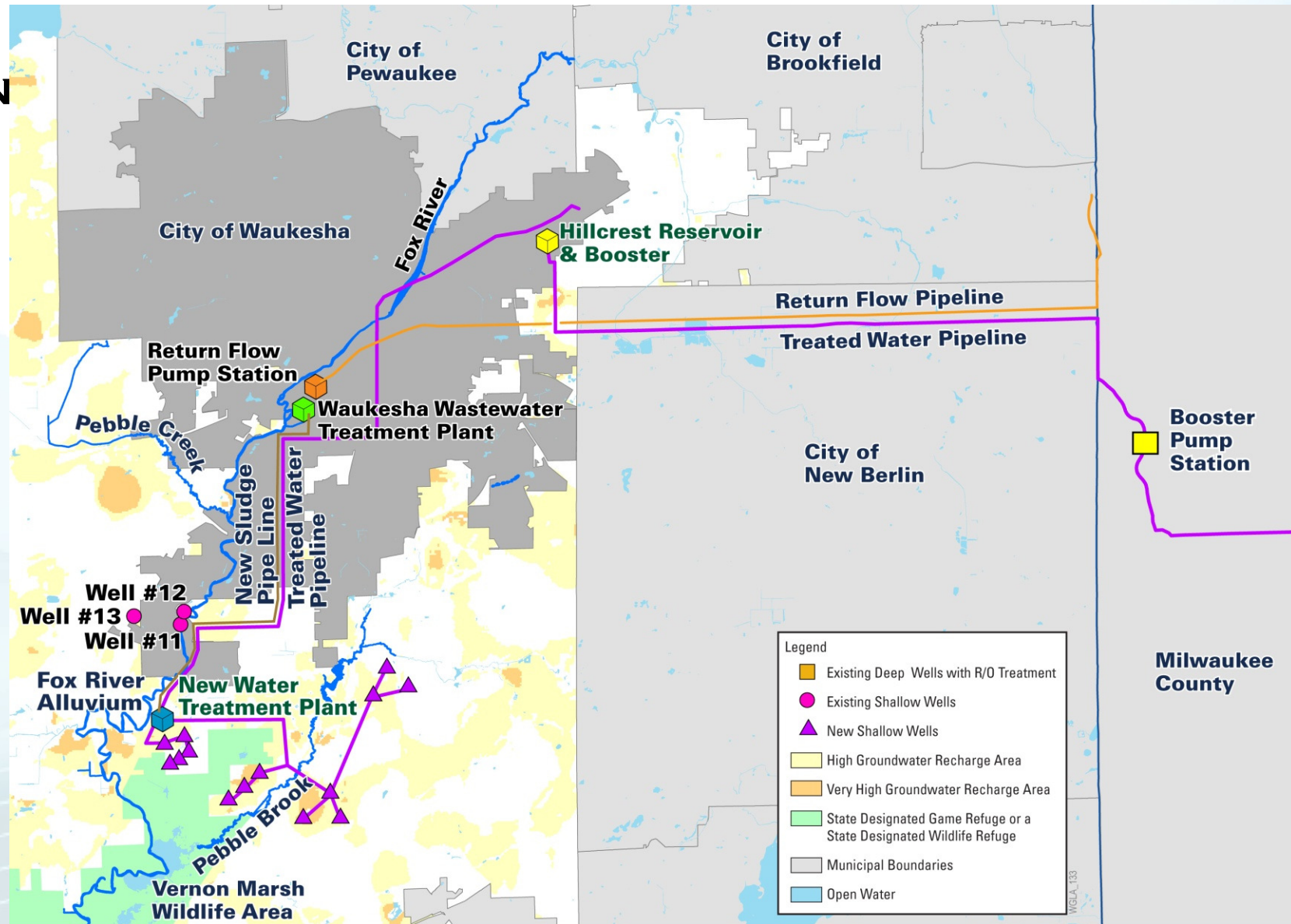
- New treatment at existing deep aquifer wells
- New treatment for quarry water from multiple quarries
- New unconfined deep aquifer wells
- New solarium dolomite wells
- Add shallow wellfield South of Waukesha near Vernon Marsh and along the Fox River



WATER SUPPLY ALTERNATIVE 5 – LAKE MICHIGAN AND SHALLOW AQUIFER

\$238 MILLION

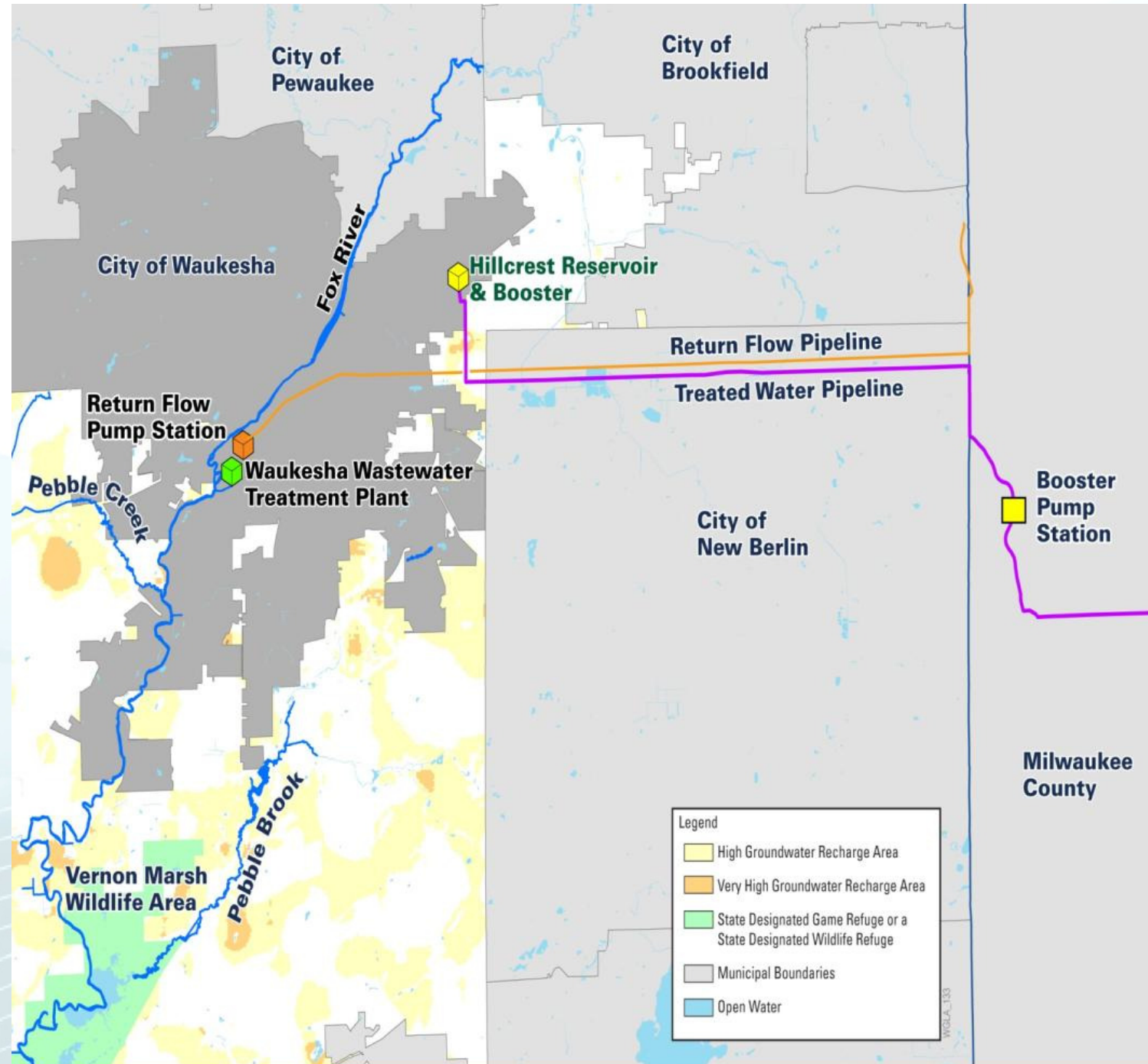
- Supply pipeline from Lake Michigan supplier to Waukesha
- New water pump station
- Return flow pump station at Waukesha wastewater plant
- Return flow pipeline
- Add shallow wellfield South of Waukesha near Vernon Marsh and along the Fox River
- New central treatment plant



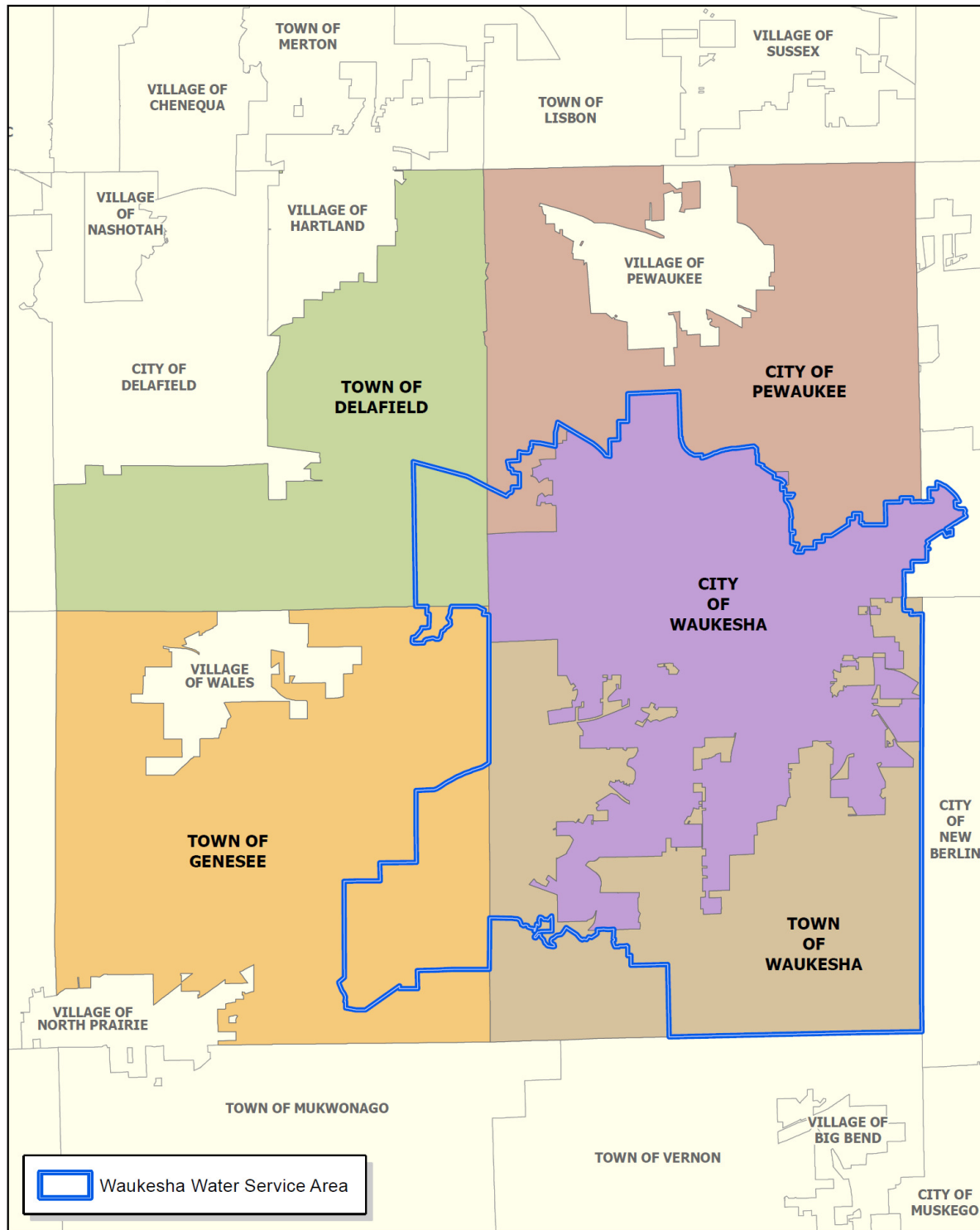
WATER SUPPLY ALTERNATIVE 6 – LAKE MICHIGAN

\$164 MILLION

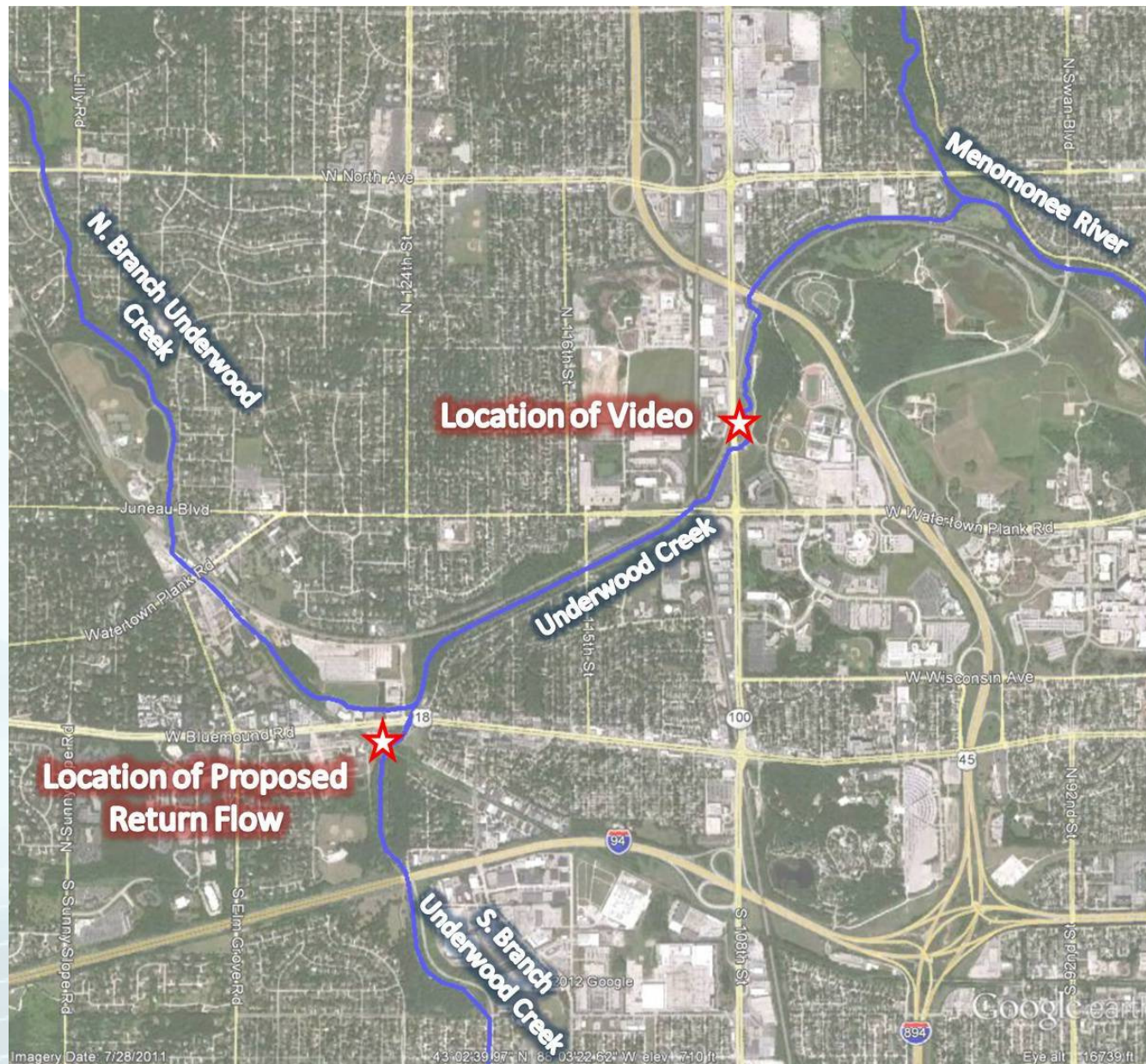
- Supply pipeline from Lake Michigan supplier to Waukesha
- New water pump station
- Return flow pump station at Waukesha wastewater plant
- Return flow pipeline



Municipalities Within the Waukesha Water Service Area



Return Flow Location



EXISTING BASE FLOW IN UNDERWOOD CREEK ~ 3 CFS



UNDERWOOD CREEK - EXISTING BASE FLOW WITH ADDITIONAL RETURN FLOW ~ 23 CFS



WATER SUPPLY EVALUATION CRITERIA

Summary of Water Supply Alternatives Evaluation

Water Supply Alternatives	Major Criteria			
	Environmental	Public Health	Long-Term Sustainability	Implementability
1. Deep and shallow aquifers	●	●	●	●
2. Shallow aquifer and riverbank inducement	●	●	●	●
3. Unconfined deep aquifer	●	⊙	●	●
4. Multiple sources	●	●	●	●
5. Lake Michigan and shallow aquifer	●	⊙	⊙	●
6. Lake Michigan with return flow to Underwood Creek	⊙	⊙	○	⊙
○ No adverse impact ⊙ Minor adverse impact ● Moderate adverse impact ● Significant adverse impact				

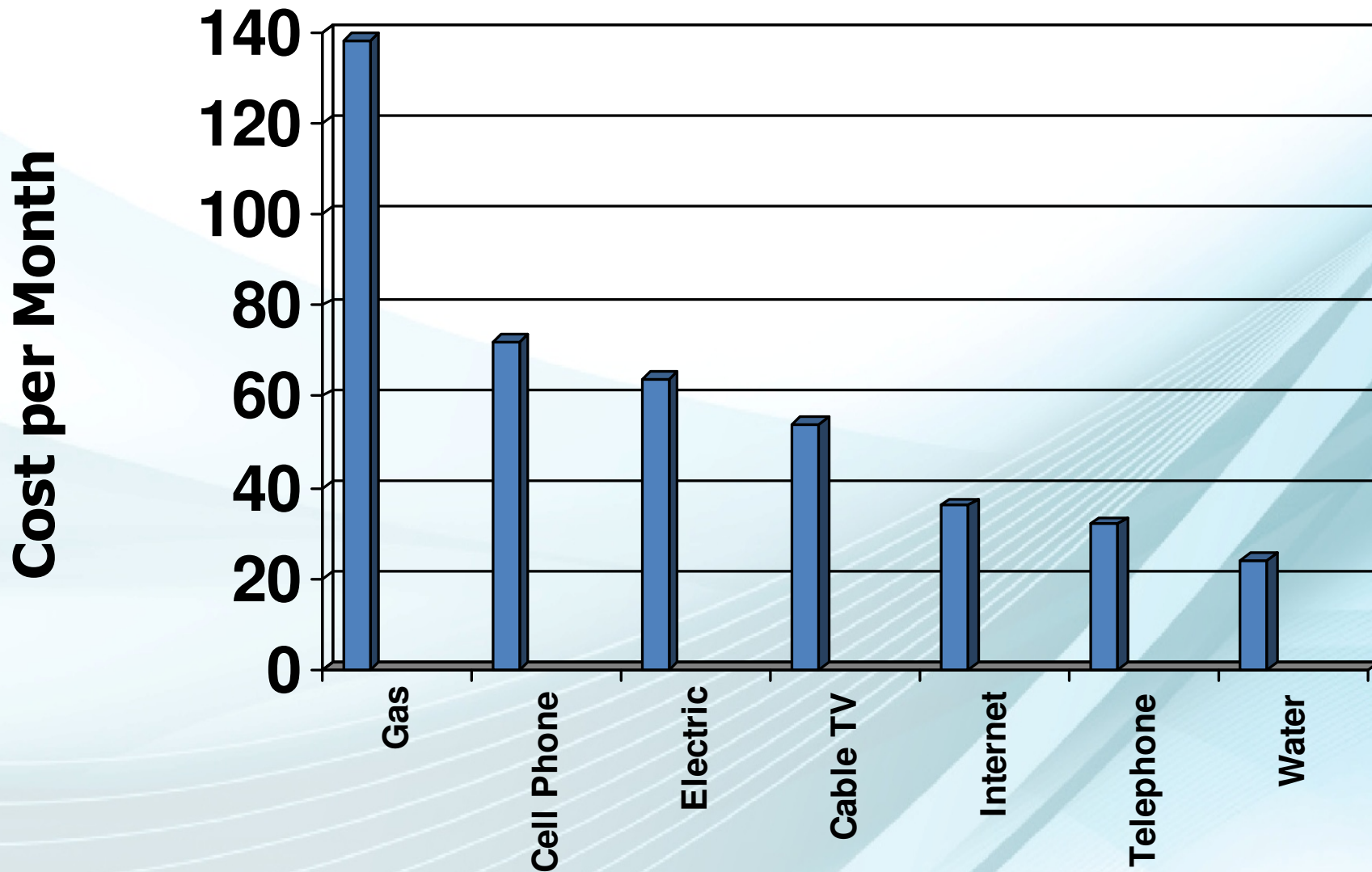
SUMMARY OF WATER SUPPLY COSTS

Water Supply Alternative Cost Estimates

Water Supply Alternative	Capital Cost ^a (\$ million)	Annual Operation/Maintenance Cost (\$ million)	20 yr Present Worth Cost (\$ million, 6%)	50 yr Present Worth Cost (\$ million, 6%)
Deep and shallow aquifers	189	7.2	272	302
Shallow aquifer and riverbank inducement	184	7.4	269	301
Unconfined deep aquifer	228	6.6	304	332
Multiple sources	319	7.9	410	444
Lake Michigan and shallow aquifer	238	7.5	324	356
Lake Michigan with return flow to Underwood Creek	164	6.2	235	262

^aIncludes direct construction cost, contractor administrative costs (insurance, bonds, supervision etc), 25% contingency, and costs for permitting, legal, engineering, administrative.

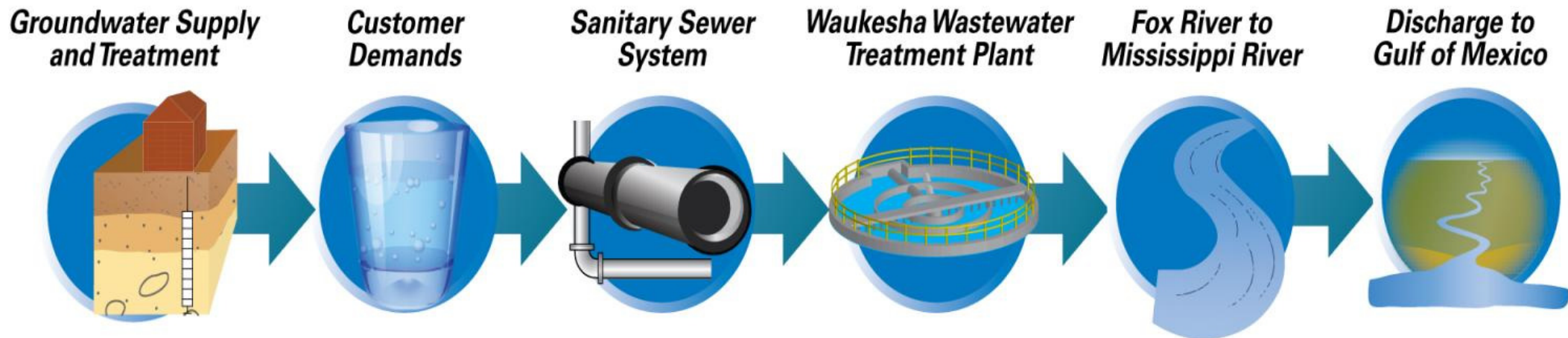
Monthly Rate Comparison



Public Service Commission Oversight

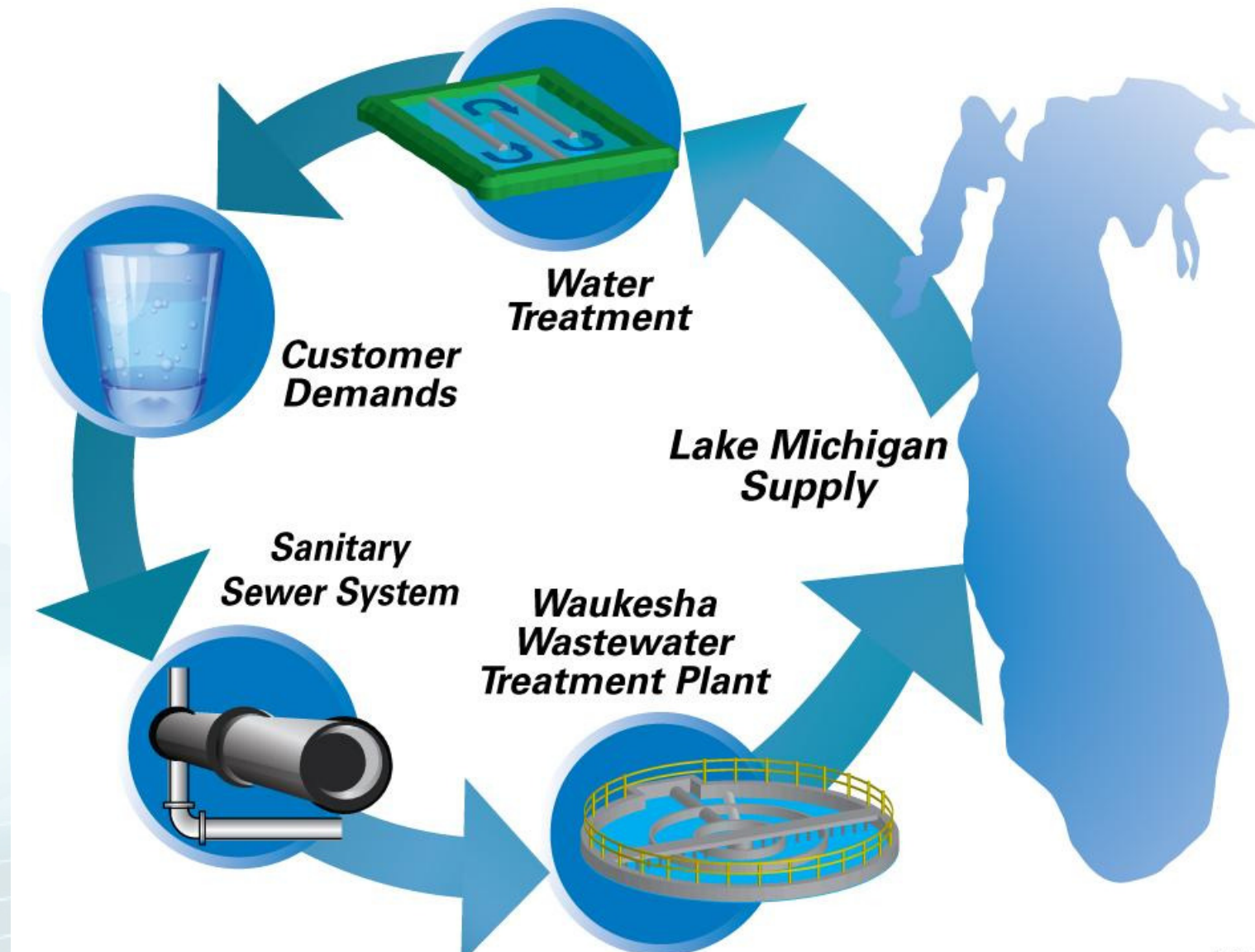
- Approves Construction Projects
- Sets Water Rates
- Determines Service and Billing Procedures
- Stipulates Record Keeping Requirements
- Sets Engineering Standards
- Requires Meter Accuracy
- Establishes Standards for Water Quality and Adequacy of Supply

GROUNDWATER LEAVES THE REGION AND GOES TO THE OCEAN.



WGLA 100

LAKE MICHIGAN WATER IS RECYCLED AND IS SUSTAINABLE



WHAT IS THE SCHEDULE MOVING FORWARD?

TIMELINE

Next Steps

Public Meeting

January 28, 2010

Water Commission Meeting

February 25

Common Council Decision Point

April 8
Common Council approval to submit application

Approval of submittal by WDNR, submittal to other Great Lake states
July 2012

Approval of supply by Great Lakes states
December 2012

Common Council Decision Point:

Approval of Sales Contract
February 2013

Committee of the Whole Meeting

March 8

Submit Great Lakes Application

May 2010

Negotiate terms with water supplier
Completed by July 2012

Common Council Decision Point:

Finalize Supply Decision
January 2013

Begin Design and Install Infrastructure

March 2013

Public Meeting

October 2009

QUESTIONS?