

Public Information Meeting

Wastewater Treatment Facility
Drinking Water Treatment Facility

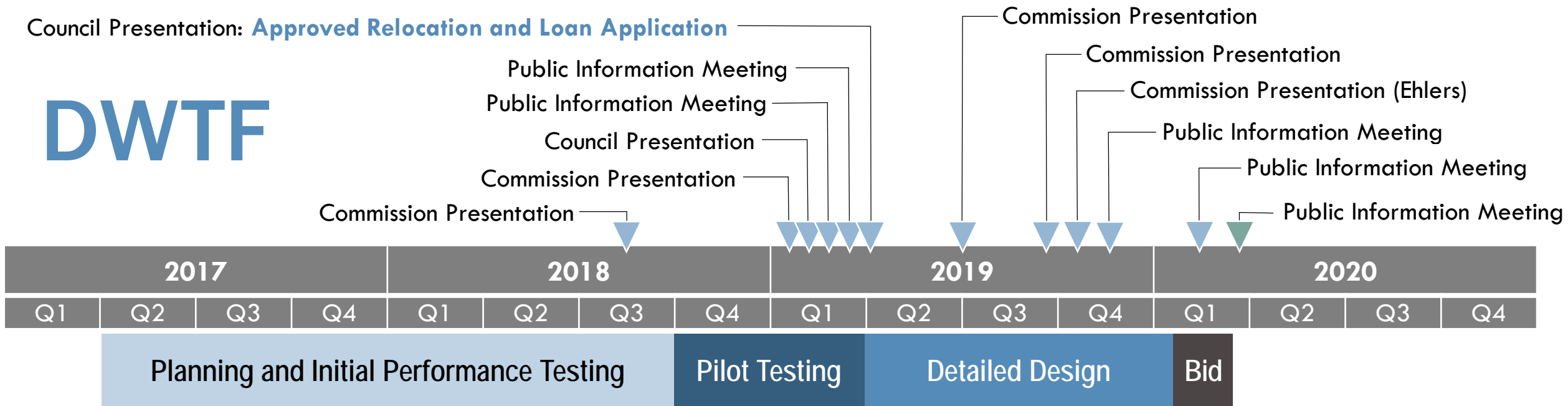


5:30 PM, Wednesday, February 26, 2020
North Central Technical College (NTC)
1000 West Campus Drive
Wausau, WI

5:00 PM, Wednesday, March 18, 2020
City Hall
407 Grant Street
Wausau, WI

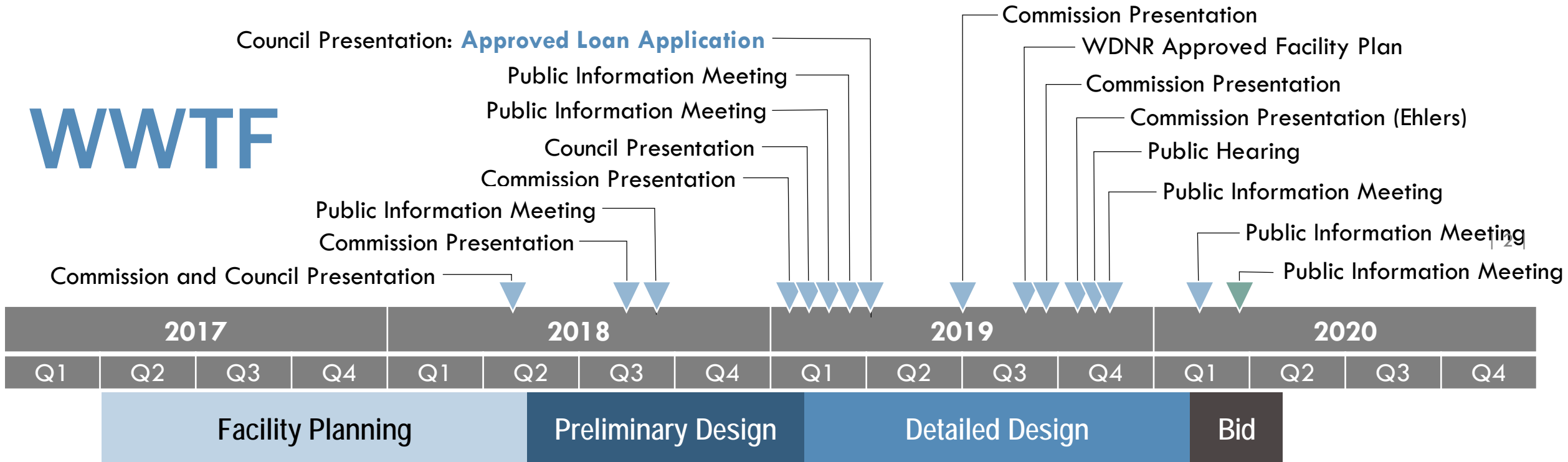
Council Presentation: **Approved Relocation and Loan Application**

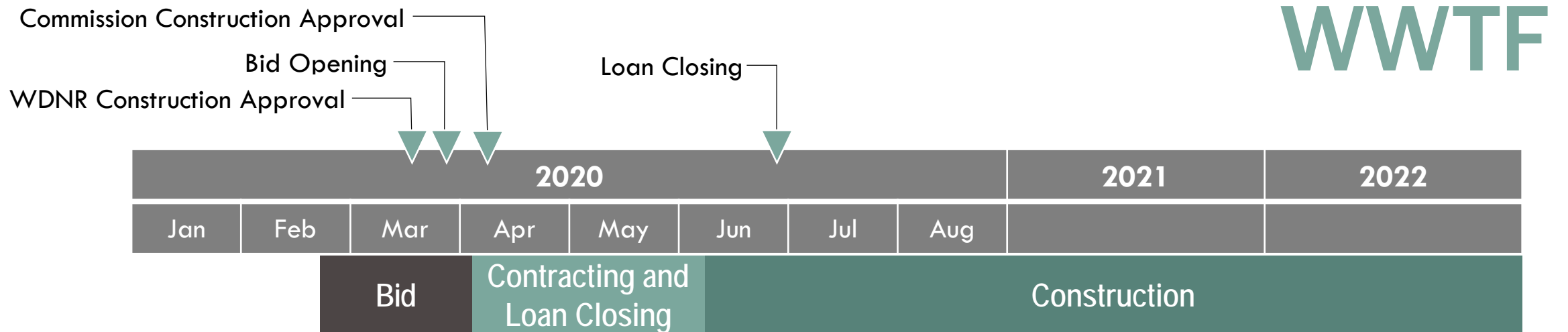
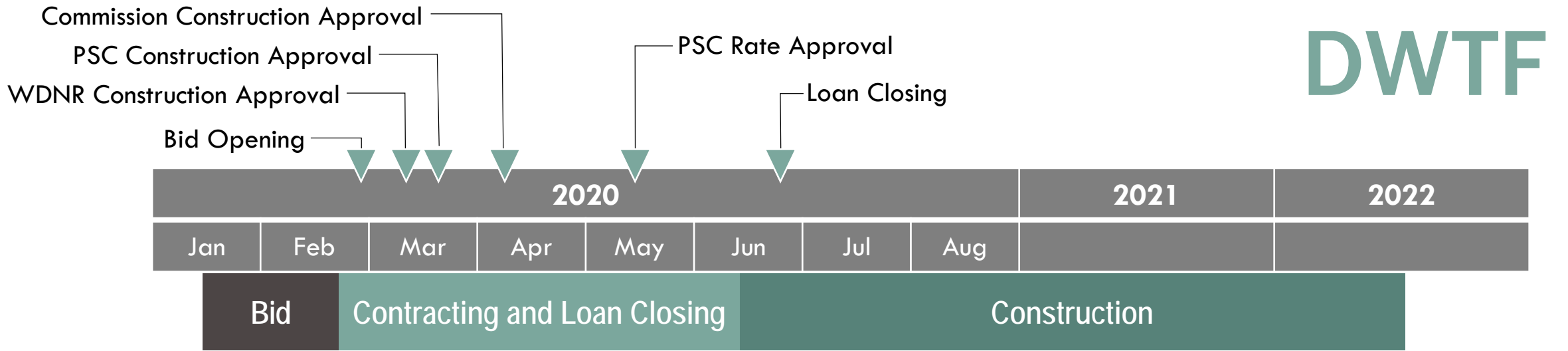
DWTF



WWTF

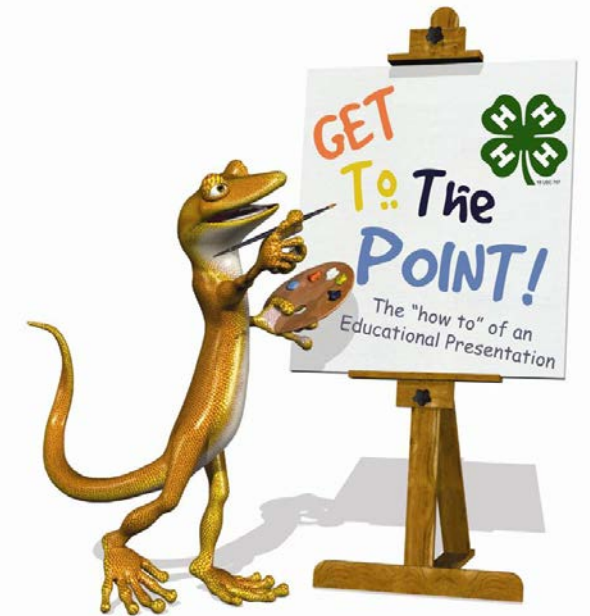
Council Presentation: **Approved Loan Application**





Public Engagement History

- 05-01-2018 – WWTF Presentation; Wausau Waterworks Commission
- 05-01-2018 – WWTF Presentation; City Council Committee of Whole (C-O-W)
- 09-04-2018 – WWTF Presentation; Wausau Waterworks Commission
- 08-07-2028 – DWTF Presentation; Wausau Waterworks Commission
- 10-17-2018 – Sewer Rate Increase; PIM
- 01-08-2019 – WWTF & DWTF Presentation; Wausau Waterworks Commission
- 01-23-2019 – WWTF & DWTF Presentation; City Council C-O-W
- 02-18-2019 – WWTF & DWTF Presentation PIM at NTC
- 03-06-2019 – WWTF & DWTF Presentation PIM at NTC
- 03-26-2019 – City Council Approves relocation of DWTF**
- 03-26-2019 – City Council Approves application to DNR for SDWL & CWFL**
- 06-25-2019 – WWTF & DWTF Presentation; Wausau Waterworks Commission
- 10-01-2019 – WWTF & DWTF Presentation; Wausau Waterworks Commission - alternative energy options
- 11-05-2019 – WWTF & DWTF Presentation by Ehler's on debt issuance; Wausau Waterworks Commission
- 11-20-2019 – WWTF & DWTF Presentation PIM; City Hall
- 02-26-2020 – WWTF & DWTF Presentation PIM; NTC**
- PROPOSED** March 18, 2020 – WWTF & DWTF Presentation PIM; City Hall



Both Projects at Once?

- New WDNR regulations – Both Water and Sewer
- Funding availability – Future availability; higher priority projects
- Financing rate at all time low – 1.65%
- Capital budget increase over 100% in 5yrs; trend to continue
- Wausau's rates have been historically low – no upgrades
- Capital Planning & Facility Planning



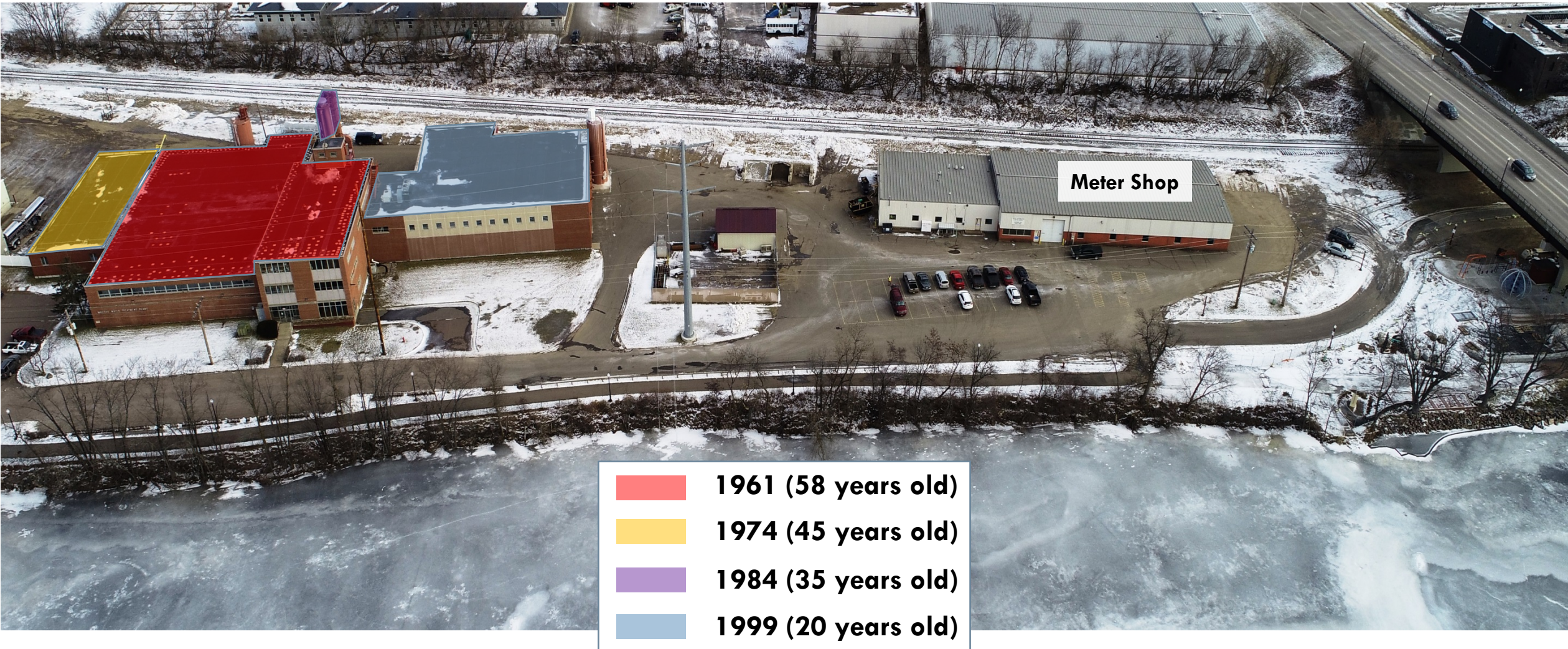
Drinking Water Treatment Facility (DWTF)



DWTF Planning History

- 2016 Initial budget for facility planning
- 2017 WDNR mandated clearwell replacement (Dec. 31, 2022)
- 2017 Utility issued RFP for DWTF Facility Plan
- 2018 Utility hired Becher Hoppe/Donohue for DWTF Facility Plan
- 2018-2019 Utility conducted an 18-month pilot study to determine best treatment process and corrosion control
- 2018-2019 Facility Plan alternatives – Relocate DWTF best option
- 2019 Design Report & Draft Plans submitted to WDNR
- 2019 Submitted Construction Authorization (CA) & Rate Case to PSC
- 2020 Becher Hoppe/Donohue/Clark Dietz – design, plans & bid project

Current DWTF North Side of Bridge Street



DWTF - WDNR Highlights

1. **Regulations: WDNR Requires Action**
 - Clearwell non-compliant – Below Groundwater
 - SS Plant and solids recovery – hydraulic deficiencies
 - Water Source – Under Surface Water Influence (GWUDI)
 - Located in 500-year floodplain
2. **Water Quality: Iron, Manganese, and Natural Organics**
3. **Operational Issues: 1961 Filter bed, SCADA, SS Plant**

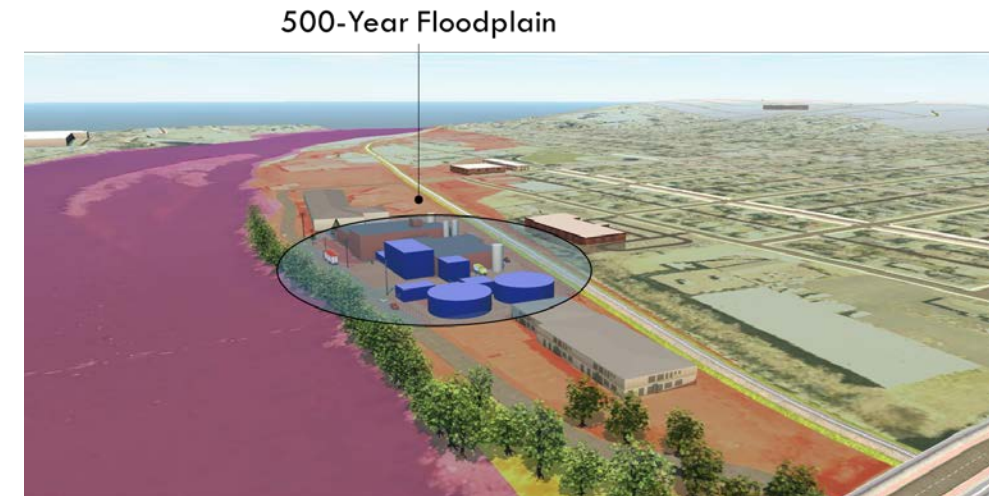
Facility Upgrades vs Relocation

1. Upgrade Existing Facility: ~\$31,000,000

- Large Investment; Short Lived
- In 500-Year Floodplain; high risk - No space to meet future regulations

2. New Facility: \$41,000,000

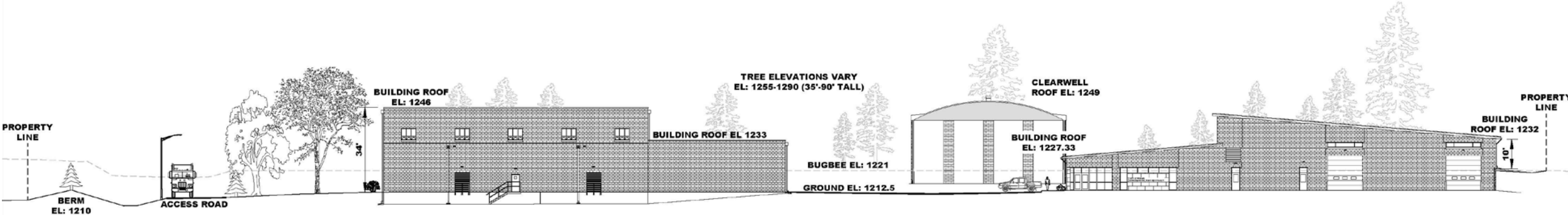
- 60+ year life of the facility
- Near 5 of 6 wells – Remove CW3
- Outside floodplain
- Meet WDNR requirements; now & future
- Maintain operation during construction
- Enhance corrosion control
- Ensure enhanced disinfection for GWUDI classification in near future



The New Drinking Water Treatment Facility



The New Drinking Water Treatment Facility



The New Drinking Water Treatment Facility

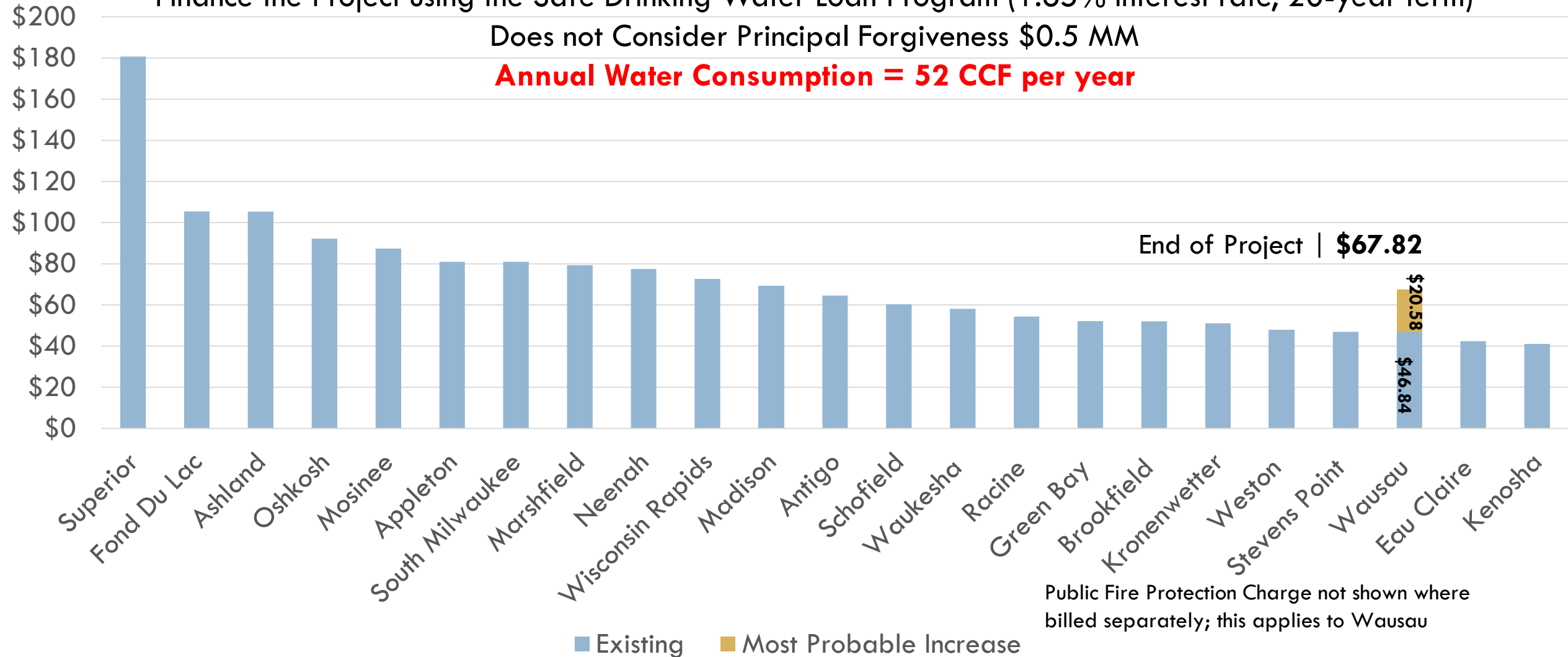


The Most Probable Residential Quarterly Cost to Finance the \$41MM Project

Finance the Project using the Safe Drinking Water Loan Program (1.65% interest rate, 20-year term)

Does not Consider Principal Forgiveness \$0.5 MM

Annual Water Consumption = 52 CCF per year



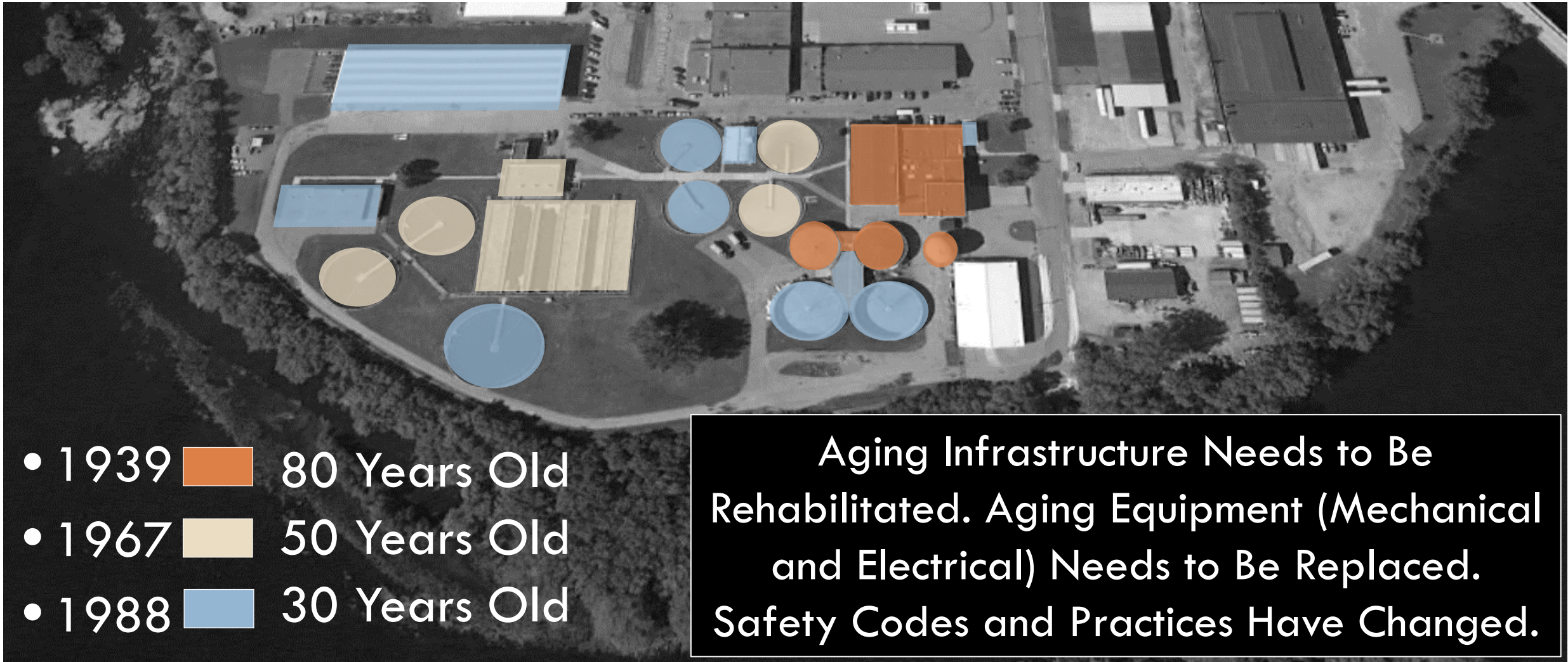
The Wastewater Treatment Facility (WWTF)



WWTF Planning History

- 2016 Initial budget for facility planning
- 2017 WDNR projected TMDL & low level phosphorous limit
- 2017 Utility issued RFP for WWTF Facility Plan
- 2018 Utility hired Donohue for WWTF Facility Plan
- 2018-2019 Facility Plan presented alternatives for WWTF improvement
- 2019 Facility plan was completed and submitted to WDNR
- 2019 Utility submitted Facility Plan to WDNR for approval
- 2019-2020 Utility hired Ehler's to prepare rate case
- 2020 Donohue/Becher Hoppe completed design plans & bid project

The Existing Facility is Old



WDNR Compliance

1. WPDES Permit

- Low level phosphorous
- Move to Class A biosolid
Class B restrictive & costly
- Future regulation
PFAS, land application testing

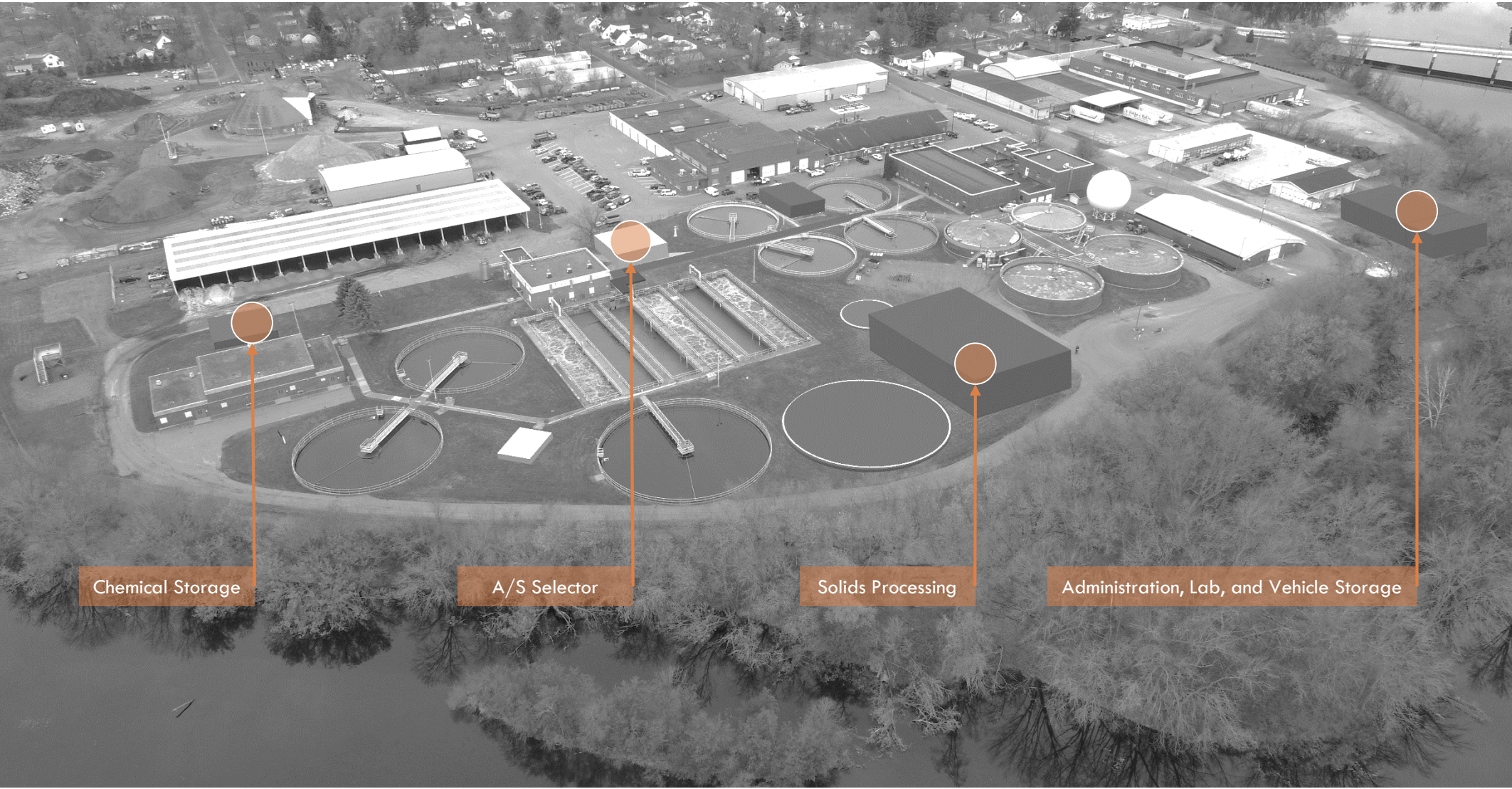
2. Capacity: Process issues

- UV disinfection
- Filtration
- Sludge thickening – no redundancy

3. Age: Safety, Reliability, and Performance



Maximize use of All Existing Structures



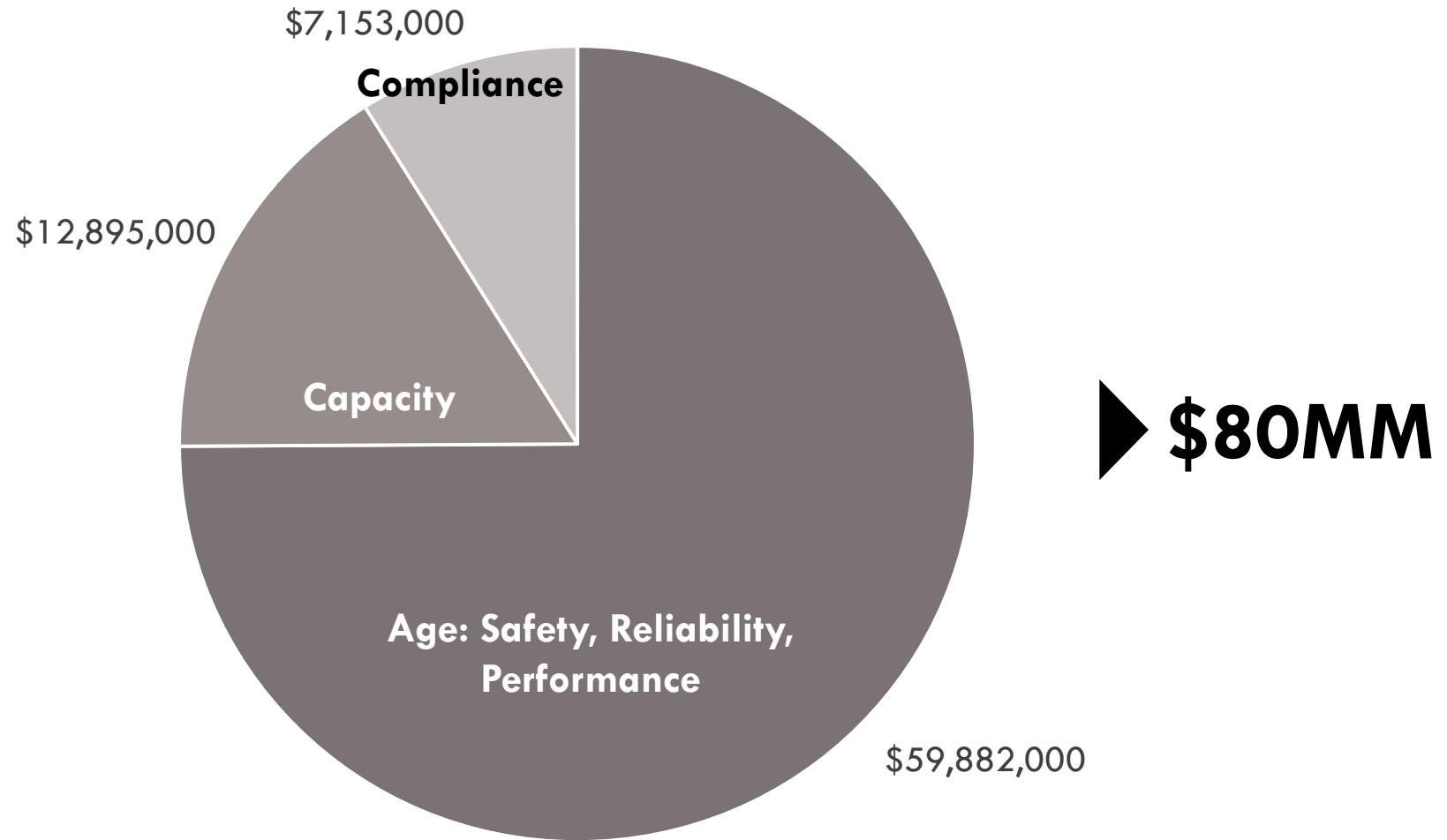
Chemical Storage

A/S Selector

Solids Processing

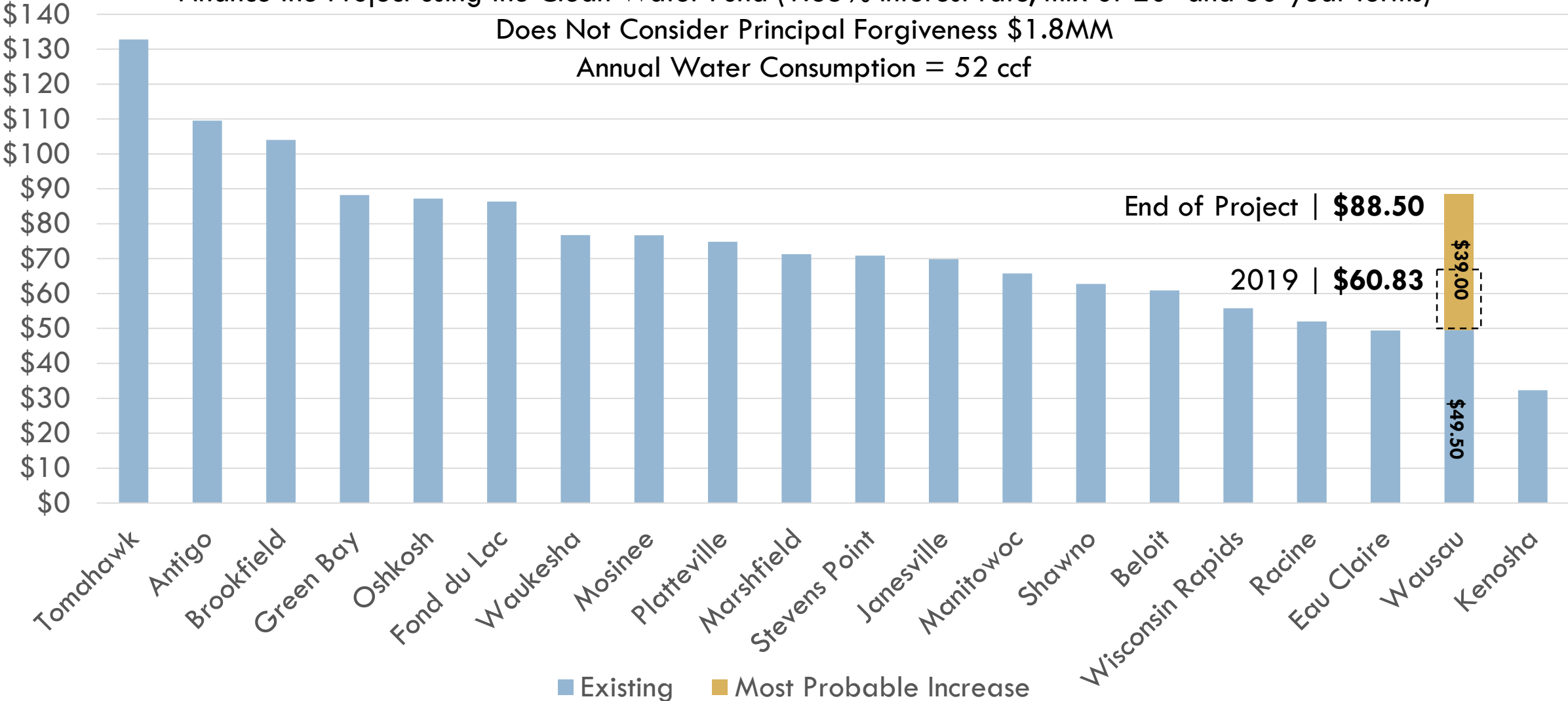
Administration, Lab, and Vehicle Storage

The Project Cost



The Most Probable Residential **Quarterly** Cost to Finance the \$80MM Project

Finance the Project using the Clean Water Fund (1.65% interest rate, mix of 20- and 30-year terms)
 Does Not Consider Principal Forgiveness \$1.8MM
 Annual Water Consumption = 52 ccf



Billing History: Lindman, Family of 5, 3/4" Meter									
Utility Charges	Rate/ccf	Jan-Mar '19 Qty ccf	Qtr Charge	Apr-Jun '19 Qty ccf	Qtr Charge	Jul-Sep '19 Qty ccf	Qtr Charge	Oct-Dec '19 Qty ccf	Qtr Charge
Water Service									
Water - Qtrly Fee		Fixed	17.07	Fixed	17.07	Fixed	17.07	Fixed	17.07
Water - Vol Chrg	2.29	29	66.41	34	77.86	38	87.02	31	70.99
Water Service Subtotal			83.48		94.93		104.09		88.06
Sewer Service									
Sewer - Qtrly Fee		Fixed	20.40	Fixed	-	Fixed	-	Fixed	-
Sewer - Vol Chrg	3.11	29	90.19	34	105.74	38	118.18	31	96.41
Sewer Service Subtotal			110.59		105.74		118.18		96.41
Public Fire Service									
Public Fire		Fixed	10.47	Fixed	10.47	Fixed	10.47	Fixed	10.47
Total Quarterly Bill			\$204.54		\$211.14		\$232.74		\$194.94
Average QUARTERLY Usage & Cost				33	\$226.14				
Average MONTHLY Usage & Cost				11	\$75.38				

Billing Proposed: Lindman, Family of 5, 3/4" Meter; Water increase of 42% and Sewer increase of 79%									
Utility Charges	Rate/ccf	Jan-Mar '19 Qty ccf	Qtr Charge	Apr-Jun '19 Qty ccf	Qtr Charge	Jul-Sep '19 Qty ccf	Qtr Charge	Oct-Dec '19 Qty ccf	Qtr Charge
Water Service									
Water - Qtrly Fee		Fixed	24.24	Fixed	24.24	Fixed	24.24	Fixed	24.24
Water - Vol Chrg	3.25	29	94.30	34	110.56	38	123.57	31	100.81
Water Service Subtotal			118.54		134.80		147.81		125.05
Sewer Service									
Sewer - Qtrly Fee		Fixed	36.52	Fixed	36.52	Fixed	36.52	Fixed	36.52
Sewer - Vol Chrg	5.60	29	162.34	34	190.33	38	212.72	31	173.54
Sewer Service Subtotal			198.86		226.85		249.24		210.05
Public Fire Service									
Public Fire		Fixed	14.87	Fixed	14.87	Fixed	14.87	Fixed	14.87
Total Quarterly Bill			\$332.27		\$376.52		\$411.92		\$349.97
Average QUARTERLY Usage & Cost				33	\$367.67				
Average MONTHLY Usage & Cost				11	\$122.56				

Affordability & Cost Effective

- No doubt big projects with BIG \$\$\$'s
- Significantly important – Providing safe clean water and treating wastewater; vital for future growth and sustainability
- Cost effective and affordable – Absolutely
- Wausau will be providing safe, high-quality drinking water to a typical home for less than \$1 /day
- Wausau will be collecting wastewater, treating it, and sending safe clean water back to the environment for a typical home for less than \$1 /day

Thank You

