



UPDATE ON MARY'S CREEK WATER RECLAMATION FACILITY PERMIT

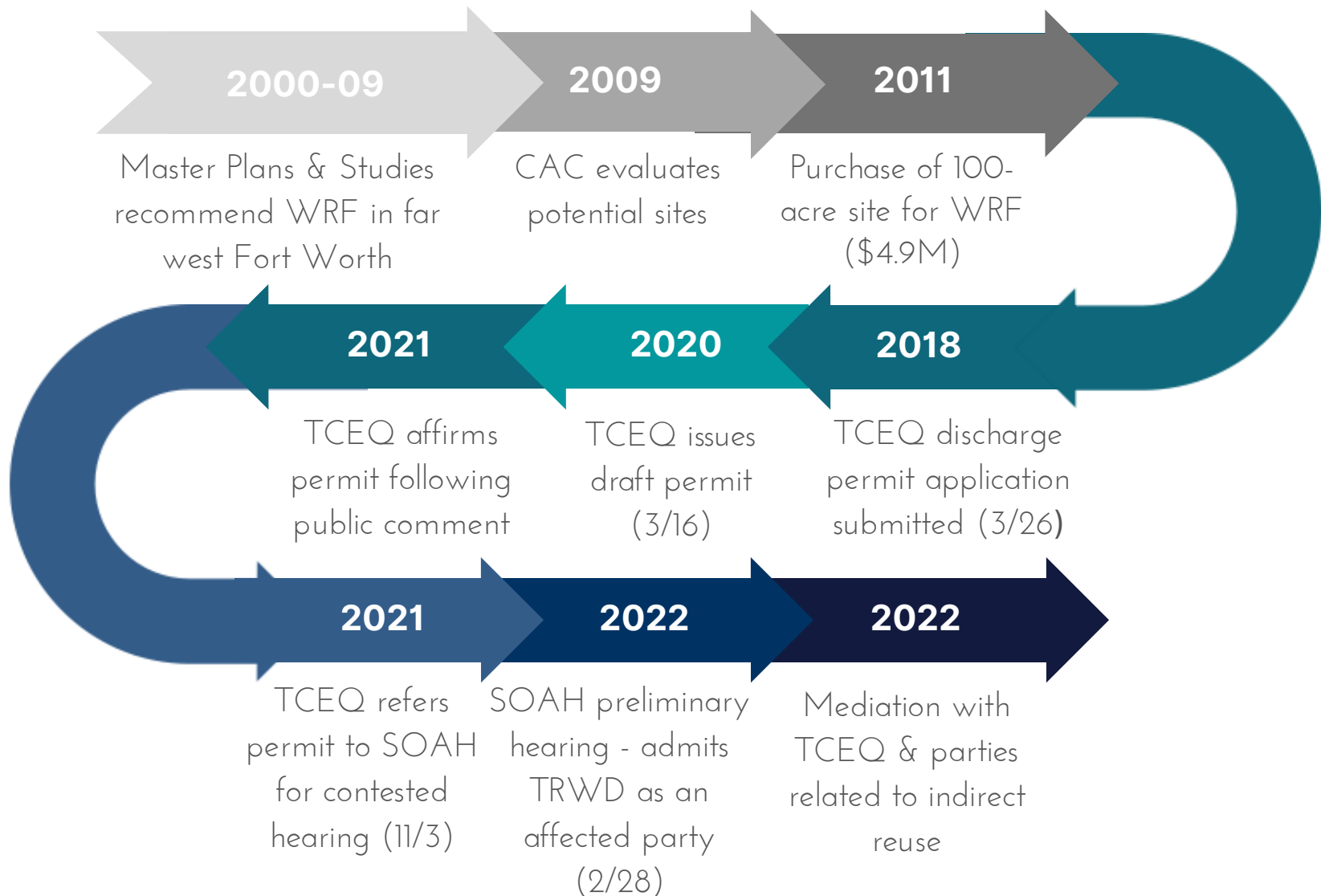
City Council Worksession
May 17, 2022

MARY'S CREEK PERMIT

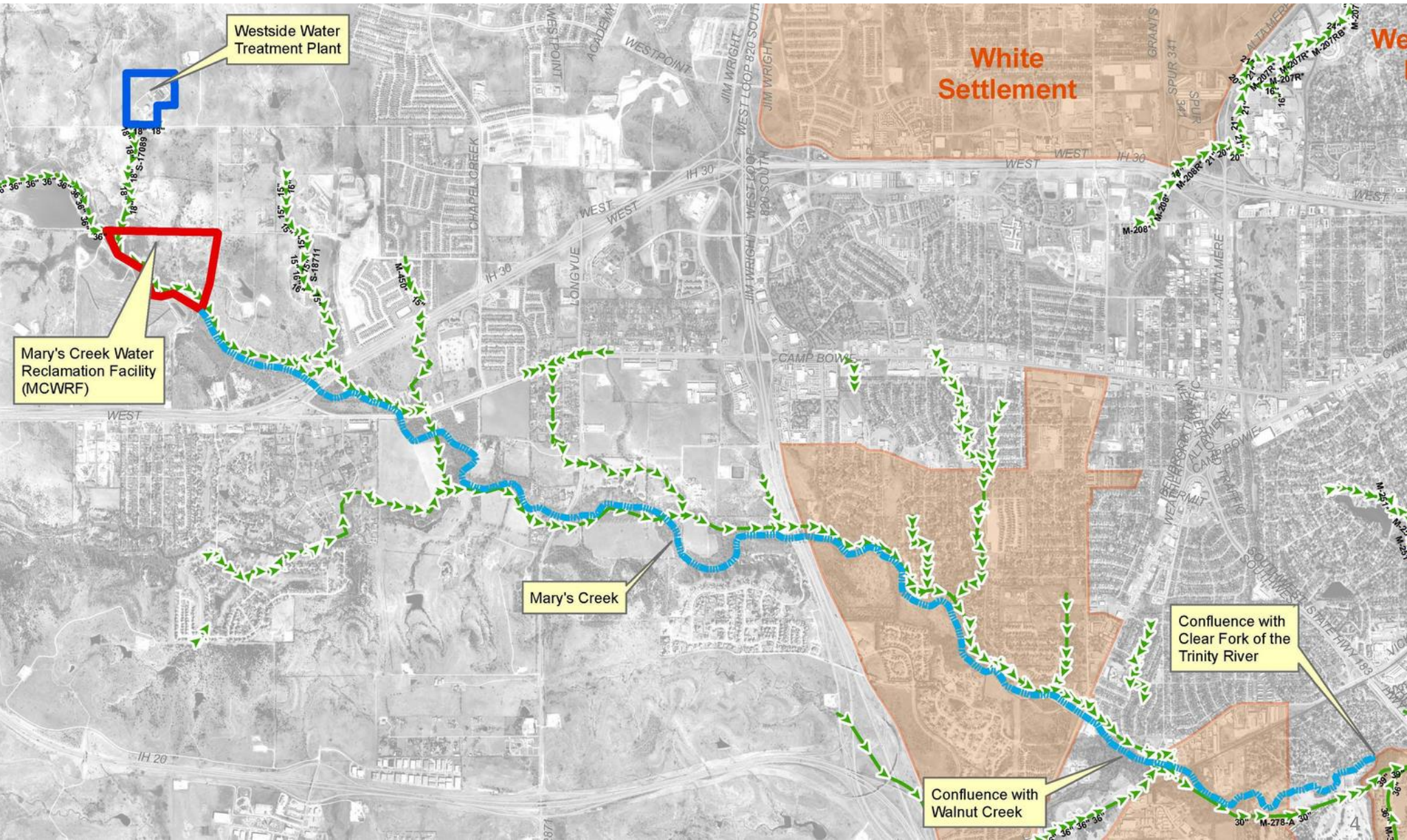
Presentation Content

- Project background and recent events
- Settlement Agreement terms
- Benefits to Fort Worth Water customers
- Next steps

PROJECT HISTORY



PLANT LOCATION AND WATERSHED



SETTLEMENT TERMS

TRWD

- Permit, design, and construct indirect reuse project on Mary's Creek consisting of an impoundment, intake, pump station and pipeline to connect to existing water supply system where it will be blended with water from other TRWD lakes

CITY

- Request TCEQ to include a 6 mg/L nitrogen limit in permit
- Limit discharge of MCWRF to 3 MGD during dry weather periods, prior to operation of indirect reuse project
- If indirect reuse project is not feasible, amend MCWRF permit to reduce phosphorus limit to 0.1 mg/L

TCEQ DRAFT PERMIT

Permit Discharge Conditions

Flowrate: 10MGD - Interim Phase; 15MGD - Final Phase

Term - 5 years

Reporting - Monthly

Treatment Process: Membrane bioreactor
with nutrient removal and UV disinfection

Effluent Limits		
<u>Parameter</u>	<u>30 Day Average</u>	<u>Monitoring Requirement</u>
CBOD	5 mg/l	One/day
TSS	5 mg/l	One/day
Ammonia (NH3-N)	2 mg/l	One/day
Total P	0.2 mg/l	One/day
Disolved Oxygen	6.0 mg/l (min)	One/day
E-Coli	126 CF/100 ml	One/day
pH	6 (min)	Daily

**Settlement Agreement - adds a 6mg/L total nitrogen requirement to permit*

SETTLEMENT AGREEMENT BENEFITS

- Allows Fort Worth to begin engineering design with goal to construct facility prior to existing wastewater collection lines running out of capacity.
- Achieves compliance with no significant change in plant design from TCEQ permit submission
- Positions City to provide reclaimed water to fast growing areas of West Fort Worth - a State Water Plan strategy
- Allows TRWD to initiate a low-cost indirect reuse project in Fort Worth

NEXT STEPS

- Issue a Request for Proposals for engineering design of MCWRF
- Design lift station and force main to pump downstream wastewater to MCWRF
- Submit TCEQ reclaimed water authorization for proposed MCWRF
- Submit applications for grant and low interest loan to provide funding for MCWRF and direct reclaimed water infrastructure
- Proposed design schedule - Fall 2022 to Fall 2024 (\$14M)
- Proposed construction schedule - Spring 2025 to Summer 2028 (\$130M)

QUESTIONS