

Pipeline 1 Pressurization Program

PUB Study Session
October 12th, 2022



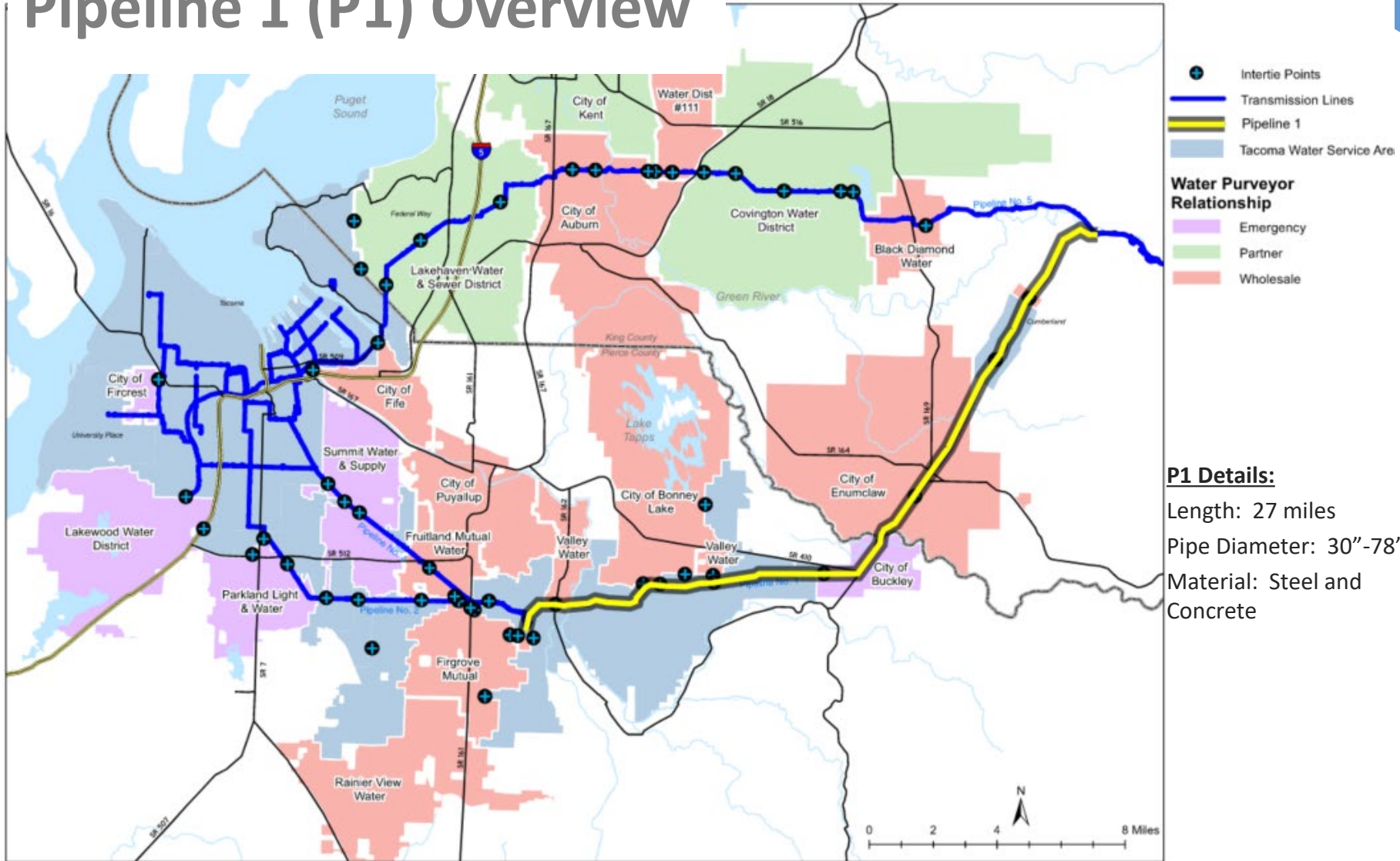
Ali Polda – Principal Engineer – Planning & Engineering

Overview

- Background
- Sanitary Survey
- Implementation Plan
- Bilateral Agreement
- Next Steps



Pipeline 1 (P1) Overview



Source: 2018 Water System Plan Update, Figure 2-2 from pg 2-7

2018 Sanitary Survey

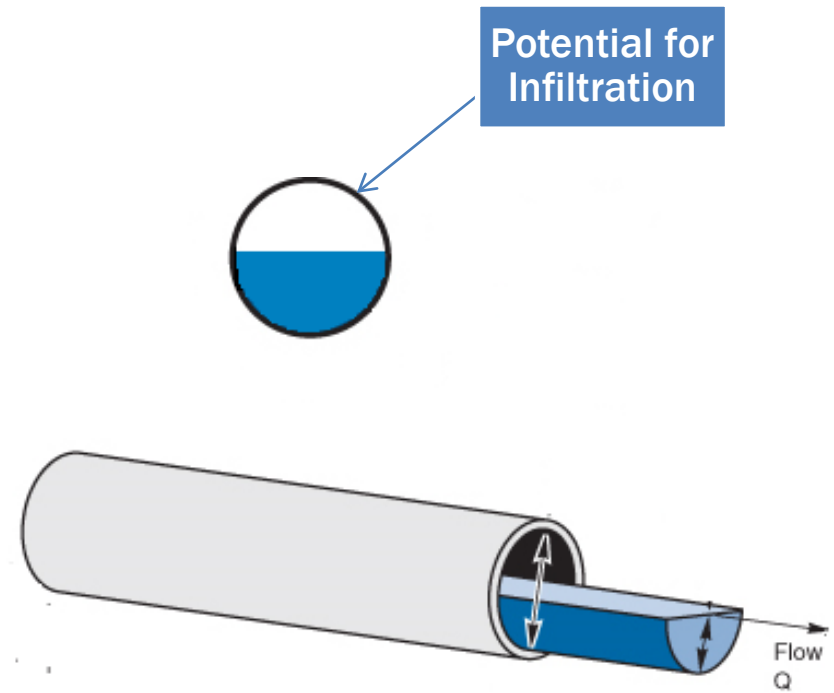
Washington State Department of Health:

- Identified “significant deficiency” creating public health risk in P1
- P1 doesn’t meet WAC requirement of 5 pounds per square inch (psi) at ground surface
- Requested approach to meeting pressurization
- No water quality violations due to operational pressure

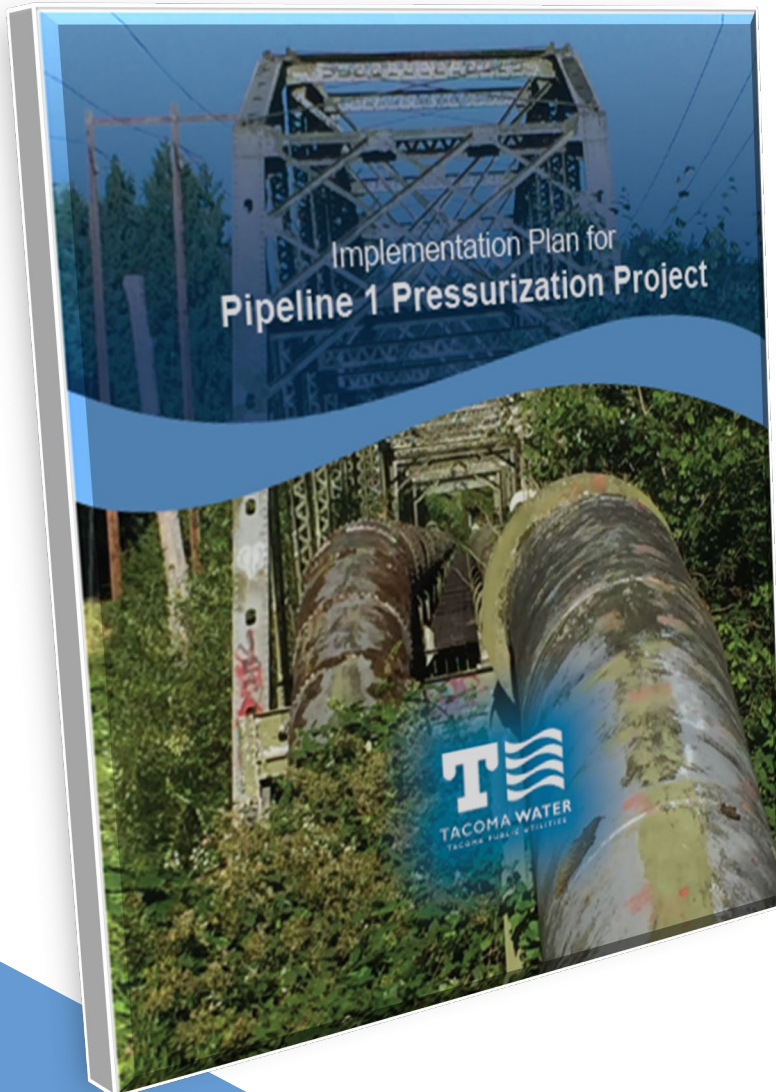


P1's Pressure Problem

Pipeline Flow Rate (MGD)	% of Pipeline Pressurized
26	~67%
36	~76%
48	~84%
~67	~100%



Implementation Plan

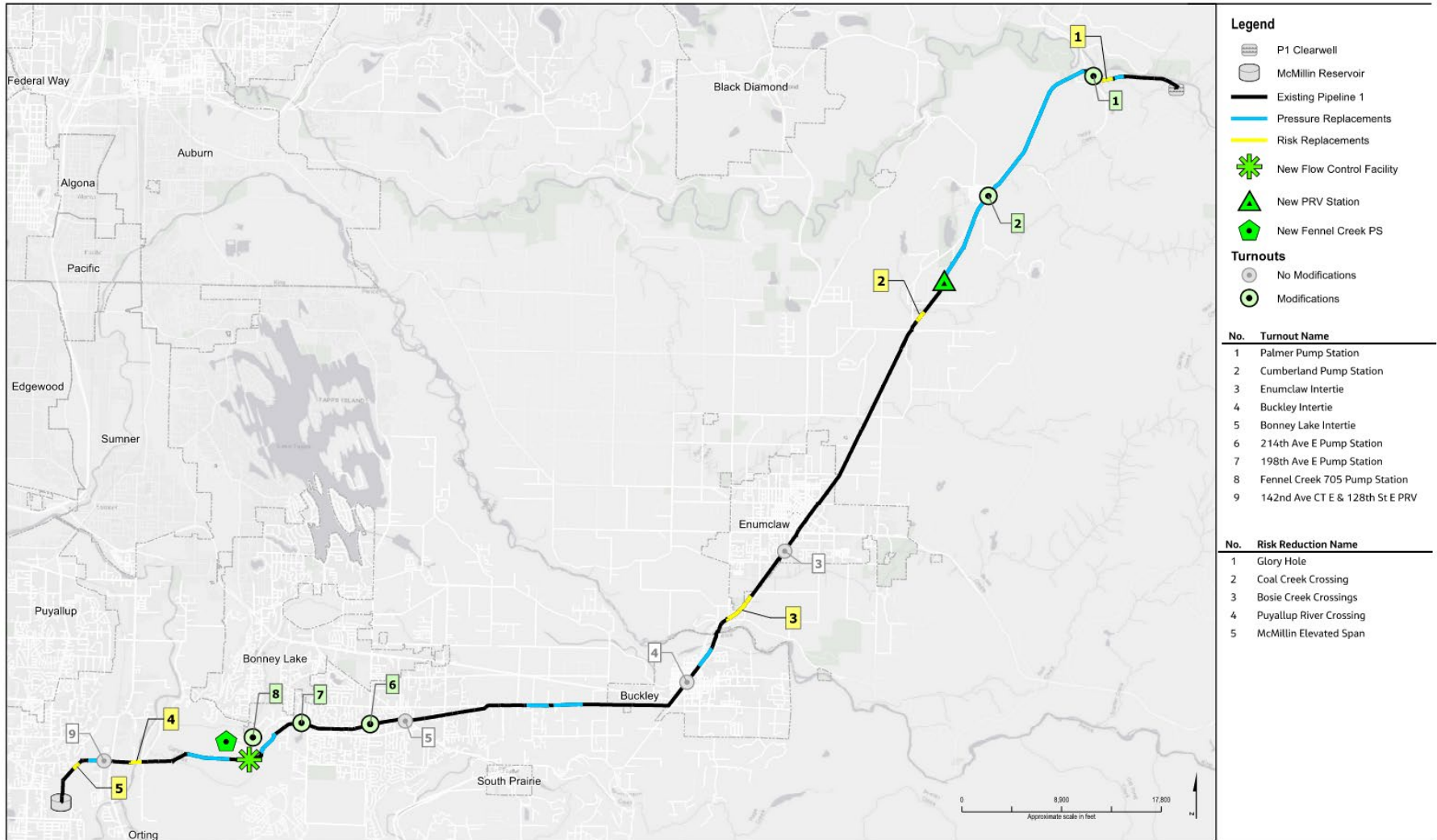


- Hired Consultant to evaluate Alternatives for P1 including:
 - Maintain existing alignment
 - Re-route to New Alignment
 - Abandon Sections of Pipe
- Identified a Preferred Alternative
 - Within existing alignment
 - Consists of pipeline replacement, flow control, and pumping facilities upgrades
 - 30-year schedule
 - \$114 Million base case for Financial Plan
 - Estimated cost of \$60 to \$225 Million* for pressurization

Note:

Class V Cost estimate Range – +50% on the low end and +100% on the high end. Only for pressurization not betterments associated the pipeline.

P1 Preferred Alternative



Bilateral Compliance Agreement

- 30-year executed Agreement to pressurize P1 by 2051
- Annual progress and monitoring reports



Next Steps

- Owner's Advisor Contract
 - Program Management Framework
 - Additional Analysis & Peer Review of Alternatives
 - Capital Project Sequencing
 - Pipe Condition Assessment Plan
- Conceptual Engineering Plan (2023-24)
 - Pipe Condition Assessment Execution
 - Engineering Design for Pipeline Replacement and Capital Facilities
 - Right-of-Way Study
- Design and Construction of New Pump Station (2023-25)



Acknowledgments

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Providing clean, reliable water

