

Sole Source Purchase Order(s) for Products and
Services with Pure Technologies U.S. Inc.
for 10-Year Pipeline Inspection and Rehabilitation
Program

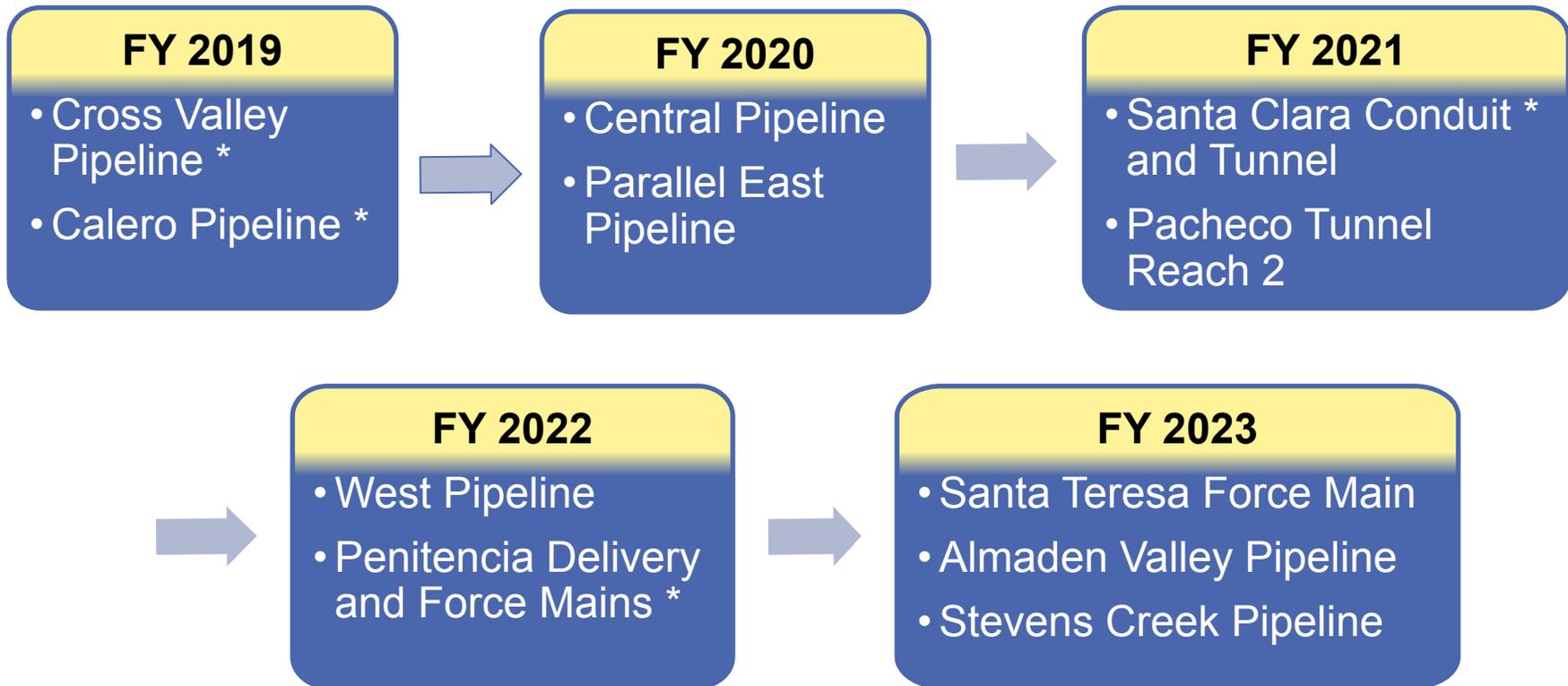
January 8, 2019



Attachment 3

10-Year Pipeline Inspection and Rehabilitation Program

Schedule thru Fiscal Year (FY) 2023:



* Proposed sole source Electromagnetic (EM) Inspection and Acoustic Fiber Optic (AFO) System(s) installation

2 | January 8, 2019, Sole Source Purchase Order(s) With Pure Technologies U.S. Inc.

Efficient and Reliable Operations

Board Ends Policy

E-2.2.1 Raw water transmission and distribution assets are managed to ensure efficiency and reliability.

EM Inspection

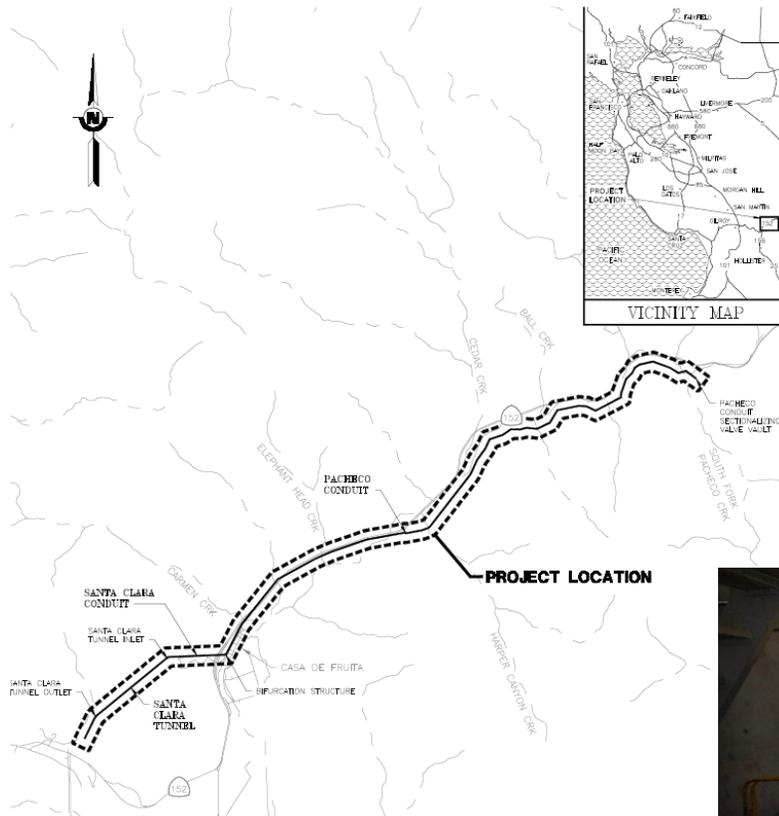
- ✓ Detects location and number of breaks in PCCP reinforcement wire
- ✓ Collects data to assess structural integrity and remaining service life in PCCP, at time of inspection

AFO System

- ✓ Real-time, acoustic monitoring 24-hours a day
- ✓ Collects data to compute rate of change in PCCP deterioration and inform further actions (e.g., pipeline shutdown)
- ✓ Supports efficient and reliable operations of raw water transmission mains.

* *EM and AFO are proprietary systems, patent held by Pure Technologies U.S. Inc.*

Accomplishments - Pacheco Conduit



Key:

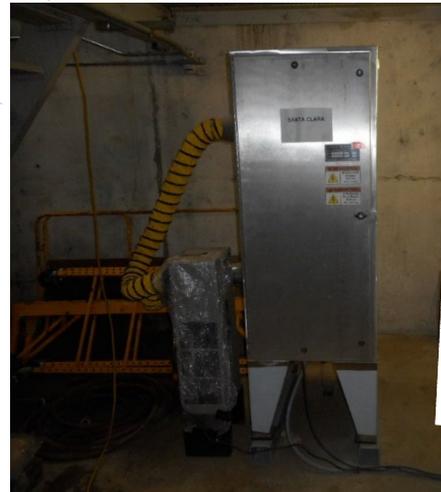
AFO – Acoustic Fiber Optic

EM – Electromagnetic

PCCP – Prestressed Concrete Cylinder
Pipe

Accomplishments – January 2018

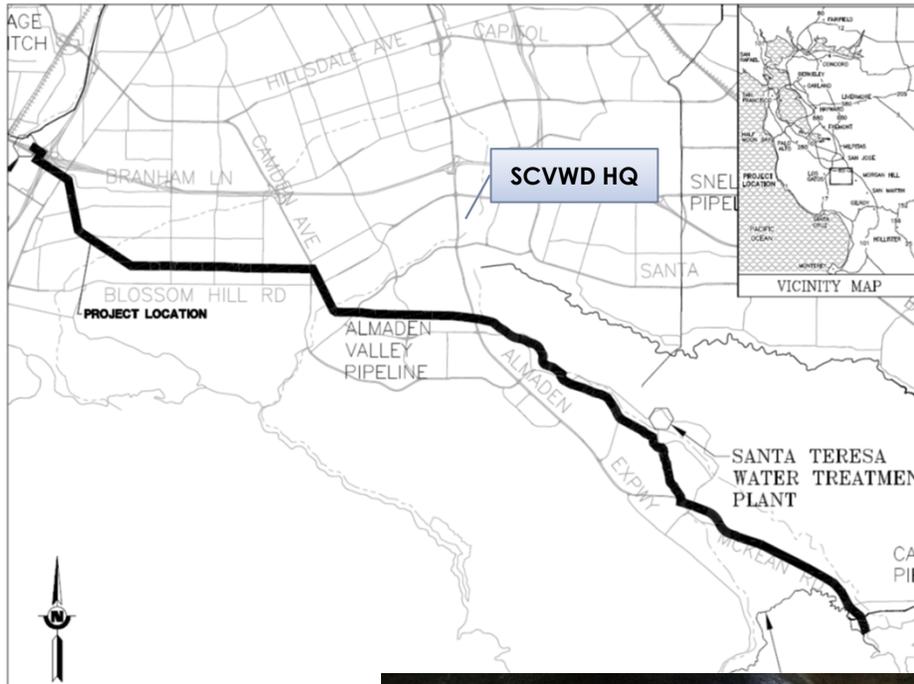
- ✓ Visual, Sounding, and EM Inspection: 7.9 miles of 120” diameter PCCP
- ✓ Repair/Replacement on pipe appurtenances
- ✓ Installed AFO System



Pacheco Conduit AFO System

4 | January 8, 2019, Sole Source Purchase Order(s) With Pure Technologies U.S. Inc.

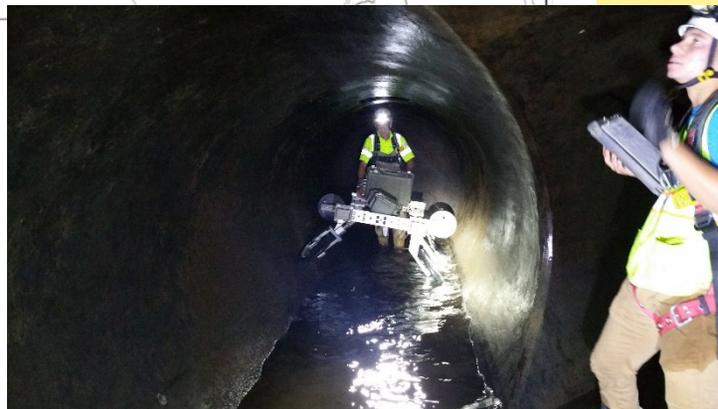
Accomplishments - Almaden Valley Pipeline



Accomplishments – March 2018

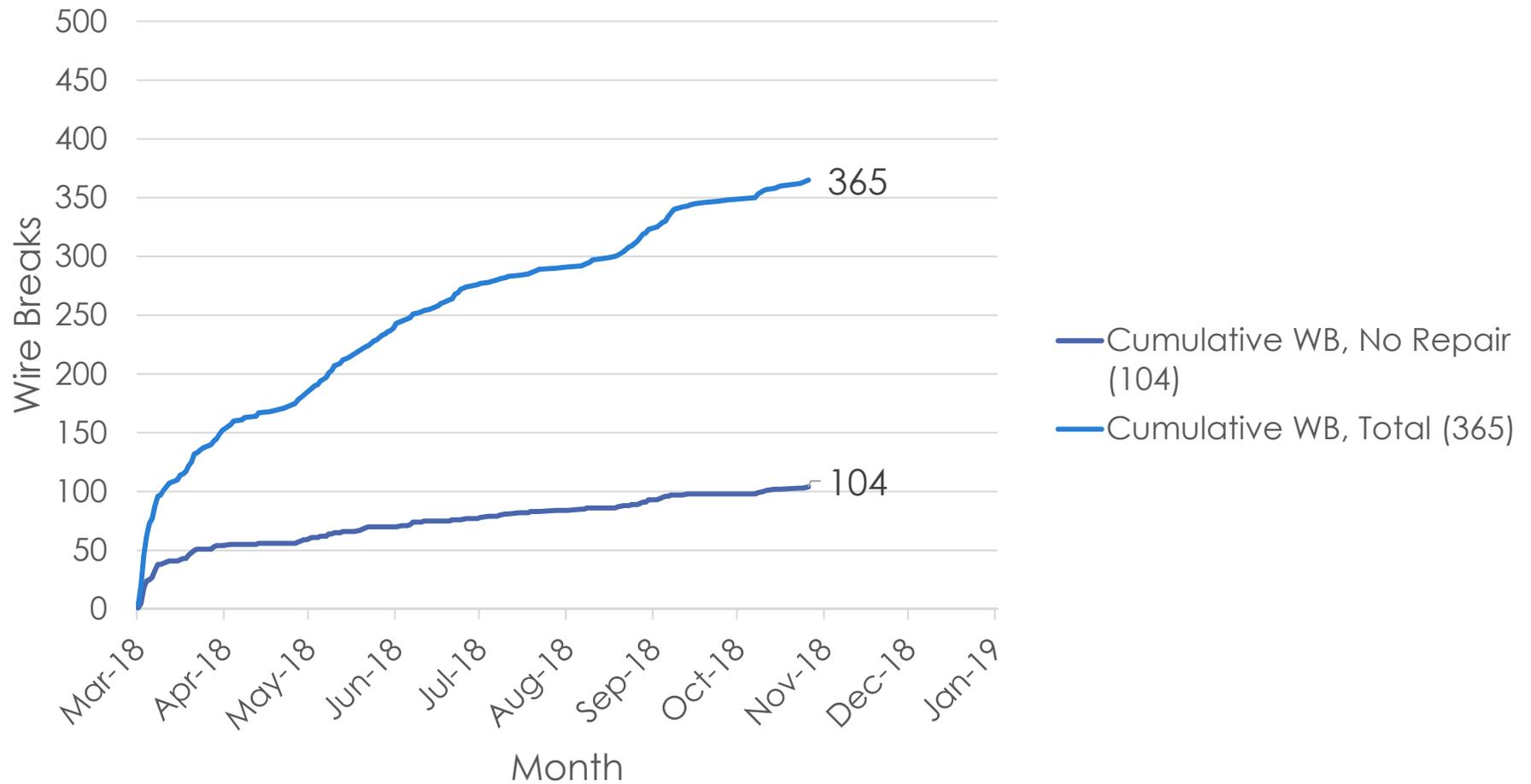
- ✓ Visual, Sounding, and EM Inspection: 11.6 miles of 72/78" diameter PCCP & WSP
- ✓ Repair/Replacement on 93 pipe appurtenances
- ✓ Installed AFO System
- ✓ Emergency pipe repair, 81 pipe segments (~ 0.4 miles)

Visual, Sounding and EM Inspection



AFO Provides for Real-Time Monitoring

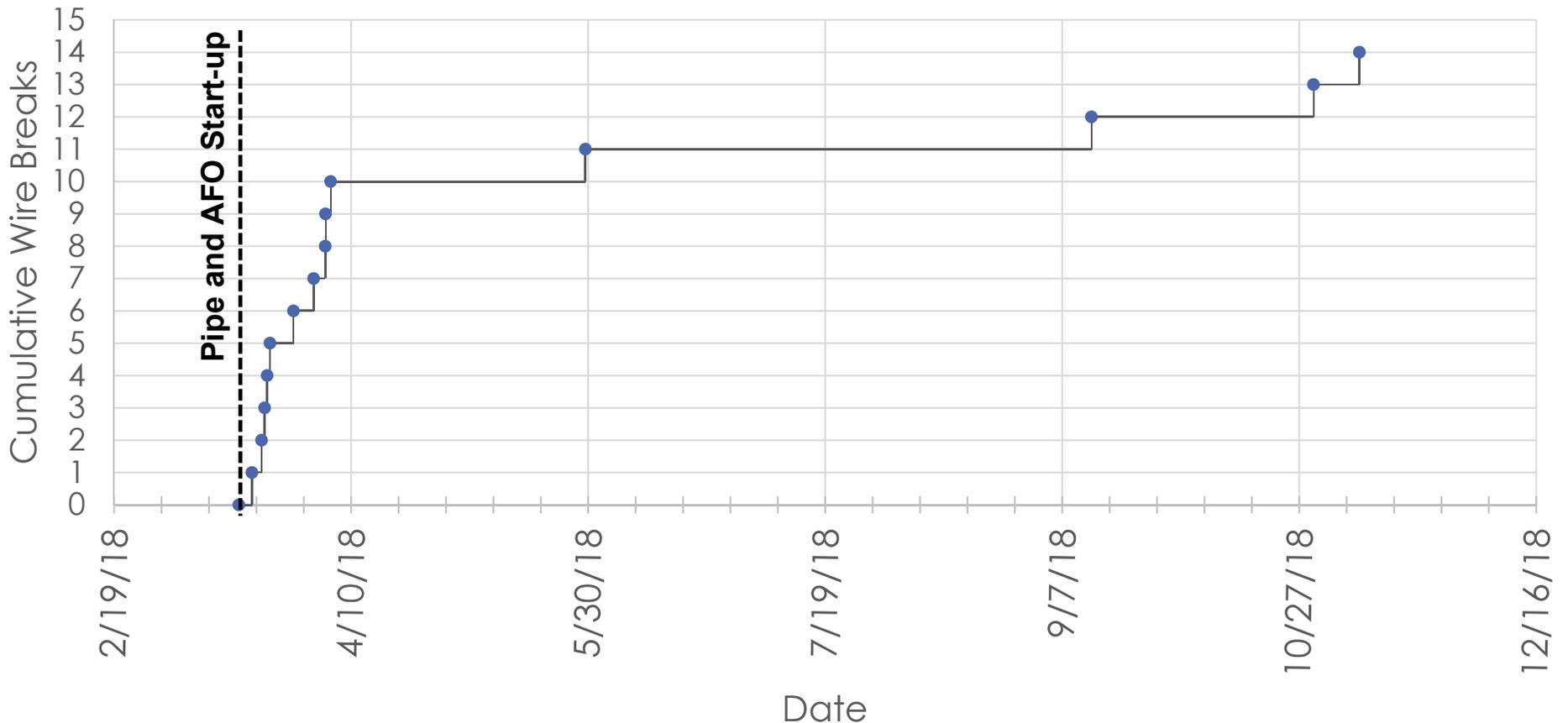
AFO Cumulative Wire Break Summary
Updated - 11/12/18



AFO Monitoring Sample

AFO System – Almaden Valley Pipeline (Pipe 525)

- ✓ 2017 EM Inspection: No wire breaks detected
- ✓ November 2018: 14 cumulative wire breaks



Recommendation

- Authorize the Chief Executive Officer (CEO) to negotiate, execute, and amend purchase order(s) as-needed with Pure Technologies U.S. Inc. (Pure) for the sole source purchase of Electromagnetic (EM) Inspections, Acoustic Fiber Optic Monitoring System(s) (AFO System) installation, and AFO System Services for the 10-Year Pipeline Inspection and Rehabilitation Program (Program), Project No. 95084002, for up to \$13,880,314.