



Valley Water

Clean Water • Healthy Environment • Flood Protection

Valley Water PPT Template
Version Release v.2.02

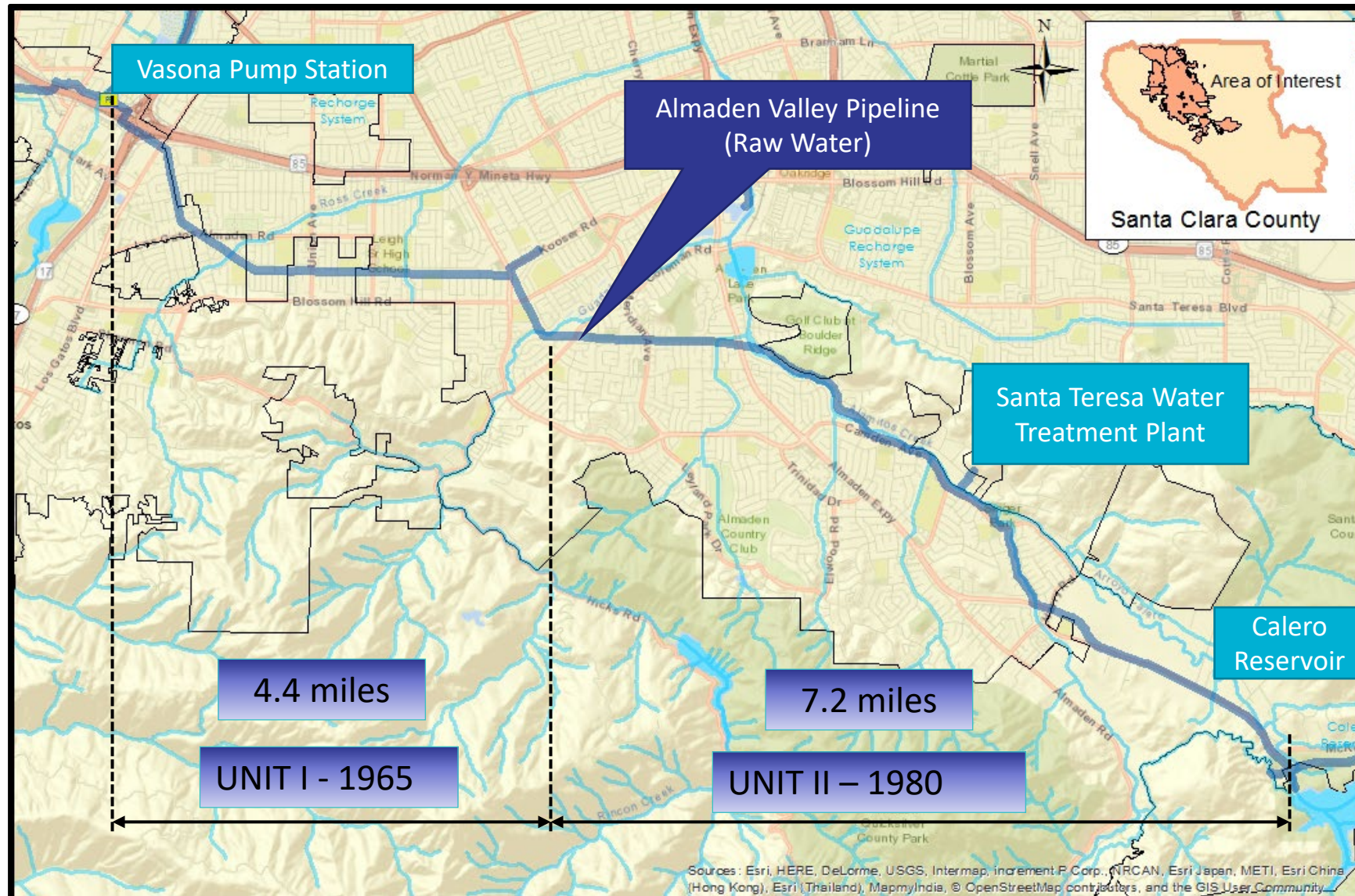


Almaden Valley Pipeline Condition Update

Presented by: Raw Water Division

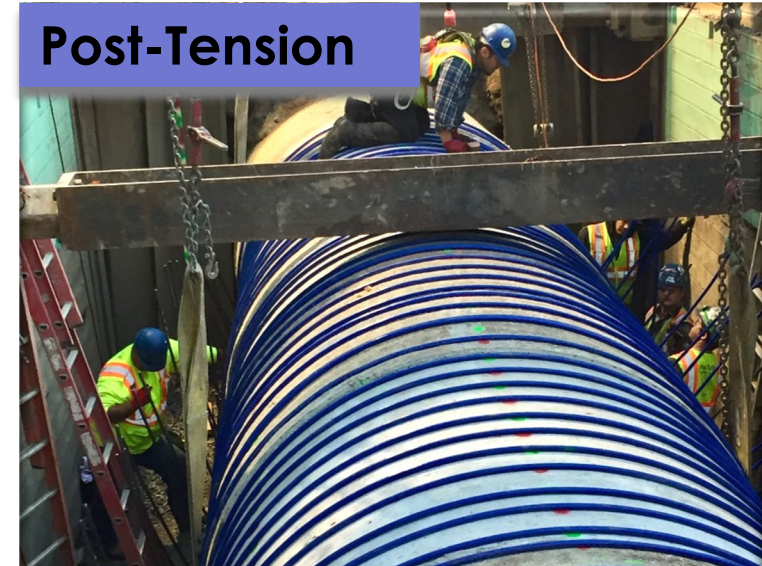
Almaden Valley Pipeline Location

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Historical Overview

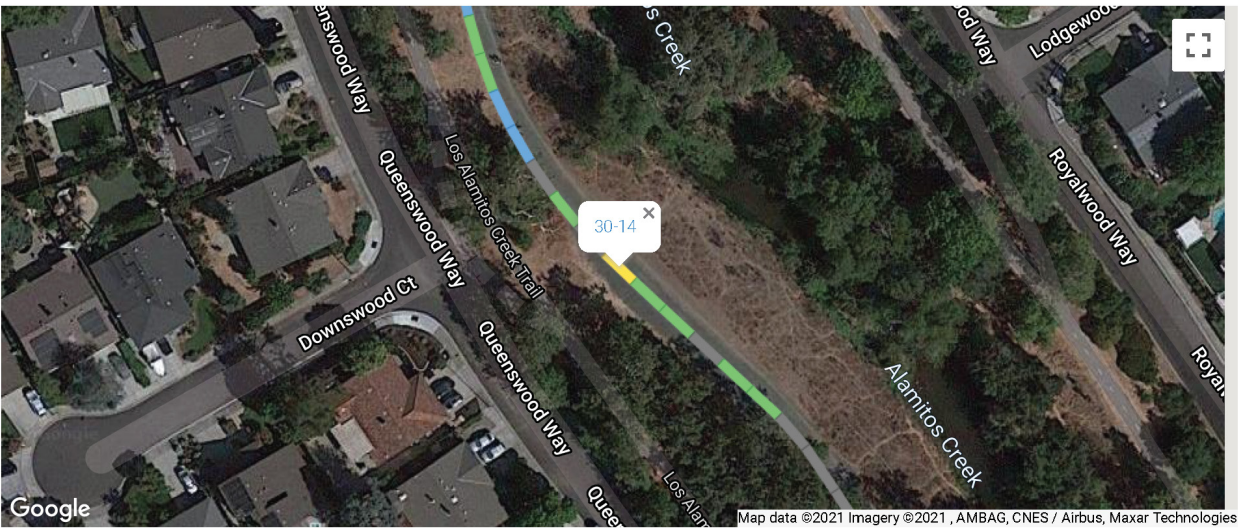
- Procure PCCP Monitoring and Condition Assessment Technology (Apr. 2017)
- Inspection and Rehabilitation Project (Sept. 2017)
 - Hydrogen Embrittlement
- Emergency Repair (Dec. 2017)
 - 81 PCCP Pieces
- Emergency Repair (Dec. 2019)
 - 5 PCCP Pieces



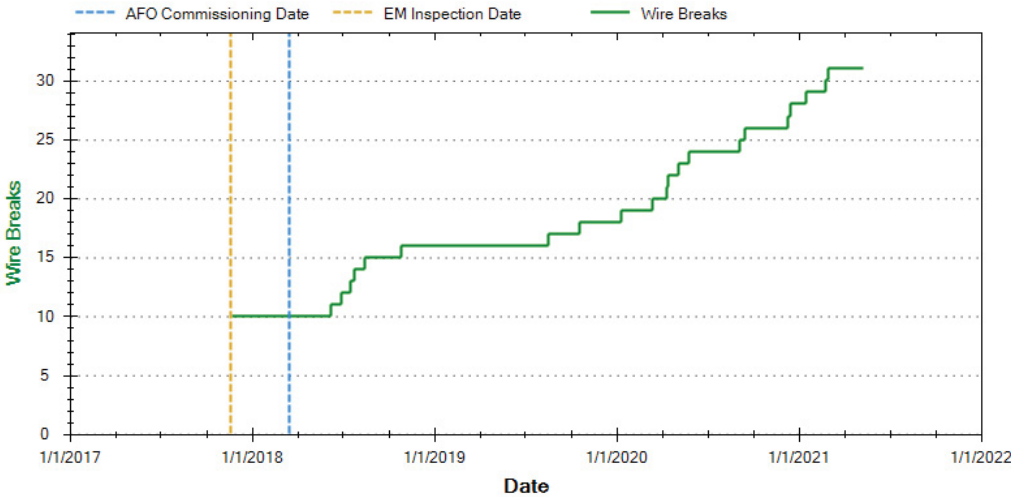
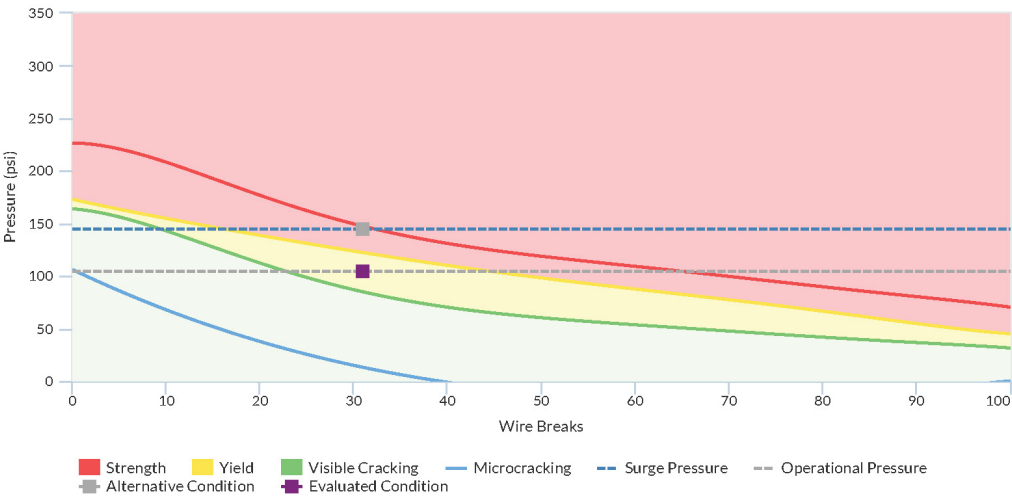
Continuous Monitoring and Assessment

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Map



- AFO Monitoring
- Pressure Monitoring
- Finite Element Modeling



Continuous Monitoring and Assessment

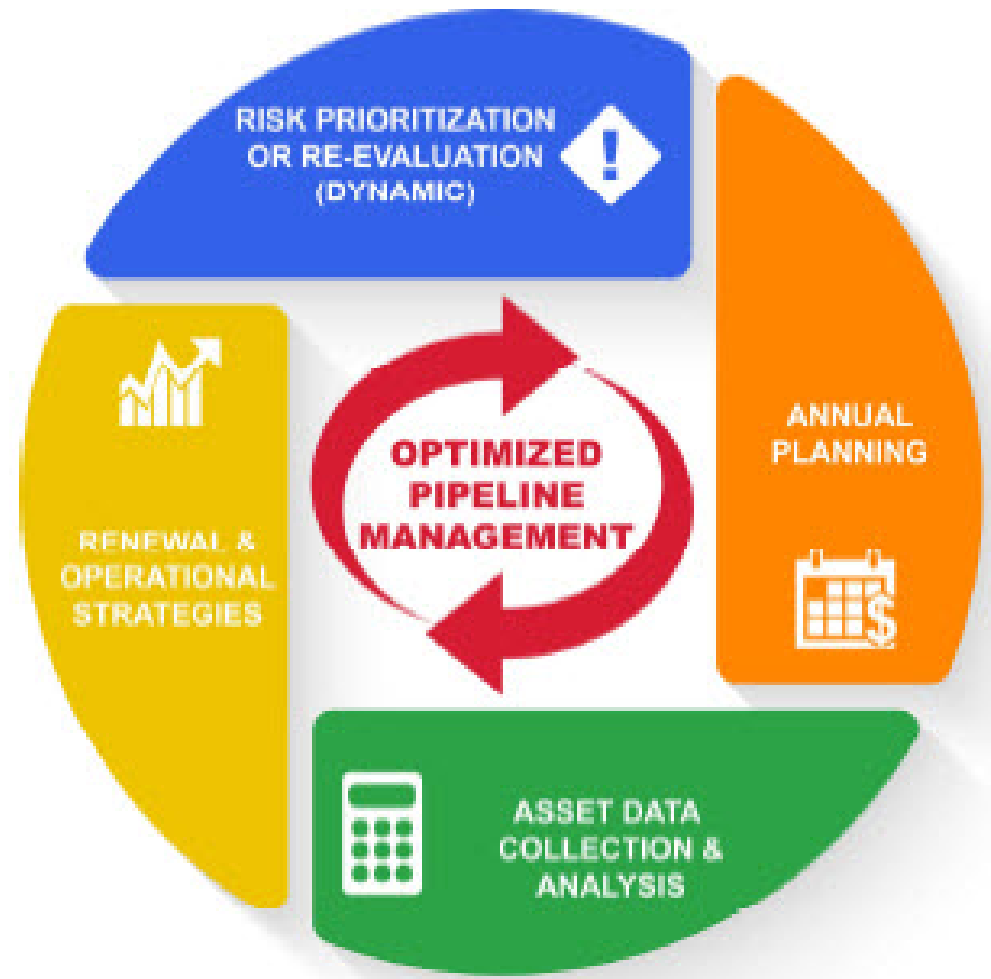
Monthly Wire Break Watchlist April 2021						
Pipe No.	Class	Wire Breaks Per 01/14/20 EM Scan	AFO Wire Breaks After 01/14/20 EM Scan	Total Wire Breaks	Wire Breaks at Pipe Yield Threshold (SGH)	Wire Break Deterioration % (Total/Yield Threshold)
264	8-200-16ga	25	1	26	35	74%
386	8-200-16ga	2	3	5	35	17%
387	8-200-16ga	2	7	9	35	26%
389	8-230-16	9	2	11	37	30%
401	10-200-16	10	5	15	40	38%
439	10-230-16*	15	0	15	N/A	N/A
518	15-230-16	35	8	43	65	66%
519	15-230-16	41	23	64	65	98%
525**	20-230-16	30	19	49	N/A	N/A
526	20-230-16	35	5	40	84	48%
530	20-230-16	10	1	11	84	13%
538	W10-260-1/4	14	0	14	60	23%
570	5-260-16	5	0	5	32	16%
571	5-260-16	10	0	10	32	32%
594	5-260-16	7	4	11	32	34%
596	5-260-16	19	12	31	32	97%
641	W10-260-16ga	9	11	20	41	49%

*No structural curve developed for this pipe class.
 ** Pipe segment with Nozzle and wrapper plate. Uncertain EM Data.

- AFO Monitoring Indicates PCCP Pieces Continue to Degrade.
- Actively Tracking Rate of Degradation.
- PCCP Pieces Approaching Severely Distressed Conditions per Finite Element Modeling.

Current Almaden Valley Pipeline Work

- Continue Monitoring and Condition Assessment
- Update Risk Assessment and Repair Prioritization
- Prepare for Nov./Dec. 2021 CFRP Repairs
- Capital Projects
 - FY23 AVP Inspection and CFRP Repair Project
 - AVP Replacement Project



QUESTIONS





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