Pomona, MVWD and IEUA Recycled Water Intertie

September 2017

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

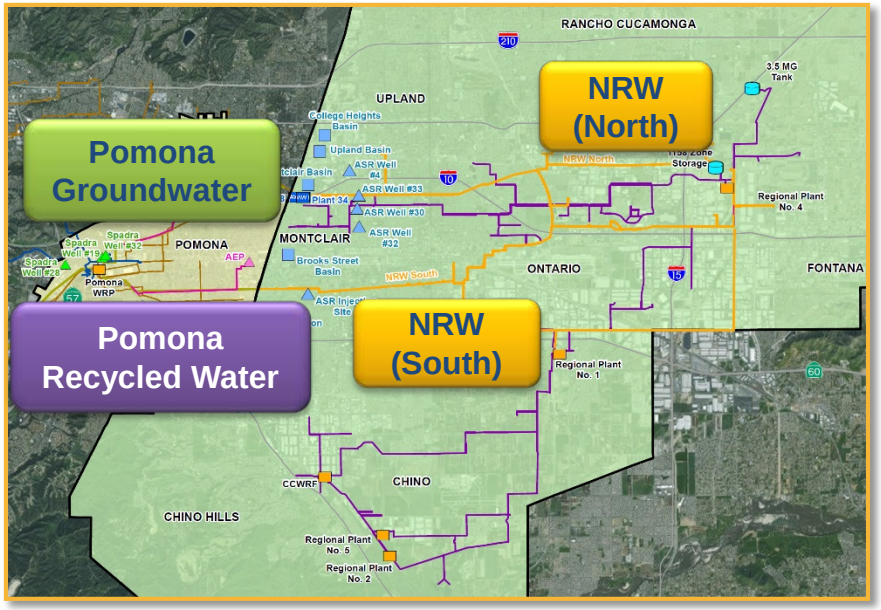
Monte Vista Water District

Project Background

- Collaboration between the City of Pomona, MVWD and IEUA
- Evaluating long-term water supply options
- Project will maximize the beneficial use of recycled water
- Addresses land subsidence in GMZ-1
- Completed Phase 1 Feasibility Study for a potential RW intertie
- Phase 2 Study with partial funding through Prop 13 ($75k)

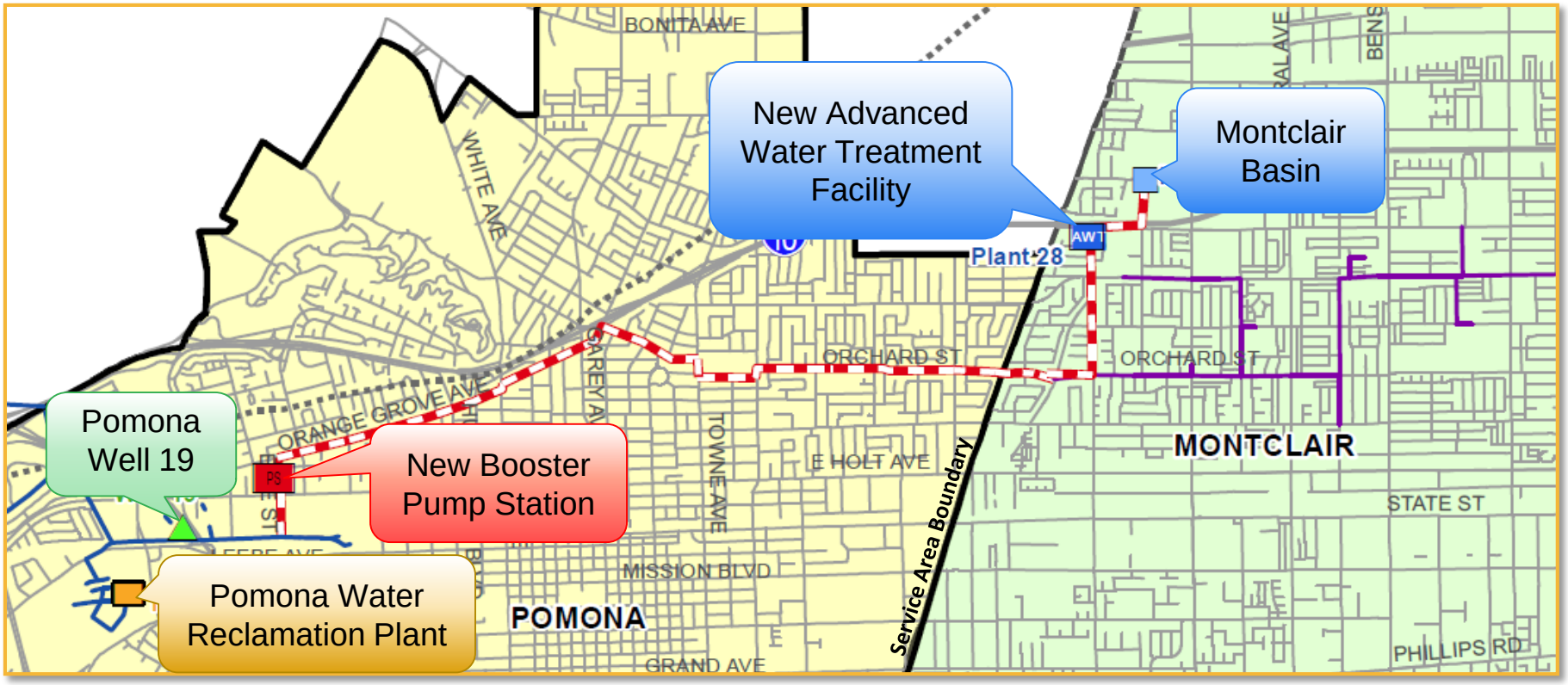
Feasibility Study
Phase 1

- Supply sources evaluated:
  - Recycled water from Pomona's Water Reclamation Plant
  - Groundwater (GW) from Pomona's Spadra Well 19
  - Non-Reclaimable Wastewater (NRW)
- Land subsidence improvements
- Water quality considerations
- Regulatory impacts
- Facilities required



Phase 1: Supply Sources

Top-Ranked Alternative



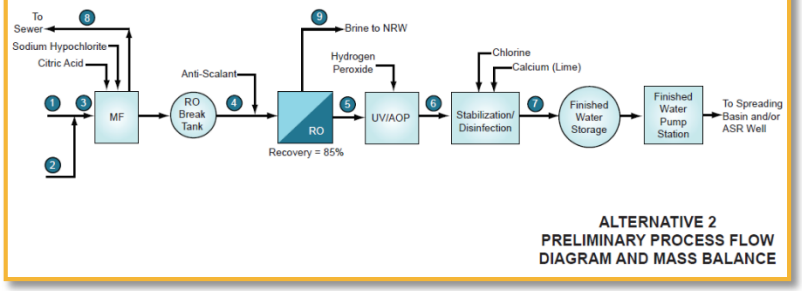
Top-Ranked Alternative

Supply Sources	• 3.2 mgd (Pomona) • 0.5 mgd (Spadra Well 19) • 3.7 mgd (Total)
Advanced Treatment	• MF/RO/UV-AOP • 3.7 mgd (Supply Total) – 0.6 mgd (Brine) = 3.1 mgd (Treated Flow) • 3,500 AFY (Beneficial Use Potential)
Beneficial Use Type	• GWR at Montclair Basin • Direct Use
Existing Infrastructure	• IEUA's RW System (connection at Orchard St) • MVWD Plant 28 Site (for AWT Plant)
Proposed Infrastructure	• Approximately 6 miles of pipeline • Pump stations (w/ land acquisition) • AWT facility (at MVWD Plant 28 Site) • Future injection wells

Feasibility Study
Phase 2

- In-depth technical evaluation of top-ranked alternatives
  - Consider use of existing pipelines
  - Siting for advanced water treatment facility
  - Siting for future injection wells
  - Potential layout schematic
  - Cost estimates
- Groundwater modeling
  - Land subsidence improvements
  - Time to nearest well
  - Water quality impacts

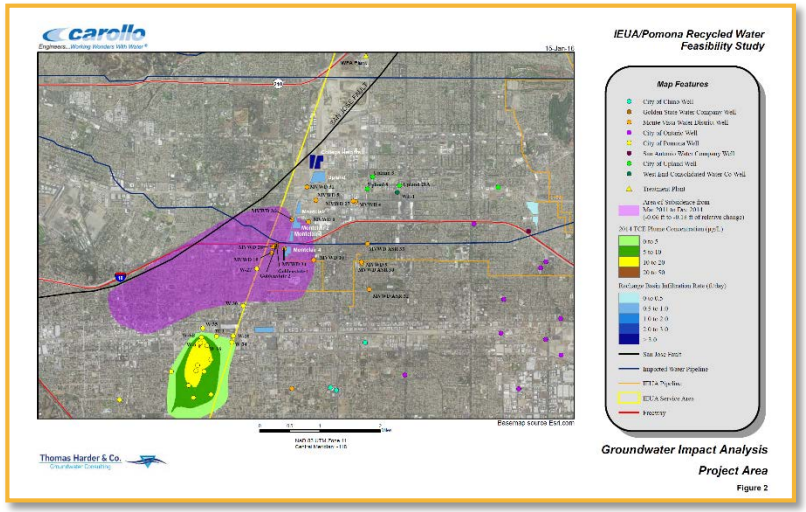
		1	2	3	4	5	6	7	8	9
		PRW	Well 19	Combined	MF Effluent	RO Permeate	UV Effluent	Finished Water	MF Backwash	RO Brine
Flow	mgd	3.2	0.5	3.7	3.7	3.1	3.1	3.1	0.1	0.6
TDS	mg/L	571	670	583.4	583.4	16.0	16.0	50.0	583.4	4,420
BOD	mg/L	<3	0	<3	<3	<3	<3	<3	<3	<3
TSS	mg/L	<2.5	0	<2.5	<1	<1	<1	<1	-	<1
pH		7.3	7.3	7.3	7.3	5.6	5.6	7.5	7.3	7.9
Calcium	mg/L	68	130	75.8	75.8	0.6	0.6	34.0	75.8	505
Sodium	mg/L	103	29	93.8	93.8	3.3	3.3	3.3	93.8	610
Chloride	mg/L	136	47	124.9	124.9	1.8	1.8	1.8	124.9	826



Preliminary Process Flow and Mass Balance

Project Status

- Phase 1 Feasibility Study completed
- Phase 2 Feasibility Study
  - Kickoff held in September
  - Groundwater modeling: June 2018
  - Technical evaluation: June 2018



Preliminary Groundwater Impact Analysis

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