

Pasadena Non-Potable Water Project (Recycled)

**Los Angeles Chapter of the WaterReuse Association
Bi-Monthly Meeting**

April 12, 2016





Pasadena Water Demand & Supply

Pasadena Water and Power

Pasadena Water and Power

- 166,500 customers
- > 37,000 service connections
- Water demand - 30,000 AFY
- Water supply
 - ✓ 60% MWD - Bay Delta and Colorado River
 - ✓ 40% Raymond Basin groundwater





History of Recycled Water in Pasadena

Pasadena Water and Power

- 1993 - agreement w/Glendale: 6,000 AFY
- 1995 - project on hold
- 1996 - USBR Title XVI Program
- 2003 - \$0.5 M - federal grant
- 2005 - feasibility study: project not feasible
- 2006 - de-obligation of grant
- 2008 - Water Reclamation Task Force

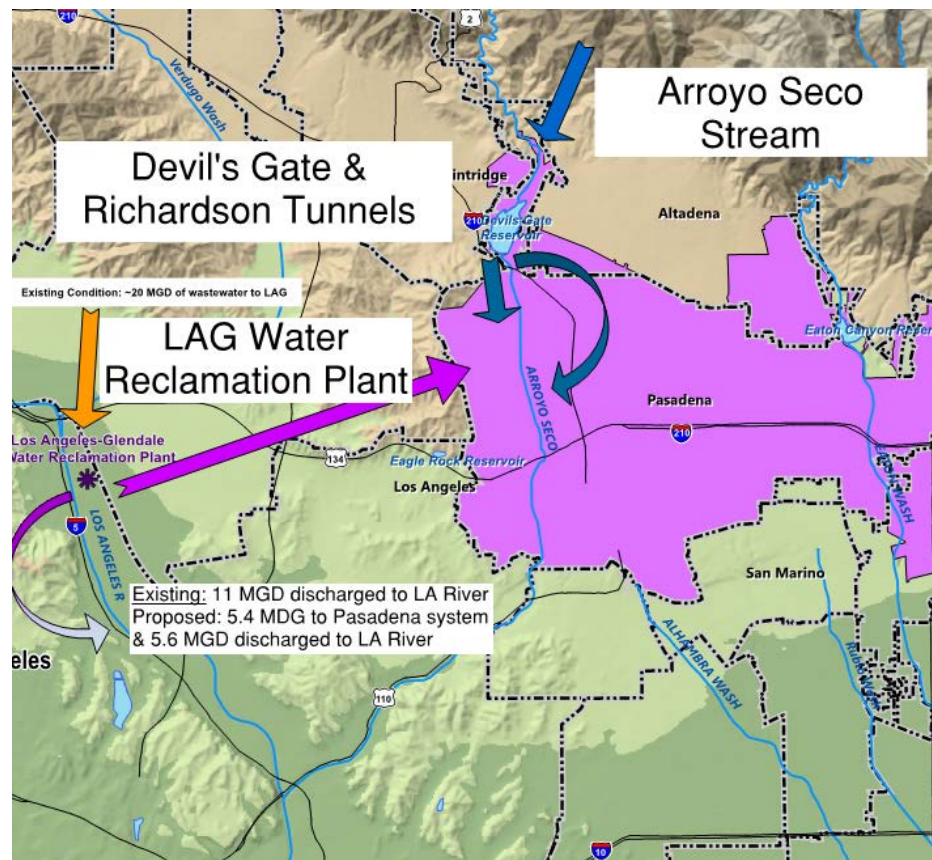


Pasadena Non-Potable Water Project

Pasadena Water and Power

New \$50 Million Non-Potable System

- 6 phases
- 25 years
- 3 water sources
- 3,060 AFY
- 10% of demand





Recycled Water Supply - LAGWRP

Pasadena Water and Power



Capacity 20 MGD (20,000 AFY)
Owned by LA & Glendale (50/50)
Connection point: Scholl Canyon





Tunnel Water Supply

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Devil's Gate and Richardson Tunnels

- Built 1891 - 1903
- Supply of 3,400 AFY
- Discontinued in the 1930s
- Devil's Gate 1971 - 1999 Irrigation
- Estimated supply - 430 AFY



PASADENA



Stream Water Supply

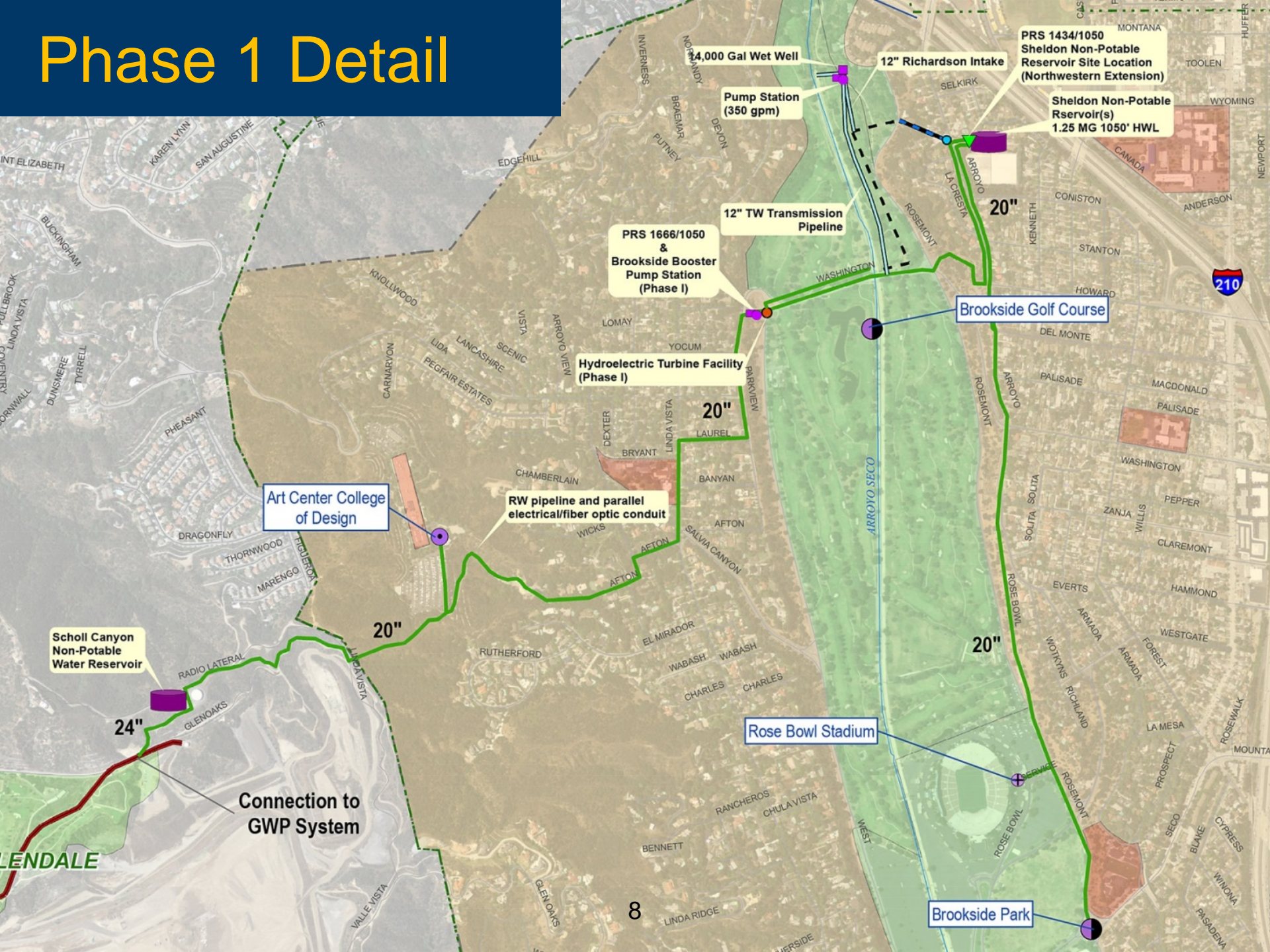
Pasadena Water and Power

Arroyo Seco Stream

- Irregular Flow
- Currently recharged in Arroyo Seco spreading basins
- Estimated supply - 1,200 AFY



Phase 1 Detail

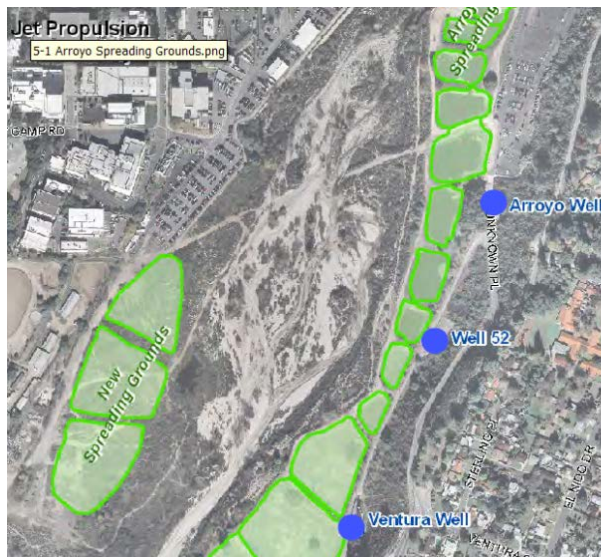




Indirect Potable Reuse

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- Maximizes RW use - 5,000 AFY
- Arroyo Seco
 - ✓ Cannot meet min. travel time of 12 mo
 - ✓ Groundwater contamination
- Eaton Canyon
 - ✓ 80% spreading credits
 - ✓ Twombly well > 36 months travel time







EIR Process

Pasadena Water and Power

- NOP Aug 2014
- 2 Scoping Meetings Sep 2014
- Draft EIR Public Review 75 days
 - ✓ 112 public comments
- 2 Public Meetings Aug 2015
- Final EIR:
 - ✓ Dec 24, 2015 - in print at 5 locations
 - ✓ Feb 22, 2016 - certified



Alternative Route Evaluation





Tentative Project Schedule

Pasadena Water and Power

- Alternative routes Summer 2016
- Final design Fall 2016
- Permits 2016 - 2017
- Funding 2016 - 2017
 - ✓ Prop 1 and CWA SRF Loan
 - ✓ USBR Title XVI FY 2016 grant
 - ✓ MWD LRP – pending route evaluation
- Construction NTP 2017



Thank you

Pasadena Water and Power

- Questions?

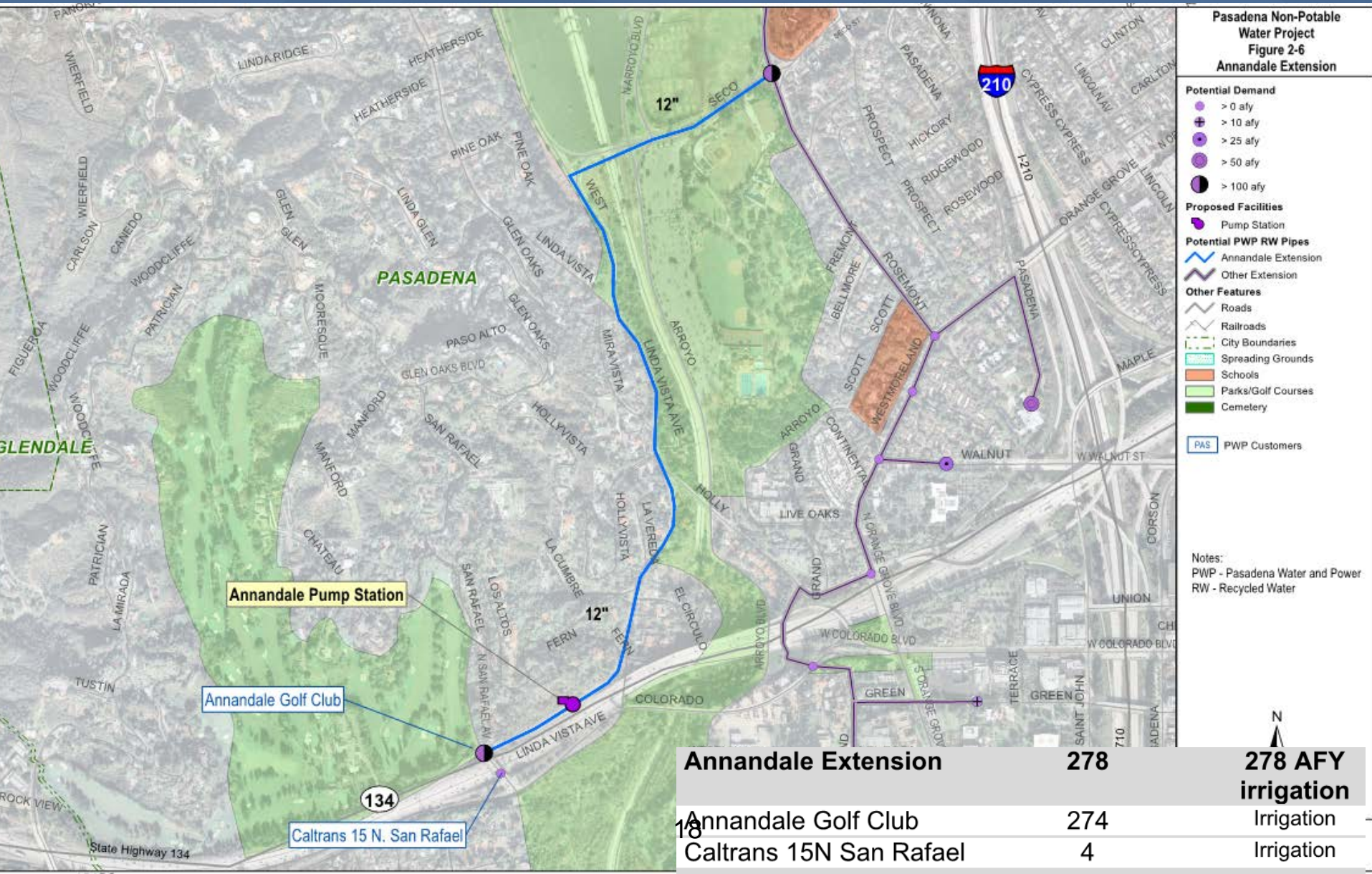






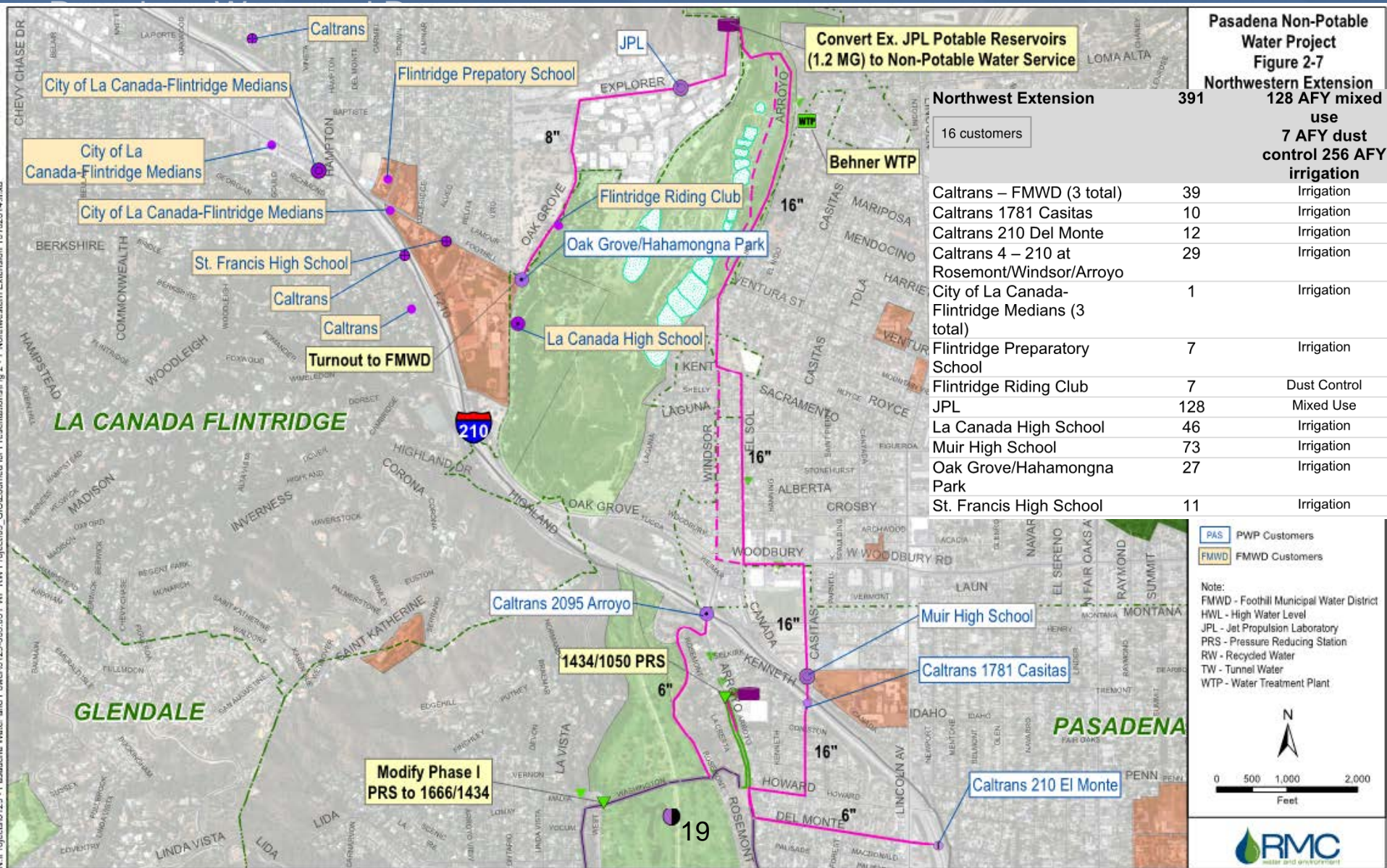


Phase 4 – Annandale Extension





Phase 5 – Northwestern Extension





Phase 6 – Northeastern Extension

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