



PURE WATER PROJECT  
LAS VIRGENES-TRIUNFO

Bringing Our Water Full Circle

# Pure Water Project Las Virgenes-Triunfo

Calleguas-Las Virgenes PFA and Joint CMWD-LVMWD Board  
Meeting

Oliver Slosser, PE – Program Manager

July 2023

# Agenda

- Why Pure Water?
- Pure Water Project Overview
- Augmentation
- Calleguas – Las Virgenes Interconnection
- Public Outreach
- Schedule and Procurement



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# Why Pure Water?

# JPA's Pure Water Project has Three Core Objectives

## Protect Malibu Creek

- Comply with more stringent regulatory requirements for discharging to Malibu Creek
- Divert flows from Tapia WRF

## Create a Local Drinking Water Source

- Maximize reuse with reservoir water augmentation
- Create a viable resource to supplement the region's water supplies

## Balance Seasonal Variation

- Balance seasonal variation of recycled water demand
- Manage salinity in the region with new Advanced Water Purification Facility (AWPF), conveyance, and concentrate management





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# Pure Water Project Overview

# Pure Water Project's Unique Features

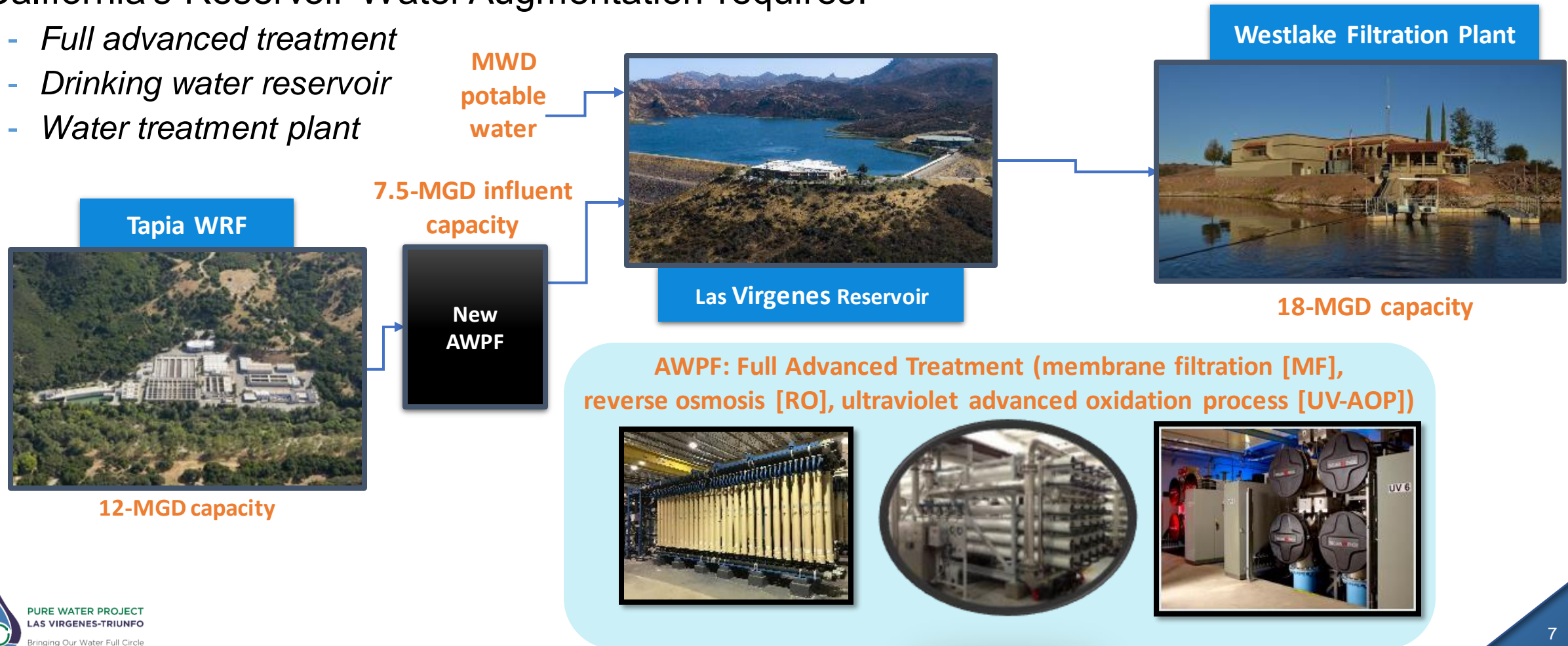
- California reservoir water augmentation (surface water source augmentation project)
- Facility locations require significant conveyance
- Unitization of existing infrastructure
- AWPf will:
  - Serve as a discharge mechanism for Tapia WRF
  - Receive seasonally variable flowrates (same source as Title 22 flows)

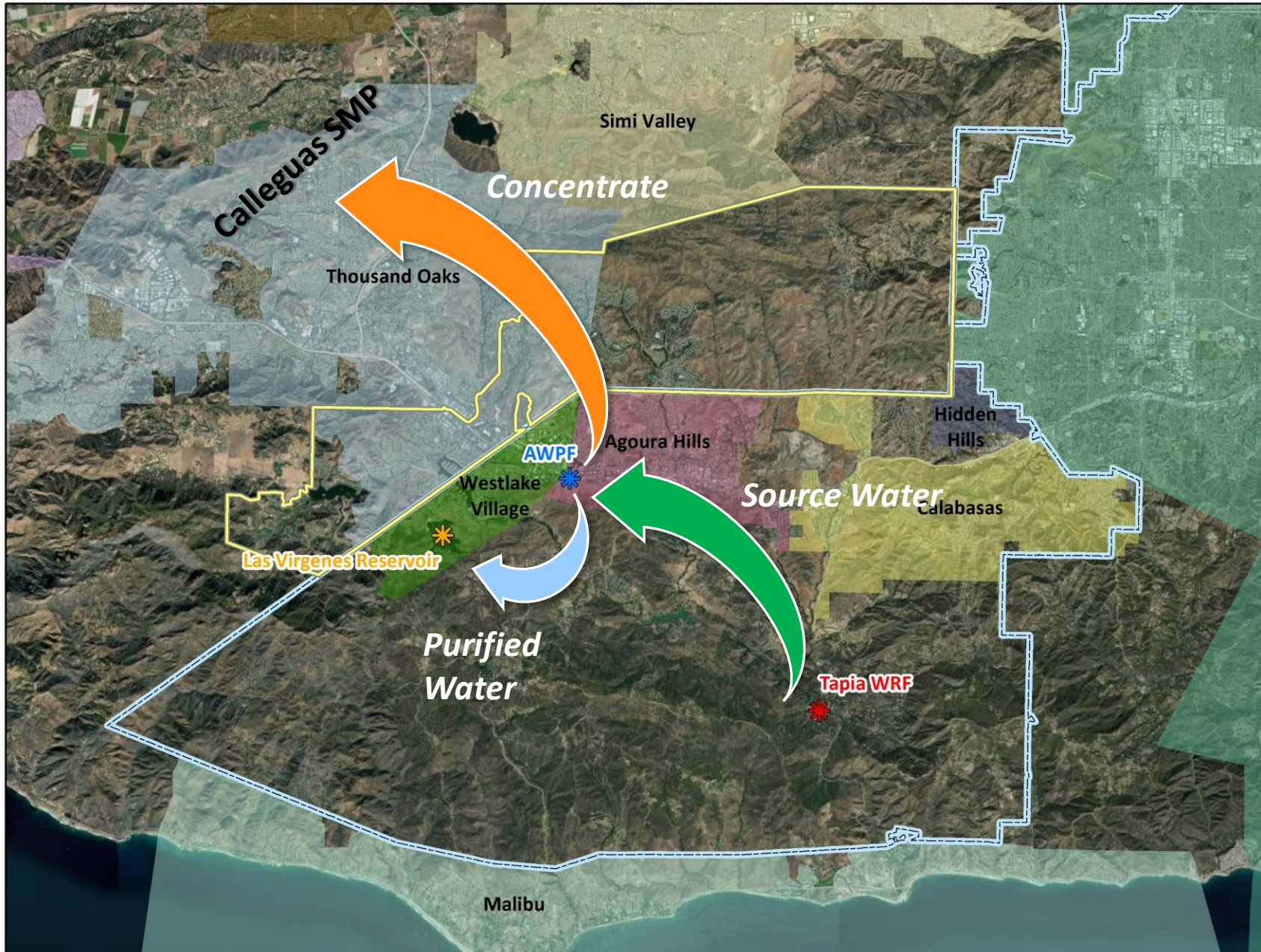


# Pure Water Project Elements

- California's Reservoir Water Augmentation requires:

- Full advanced treatment
- Drinking water reservoir
- Water treatment plant





- AWPf Site on Agoura Rd
- Main conveyance
  - Source Water from Tapia WRF
  - Purified Water to Las Virgenes Reservoir
  - Concentrate to Calleguas Salinity Management Pipeline (SMP)
- Conveyance corridors are similar for both sites





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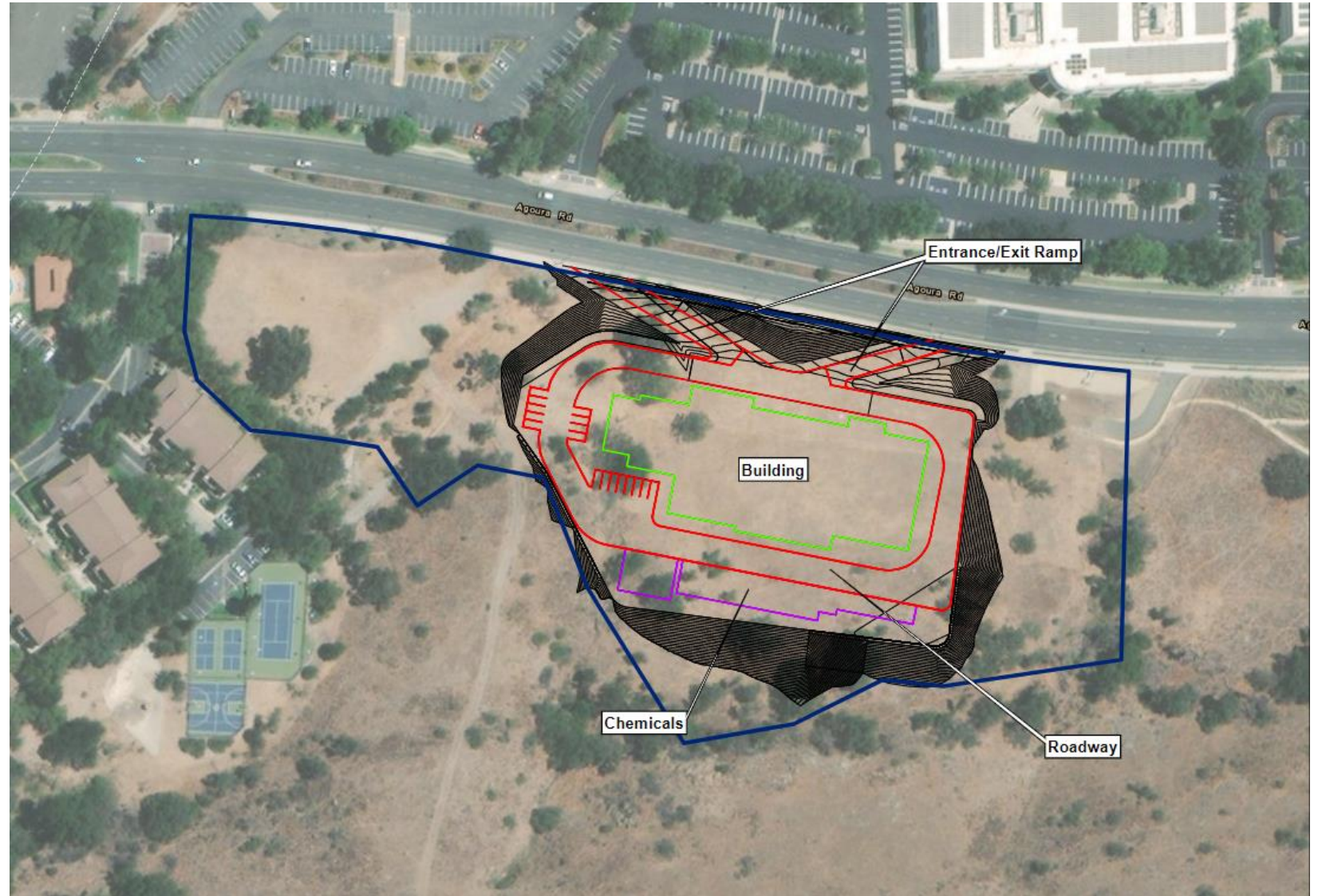
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*AWPF*

# Project Location: 30800 Agoura Road in City of Agoura Hills



# AWPF at Agoura Road Site



Sources: ESRI World Topo Map; ESRI World Street Map

# AWPF at Agoura Road Site





# AWPF at Agoura Road Site



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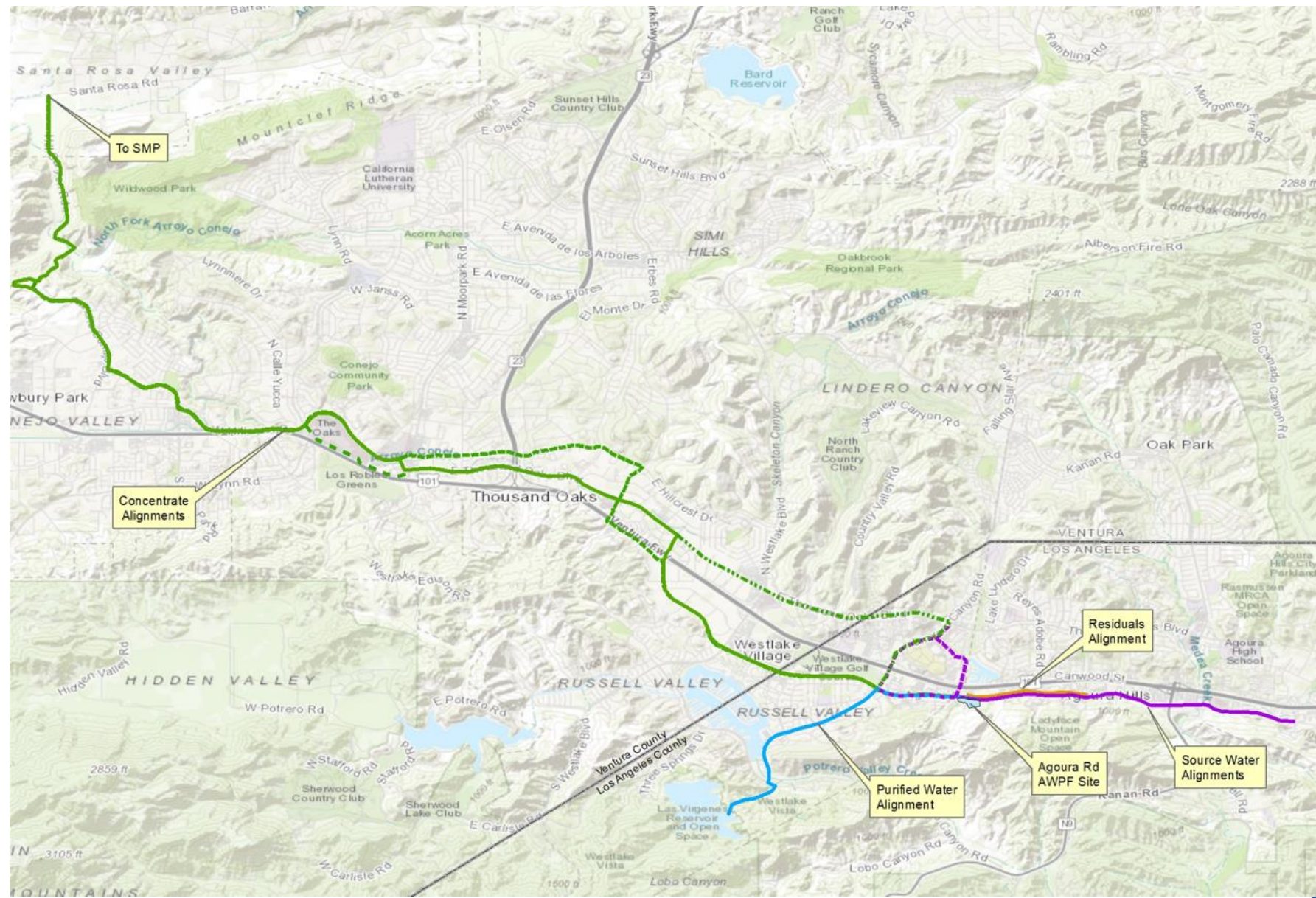
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# *Conveyance*

# Conveyance Overview

- Source Water
- Purified Water
- Concentrate
- Residuals

≈ 20 miles of pipelines



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

# Concentrate Pipeline

- Several Alternatives are being considered
- Finding alternatives that minimize impacts to residents and businesses, and minimize construction time







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# Augmentation

# Augmentation Sources



- Additional Sources of water for the AWPf are currently being investigated including:
  - *Impaired groundwater from neighboring agencies, such as the Los Robles Wells in Thousand Oaks, CA*
  - *Excess Reclaimed water from Hill Canyon Treatment Plant*
  - *Stormwater and dry water diversions that may help neighboring cities meet their MS4 requirements*
- These sources will help maximize use of the AWPf, create more local water, improve operability of the AWPf, and help neighboring cities and agencies meet their regulatory requirements
- Initial expansion is maximizing seasonal utilization



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# Calleguas – Las Virgenes Interconnection

# Calleguas – Las Virgenes Interconnection and the Pure Water Project



- The CMWD LVMWD Interconnection will facilitate regional partnerships and give LVMWD ability to wheel water between agencies and to TWSD
- MOU between CMWD, LVT JPA, Camrosa, and City of Thousand Oaks signed in May 2022.
- Opportunities for flow augmentation and the ability to transfer water between these agencies is bolstered by the interconnection and will achieve the goals set forth in the MOU



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# Public Outreach

# Public Outreach Efforts to Date

- 5 "Taste The Water, Explore The Garden" Tours
- 31 Pure Water School Tours
- 57 Pure Water Tours (General Public)
- 26 Pure Water Tours for consultants, water boards and staff, and politicians' staffs
- 2021 Earth Day – Virtual Garden Tour featuring Urban Water Group, Inc.
- 2022 Earth Day – Pure Water Demo Facility & Sustainability Garden Tour
- Pure Water Tasting Series Pt. 1 – “Pure Coffee” – 3 Pure Water Tours
- Pure Water Tasting Series Pt. 2 – “Pure Gelato” – 5 Pure Water Tours
- Pure Water Tasting Series Pt. 3 – “Pure Beer”

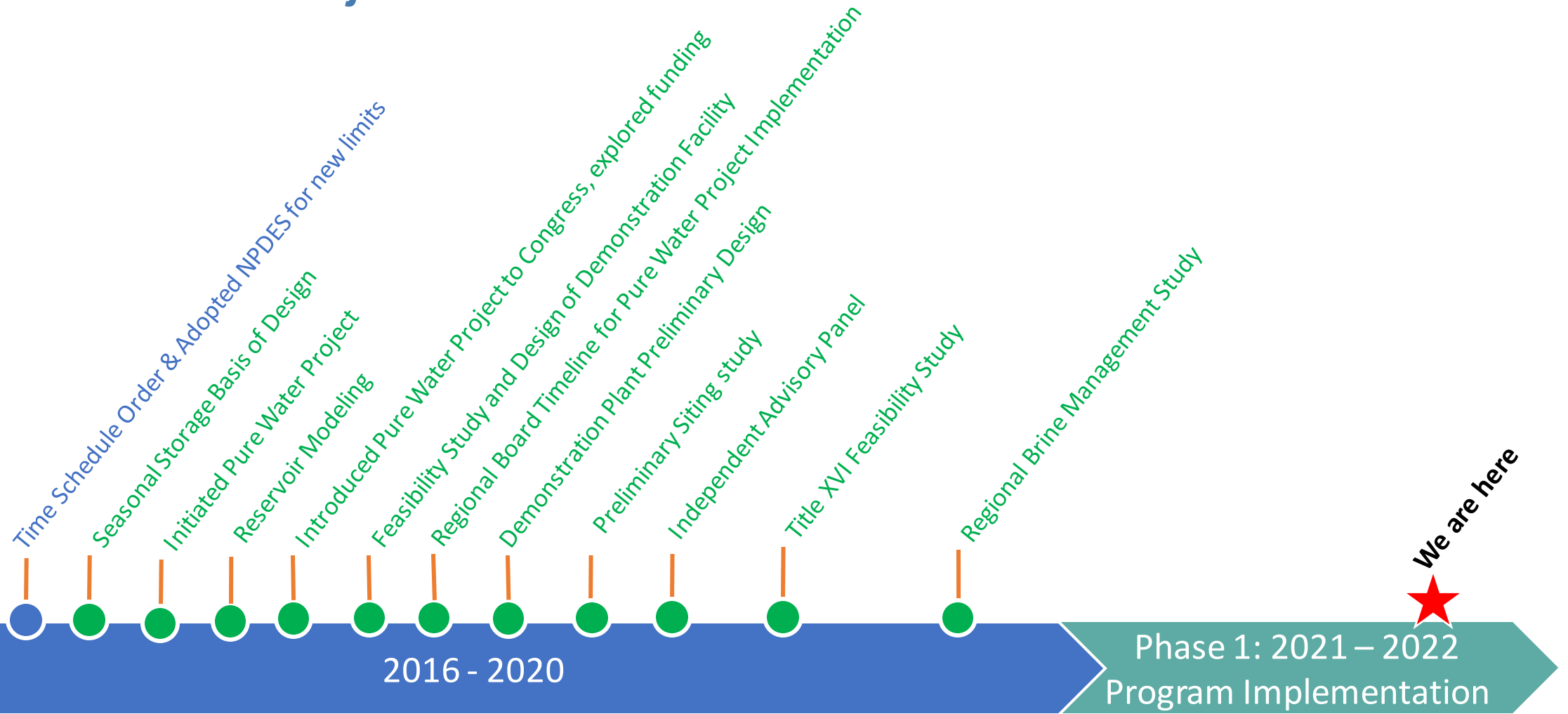


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# Schedule and Procurement

# Pure Water Project Timeline





# Procurement

- RFQ for AWPf and ROC pipeline release April 2023; seven SPQs were received
- Three teams were shortlisted in June, 2023
- RFP release in July/August. Interviews and Confidential Meetings to follow.
- JPA wishes to have a PDB Team on Board by February 2024
- AWPf and ROC Pipeline contract estimated at \$245M, 67% of Project Budget
- Other Procurements (DBB) to include:
  - *Reservoir testing*
  - *Other pipelines*
  - *Pump System Upgrades*
  - *EQ Storage at Tapia*
  - *Disinfection changeover to address CTR*

# Project Construction Schedule

## Advanced Water Purification Facility Construction



Site Preparation



Building Construction



Commissioning



## Pipeline Construction

Source Water Pipeline



Purified Water Pipeline



Concentrate Pipeline





Malibu Creek

# Thank You