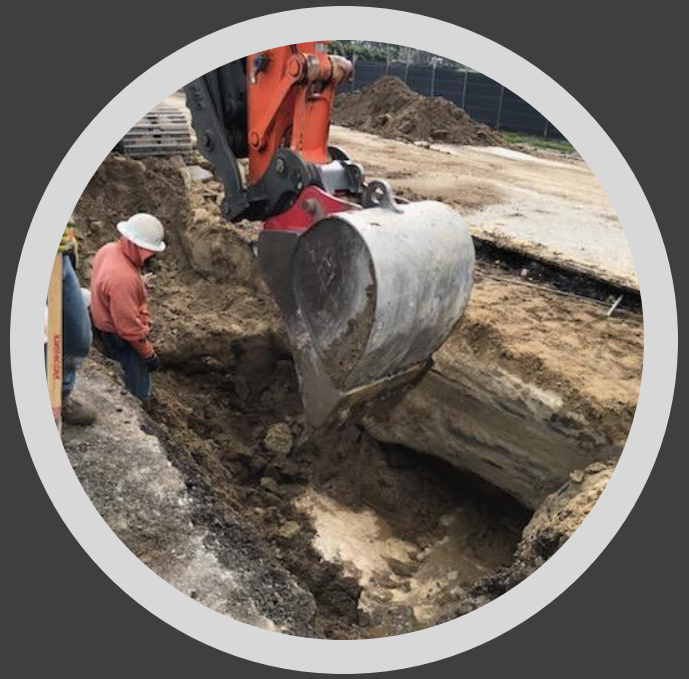


Water Resources Implementation Strategy

Potential Desalter(s) in the Northern Reaches of the Calleguas Creek Watershed

February 20, 2025
Purveyor Meeting

Background

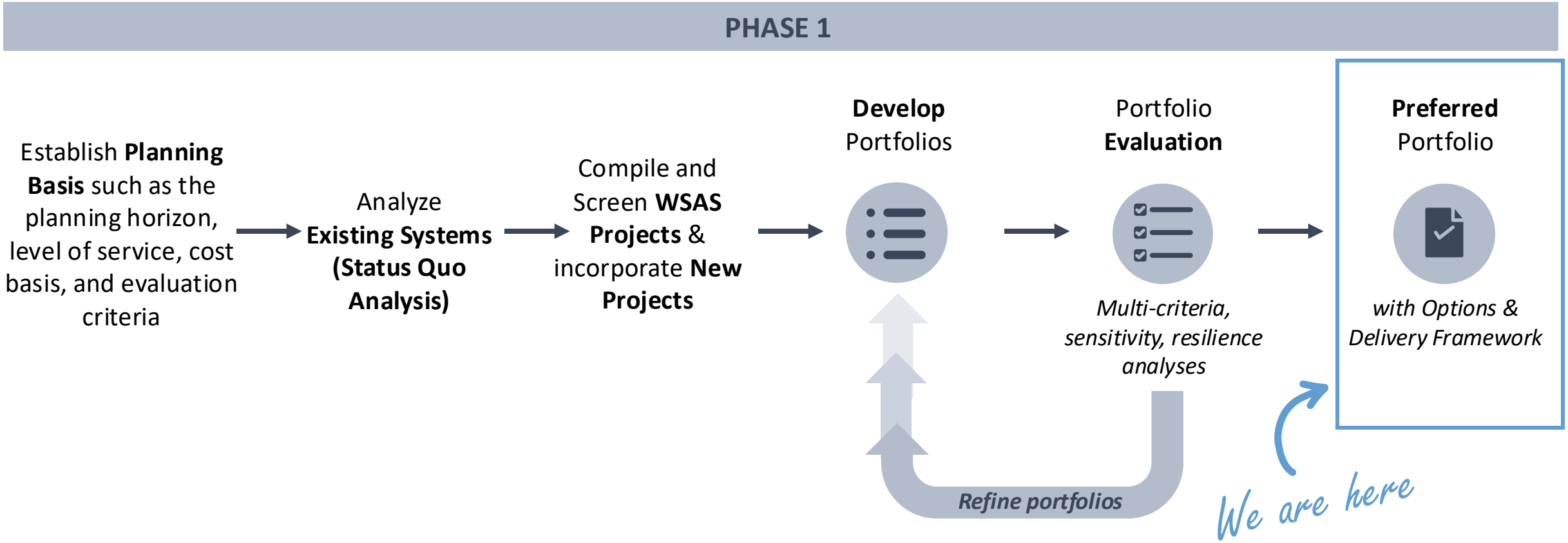
A New Model for Resilience

Calleguas's Board determined that its future will involve greater resilience through partnerships and regional collaboration to develop water supply, storage, conveyance, and programs.

Water Resources Implementation Strategy (WRIST)

- Build on history of extensive regional collaboration to enhance existing partnerships and forge new ones.
- Address long-term water supply reliability and resiliency along with outages.
- Characterize and evaluate portfolios of projects with a regional focus.
- Acknowledge risks and uncertainties and develop an adaptive management plan to address them.

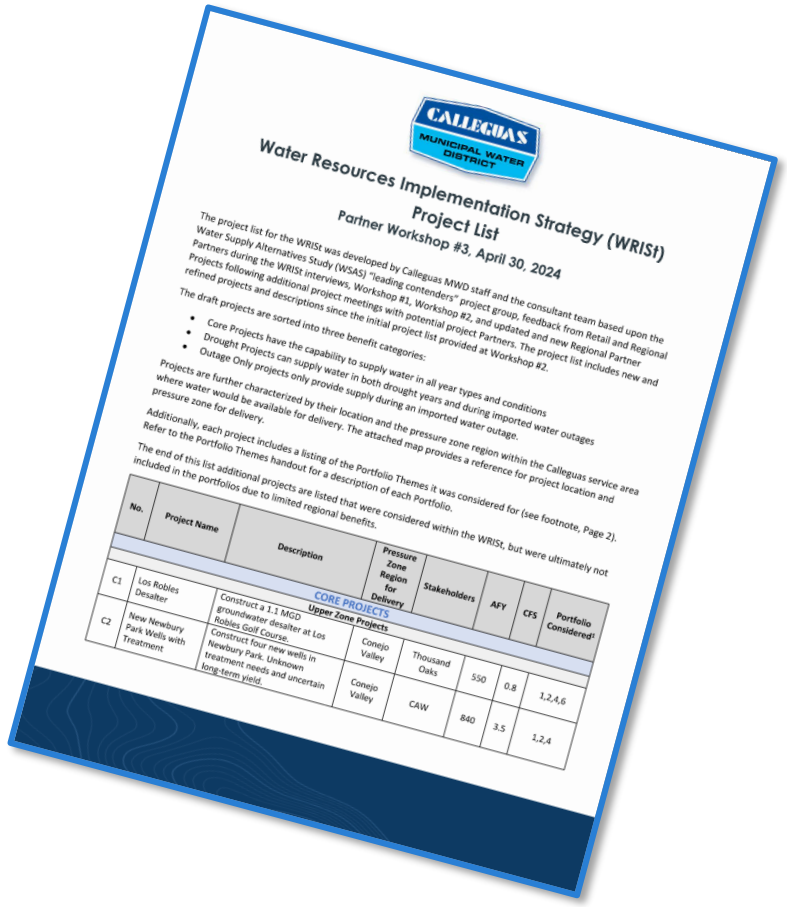
Water Resource Portfolio Development & Regional Alignment



List of Projects

Background

- Initially developed from WSAS “leading contender” group of projects with refinement.
- Additional conceptual projects added based on feedback from previous Workshops, Partner Interviews, and follow-up meetings with Regional Partners
- Categorized by benefit:


Water Resources Implementation Strategy (WRISt)
Project List
Partner Workshop #3, April 30, 2024

The project list for the WRISt was developed by Calleguas MWD staff and the consultant team based upon the Water Supply Alternatives Study (WSAS) "leading contenders" project group, feedback from Retail and Regional Partners during the WRISt interviews, Workshop #1, Workshop #2, and updated and new Regional Partner Projects following additional project meetings with potential project Partners. The project list includes new and refined projects and descriptions since the initial project list provided at Workshop #2.

The draft projects are sorted into three benefit categories:

- Core Projects have the capability to supply water in all year types and conditions
- Drought Projects can supply water in both drought years and during imported water outages
- Outage Only projects only provide supply during an imported water outage.

Projects are further characterized by their location and the pressure zone region within the Calleguas service area where water would be available for delivery. The attached map provides a reference for project location and pressure zone for delivery.

Additionally, each project includes a listing of the Portfolio Themes it was considered for (see footnote, Page 2). Refer to the Portfolio Themes handout for a description of each Portfolio.

The end of this list additional projects are listed that were considered within the WRISt, but were ultimately not included in the portfolios due to limited regional benefits.

No.	Project Name	Description	Pressure Zone Region for Delivery	Stakeholders	AFY	CFS	Portfolio Considered
			CORE PROJECTS				
			Upper Zone Projects				
C1	Los Robles Desalter	Construct a 1.1 MGD groundwater desalter at Los Robles Golf Course.	Conejo Valley	Thousand Oaks	550	0.8	1,2,4,6
C2	New Newbury Park Wells with Treatment	Construct four new wells in Newbury Park. Unknown treatment needs and uncertain long-term yield	Conejo Valley	CAW	840	3.5	1,2,4

Core Projects
- All conditions

Drought and Outage Projects
- Dry year/outages

Outage Only
- Imported water outages

- Sorted by Pressure Zone Region (see map)
- 27+ projects considered
- 23 projects grouped into portfolios

PORTFOLIO THEMES

Project Map

Map provides location of projects, benefit category, and Pressure Zone Region

Portfolio Analysis Findings

Investment in local supply projects provides greater reliability at a lower long-term cost relative to the Status Quo, while significantly reducing demand for imported water.

Investment in local supplies and local storage provides the greatest reliability and resilience but will require West to East Transmission to fully utilize all supplies and increases portfolio costs.

Drought storage projects provide increased reliability but have high unit costs due to the high cost of imported (stored) water and infrequent use.

Local projects can be adaptively phased to incrementally increase reliability while moderating cost impacts.

Recommendations

Draft Preferred Portfolio

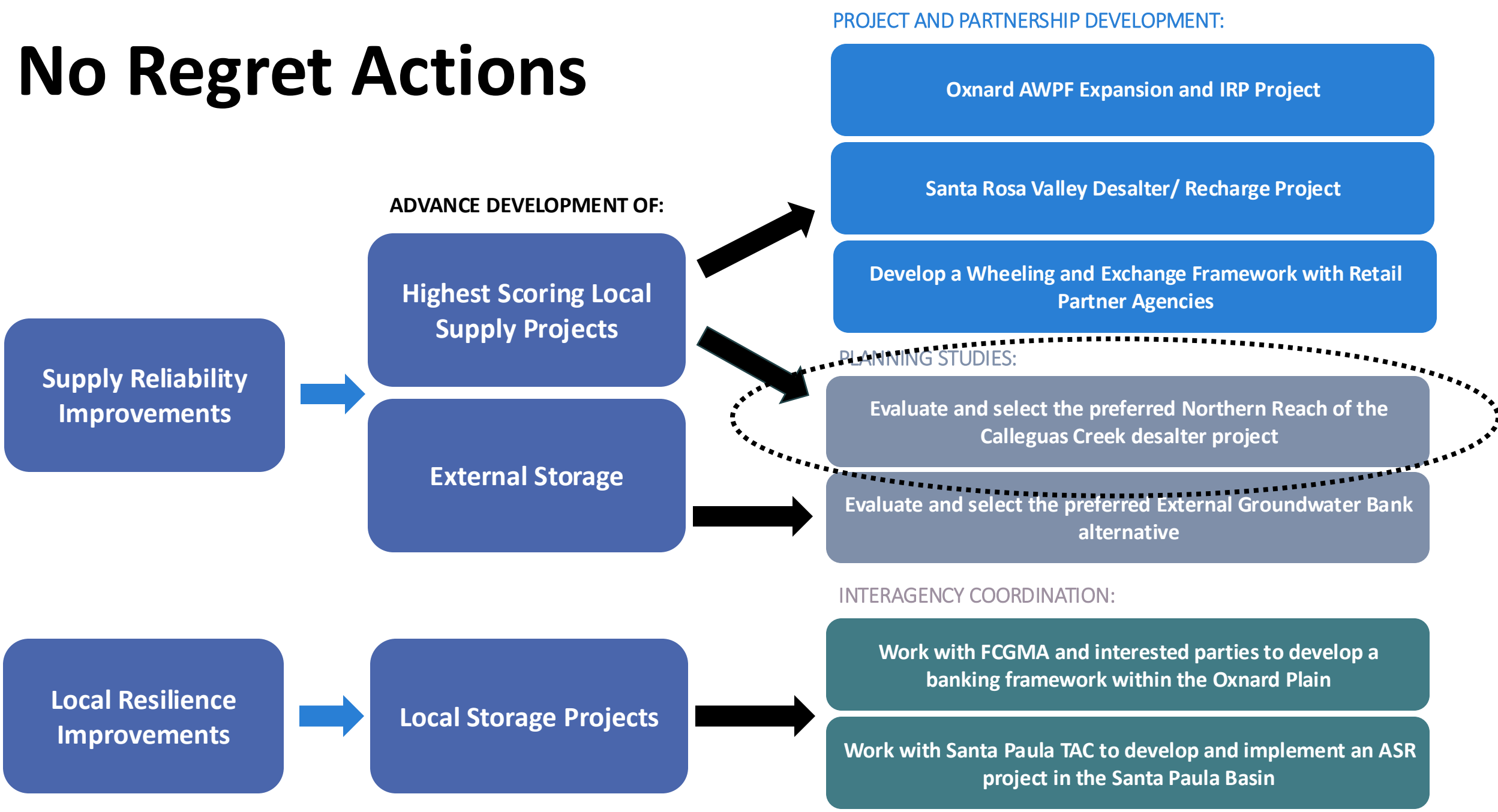
Common to all Hybrid Portfolios

- Oxnard AWPF Expansion and IPR Project
- Northern Reach of Calleguas Creek Watershed Desalter Project
- Santa Rosa Valley Desalter/ Recharge
- West-East Transmission
- New Newbury Park Wells with Treatment
- Increase Pleasant Valley Basin Pumping Capacity to Extract Camrosa Water District Credits

Other Top Performing Projects from Hybrid Portfolios

- Additional ASR in Santa Paula Basin
- Oxnard Plain Program
- South Oxnard Plain Brackish Water Treatment Facility (UWCD Extraction Barrier Brackish Water Treatment Project with conveyance to Calleguas)
- External Groundwater Bank
- Expansion of Camrosa Non-Potable Water System

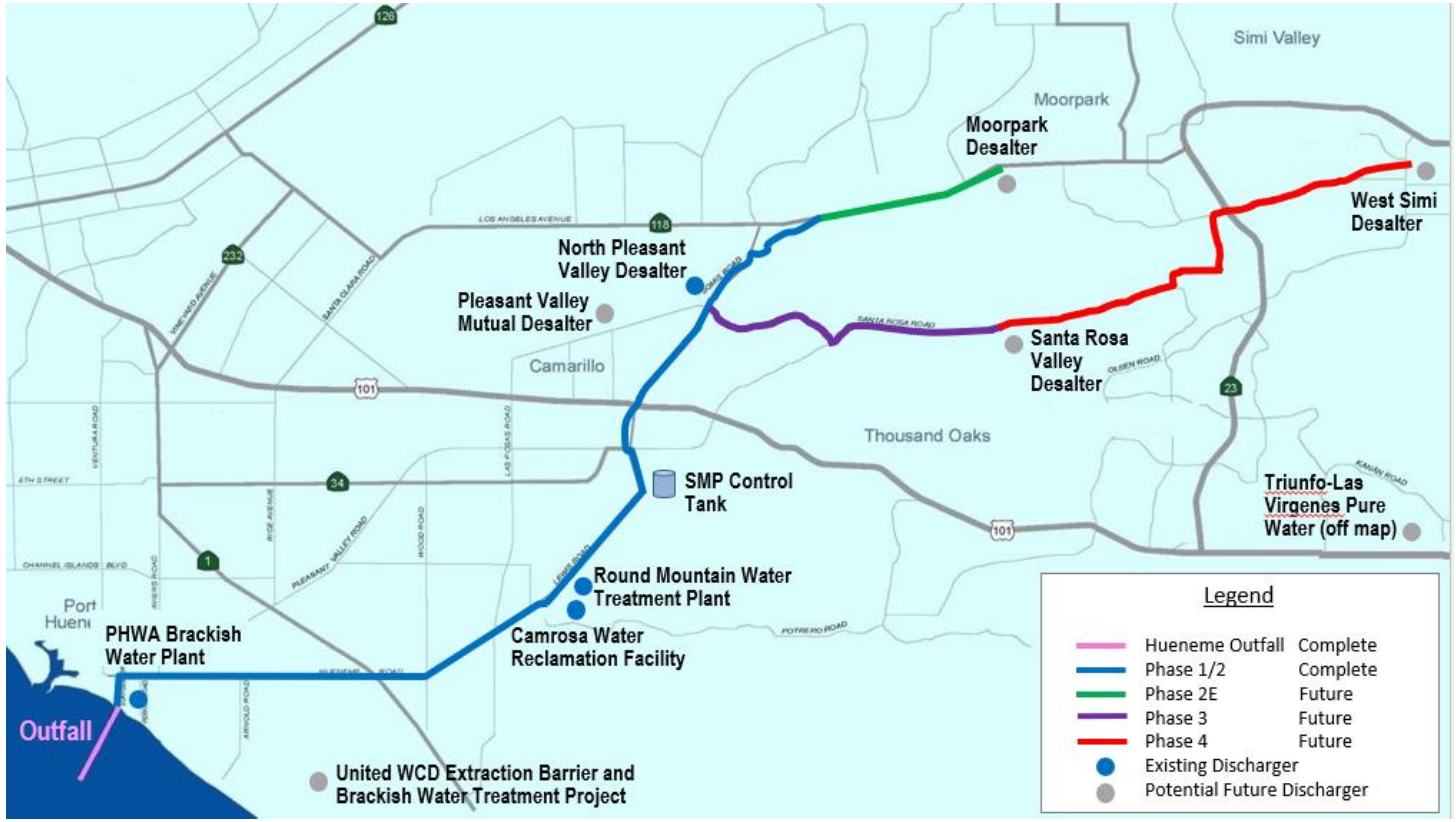
No Regret Actions



Potential Desalters

Potential Desalter Concepts

- Moorpark Desalter
- Simi Valley Desalter
- North Pleasant Valley Desalter, Phase 2
- Other options?



Moorpark Desalter

- Previously explored by VCWWD
- East Las Posas Valley Basin
- Estimated initial capacity of 2.25 mgd.
- Requires extension of the SMP.

Simi Valley Desalter

- Previously explored by City of Simi Valley, but put on hold in 2018 due to negative public reaction.
- Simi Valley Basin.
- Estimated initial capacity of 6 mgd.
- Requires extension of the SMP.

North Pleasant Valley Desalter, Phase 2

- Previously explored in Title XVI Feasibility Study and WRIST.
- Existing NPV Desalter was constructed with expansion potential.
- Estimated potential capacity increase from 4 mgd to 8 mgd.
- Source water would be non-native water (SVWQCP effluent and water produced from groundwater dewatering wells sourced from Simi Valley) recovered downstream and conveyed to the NPV Desalter via a combination of repurposing SMP Phase 2D and new pipelines.
- No SMP extension required.

Proposed Next Steps

Proposed Next Steps

CONVENE WORKING GROUP OF STAFF FROM AGENCIES INTERESTED IN EVALUATING/PARTICIPATING.

DEVELOP STRUCTURE FOR ELECTED OFFICIAL TASK FORCE/ADVISORY GROUP.

ISSUE REQUEST FOR PROPOSALS FOR CONSULTANT TO EVALUATE POTENTIAL DESALTER CONCEPTS AND HELP IDENTIFY MOST FEASIBLE, BENEFICIAL, AND COST EFFECTIVE CONCEPT.


Questions?