
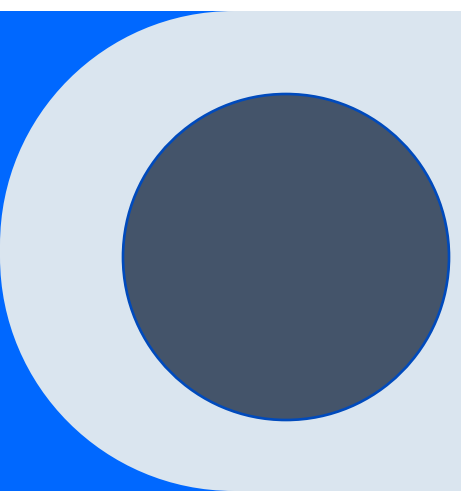




Water Use Efficiency Strategic Plan & Demand Forecasting

Matthew S. Dickens, MPA

11/8/2023



Agenda

1. Welcome
2. Water Use Efficiency Strategic Plan
 1. History & Current Status
 2. SCV Water “Making Conservation a California/Santa Clarita Way of Life”
3. Water Demand Forecasting
4. Project(s) Objectives, Milestones, Schedule, & Resource Needs
5. Next Steps

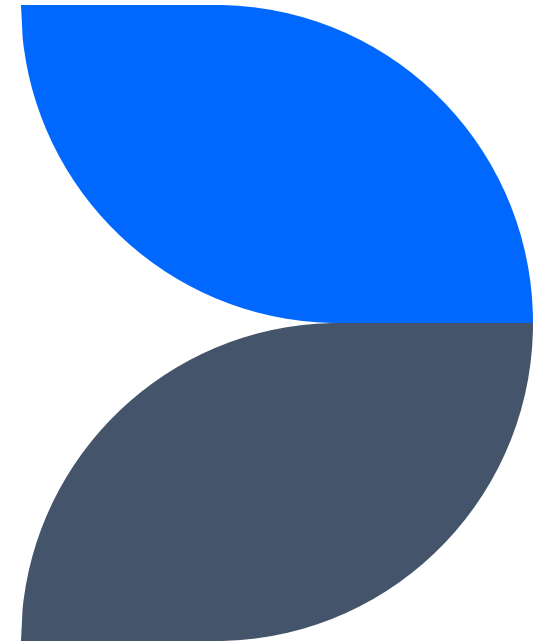


Welcome

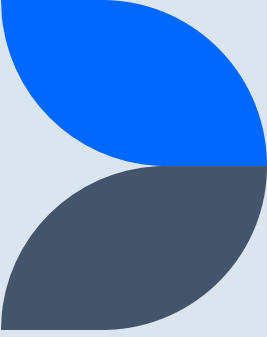
The Water Use Efficiency Strategic Plan is an essential component to SCV Water's initiatives to secure water reliability, water quality, and water affordability; each of which is critical to supporting the SCV's sustainability, viability, and exceptional quality of life.

Water Use Efficiency Strategic Plan

Project History and Current Status

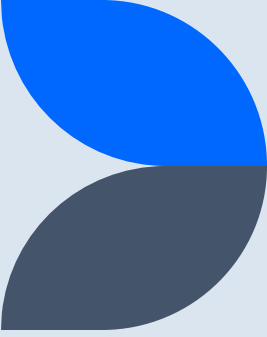


WUESP – History & Current Status



- 2009 – SCV Family of Water Suppliers
- 2013 – CLWA & Retailers (SBx7-7 20% by 2020 Reduction in GPCD)
- 2016 – CLWA & Retailers (Drought & SBx7-7 20% by 2020 Reduction in GPCD)
- 2020 thru 2023 – BAU 2% Annual Reduction in GPCD

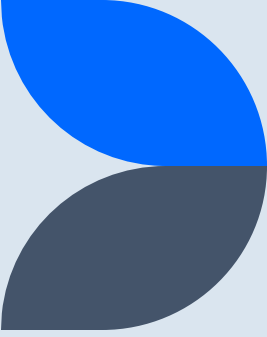
WUESP – SCV Water



- AB 1668 and SB 606 – Annual Urban Water Use Objectives
 - 2024-2025
 - 2025-2030
 - 2030 and Beyond
- AB 1572 – Nonfunctional Turf
- AB 1573 – Model Water Efficiency Landscape Ordinance
- Water Loss Requirements
- Recycled Water Expansion
- SCV Water Sustainability Objectives

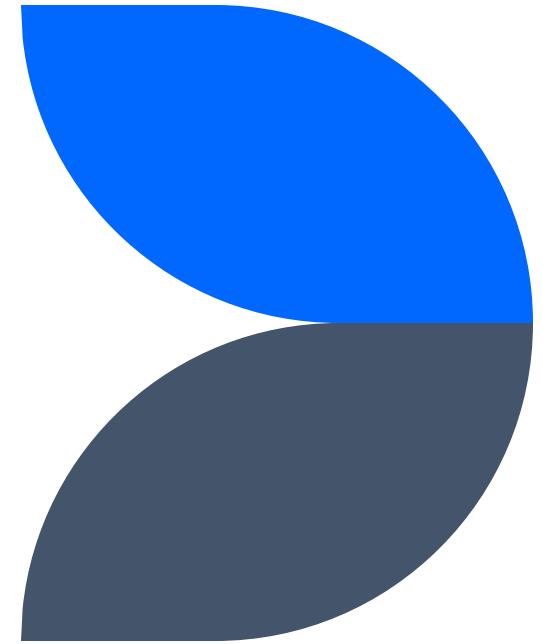
WUESP – Plan Components

- Water Demand Forecasting
 - Business as Usual (BAU)
 - BAU with Land Use
 - BAU with Traffic Analysis Zones (TAZ)
 - Econometric Analysis
 - Climate Change Impacts
 - Passive Conservation
 - Active Conservation
- Community Water Conservation Performance
- Community Conservation Opportunities
- Strategies and Measures

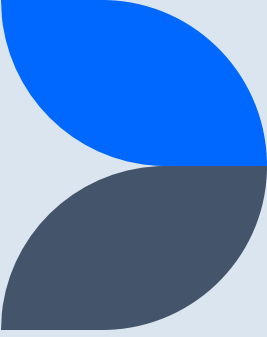


Water Demand Forecasting

Water Demand Factor (WDF)



WDF Tool – History & Current Status



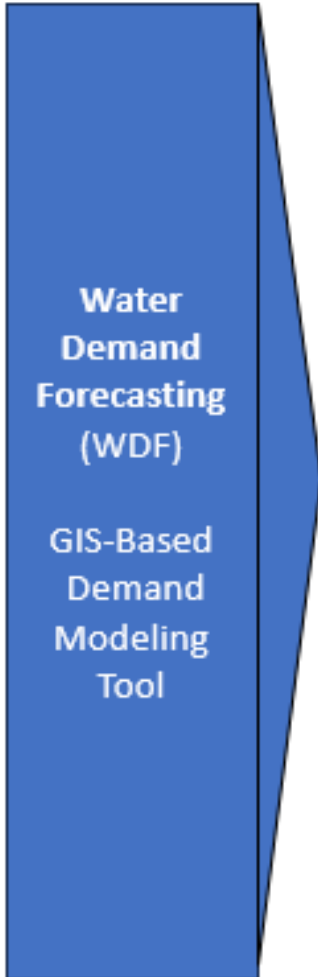
1. Contract with DCSE Launched in 2020
2. WDF Tool Completed in 2021
3. SCV Water Used Maddaus DSS Model Forecasting for 2020 UWMP
4. WDF Tool Inactive as of 2023

WDF Tool – Overview

STEP 1 –WDF Calculate General Demand Scenarios w/BAU and New Development (Land Use Plan & TAZ Frame)

General Inputs →

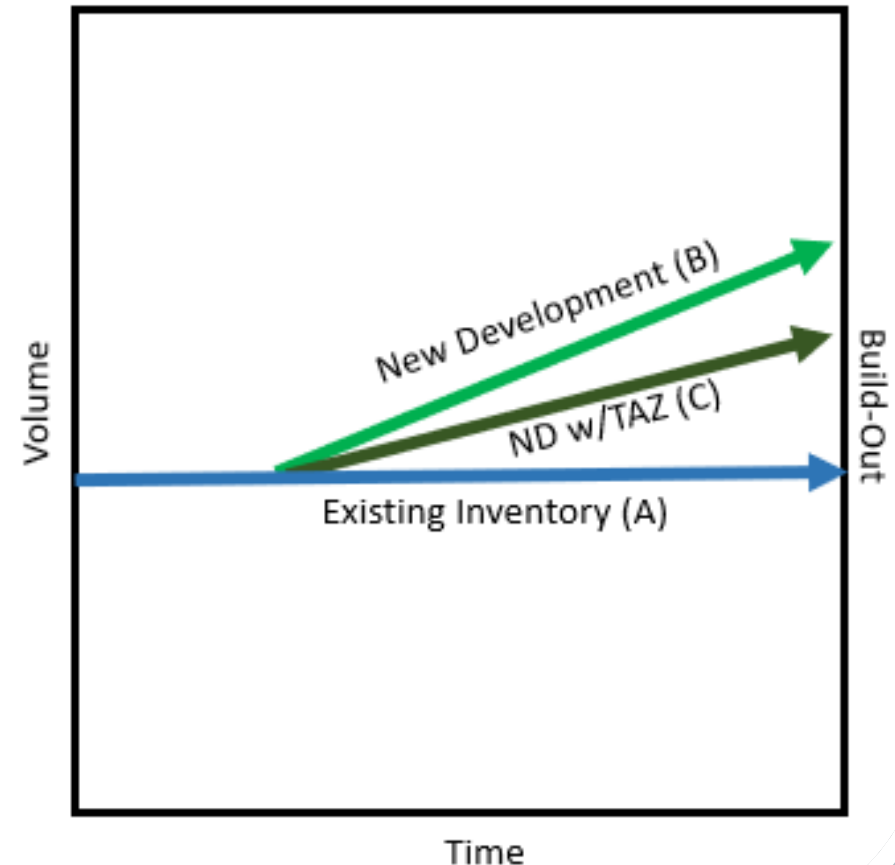
- Existing Inventory
 - Units by Type
 - Demand Factors by Product Type and End Use
 - Population
- General Plan
- Specific Plan
- Traffic Analysis Zone (TAZ)
- New Development
 - Units by Type
 - Demand Factors by Product Type and End Use
 - Population



→ General Outputs

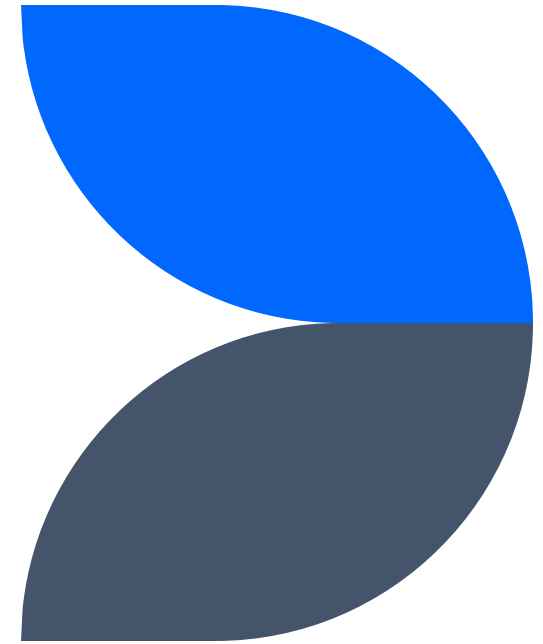
- Existing Inventory
 - Total Demand by Product Type and End Use
 - Demand Projection BAU (A)
- New Development
 - Total Demand by Product Type and End Use
 - Specific Plan (B)
 - TAZ (C)
- Total Population
 - Gallons per Capita Day

Figure 1. WDF General Outputs

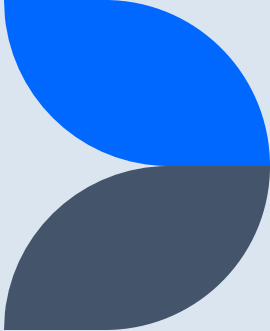


Project Objectives

Timelines, Resource Needs, Roles
& Responsibilities



Proposed Project Path

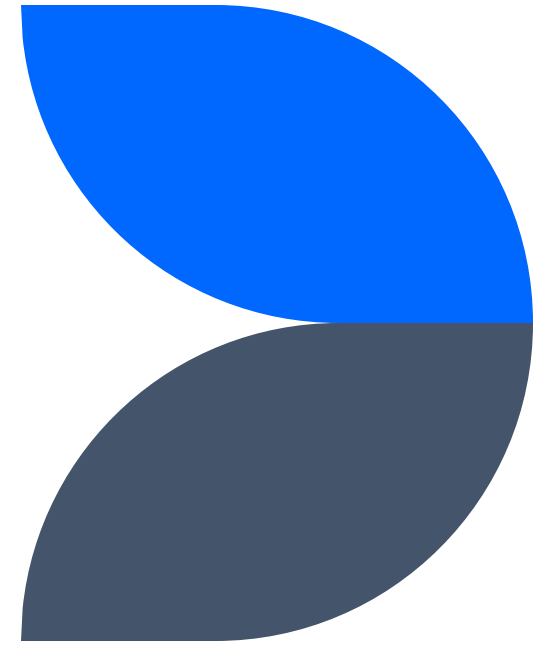


Conservation Plan – Project Schedule

						FY 24			FY 25				FY 26																												
						Q2			Q3			Q4				Q1	Q2	Q3	Q4																						
Item	Description	POC	CMT	Start Date	End Date	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26			
1	Water Demand Factor (WDF)	MD	JH/RV/DC	12/31/2020	4/1/2024																																				
2	Conservation Plan RFP/DEV	MD	WR, SCT	11/1/2023	10/1/2024																																				
3	WDF-CP Configuration/Integration	MD	JH/RV/NP	2/1/2024	8/1/2024																																				
4	WDF - Finalization, Maintenance, and Training	TBD	TBD	7/1/2024	Ongoing																																				
5	Consevation Plan Adoption	MD	EMT/BOD	8/1/2024	1/1/2025																																				
6	UWMP Prep	SF	TBD	1/1/2025	7/1/2026																																				
7	WSCP Plan Update	MD	TBD	Q1 2025	7/1/2025																																				

PROJECT TITLE: Water Conservation Planning & Water Demand Forecasting		PROJECT MILESTONES		PROJECT BUDGET (FY 24)	
<p>Executive Summary: SCV Water will be updating the Water Use Efficiency Strategic Plan (WUESP) in 2023/2024 and a critical component of the plan includes water demand forecasting (WDF). Historically, the WDF was performed by external consultants and was only updated/verified during the UWMP process. This project will develop in-house capabilities to conduct and maintain GIS and Population-based water demand forecasting capabilities.</p> <p>Scope Statement: Will include contract with DCSE to update WDF and coordination with WUESP consultant to develop methodology and documentation for key influence variables. Agency to be provided training and smart practice manual for maintenance and scenario assessment.</p> <p>Project Risks:</p> <ul style="list-style-type: none"> Defensibility of WDF Projections Must be completed in advance of UWMP updated (January 1, 2025 start) Capacity of Agency to use and maintain 		<p>Pre-Planning Start 10/18/2023 Start</p> <p>Milestone 1: 11/2023 WUESP RFP</p> <p>System Support Milestone 1: 12/2023 WDF Contract WUESP Selection</p> <p>Milestone 2: Baseline WDF</p> <p>System Support Milestone 2: Econometric Study, Climate Change Doc.</p> <p>Milestone 3: WUESP Program Planning</p> <p>System Support Milestone 3: Stakeholder Engagement</p> <p>Milestone 4: WUESP Program WDF Outcomes</p> <p>System Support Milestone 1: WDF Doc. & WUESP Draft</p> <p>Project End: BOD Engagement</p> <p>WUESP Plan</p>		<p>Conservation Plan - \$250,000 WDF - TBD</p>	
PROJECT OWNERSHIP		SYSTEM SUPPORT		PROJECT EVALUATION	
<p>Project Sponsors:</p> <ul style="list-style-type: none"> Steve Cole, Assistant General Manager Ali Elhassan, Director of Water Resources Cris Pérez, Director of Technology Services <p>Project Manager:</p> <ul style="list-style-type: none"> Matthew Dickens, MPA <p>Product Manager</p> <ul style="list-style-type: none"> Jose Huerta <p>Key Users</p> <ul style="list-style-type: none"> Rick Vasilopoulos, WR Planner Dolores Campos, Conservation Doug Richan, GIS <p>Stakeholders (Internal):</p>		<p>Consultant Support Manager/Lead:</p> <ul style="list-style-type: none"> WDF - DCSE WUESP - TBD <p>Implementation Team</p> <ul style="list-style-type: none"> IT Data Acquisition Administration (Rate Advisor) Administrative Analyst <p>Initial Data/MGMT Needs</p> <ul style="list-style-type: none"> 2020 UWMP OVOV Plan TAZ Data 2021 DSS Model 2016 Water Use Efficiency Strategic Plan 2021 WDF Demand Factors GIS Land Use Layers Population Estimates 		<ul style="list-style-type: none"> Complies with AB1668 & SB606 Requirements Milestones Met Timely Deliverable Public Engagement & Support Utilization of Deliverables in UWMP and Rate Case Provides Action Items for Short and Long-term Implementation Promotes Sustainability and Innovation Improves Demand Forecasting Predictability and Reduces Uncertainty Staff able to maintain WDF tool and to run scenarios as requested Integration with Conservation Tracking Tools & Annual Reporting 	

Next Steps



Next Steps

- Nov 2023 – Statement of Work & Procurement for Water Demand Factor
- Nov 2023 – Request for Proposals for Water Use Efficiency Strategic Plan
- Dec 2023 – Review of Responses
- Jan 2024 – Presentation to Water Resources and Watershed Committee & Consideration of Staff Recommendations
- Jan 2025 – Water Use Efficiency Strategic Plan Consideration by SCV Water Board of Directors



Thank you

Matthew S. Dickens, MPA
Sustainability Manager
SCV Water