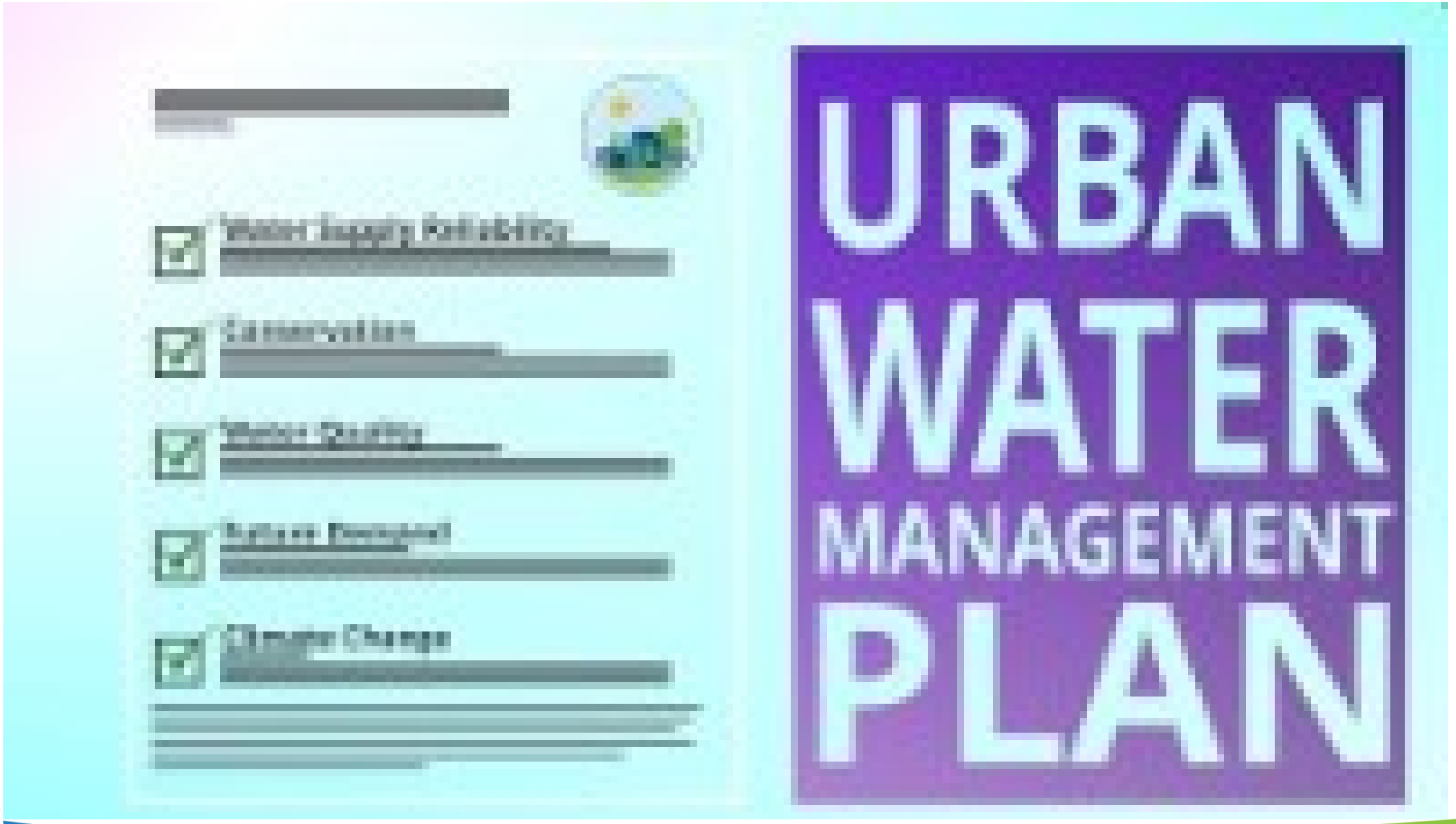
SCV WATER

Public Hearing

2020 Urban Water Management Plan
Addendum to 2015 Urban Water Management Plan
May 27, 2021

Overview

- Project Timeline and Outreach
- Urban Water Management Plan (UWMP) Orientation
- Key Sections
  - Population and Demand Forecasting
  - SBx7-7 Compliance
  - Water Supplies and Water Quality
  - Recycled Water
  - Water Reliability
- 2015 UWMP Addendum


URBAN
WATER
MANAGEMENT
PLAN

Public Involvement Throughout Process

*Legal Requirements- Make plan available for public inspection prior to adoption after a noticed public hearing.

Public Involvement

Workshop #1

- What is an UWMP
- Water Supply Characteristics
- Climate Change
- Upcoming Involvement Opportunities

Workshop #2

- UWMP Compliance with Water Use Reduction Targets
- Demand and Conservation Analysis
- Drought Risk Assessment

Workshop #3

- Reliability Tables
- Reliability Analysis
- Seismic Risk Analysis and Mitigation Plan

UWMP Adoption Process and Timeline

May 27th
Public Hearing

- 2020 Urban Water Management Plan (UWMP) Part 1
- 2015 Addendum

June 9th
Public Hearings

- Water Shortage Contingency Plan (WSCP)
- *Water Shortage Ordinance
- Adoption of WSCP and *Ordinance

June 16th
Public Hearing

- UWMP Part 2
- Adoption of UWMP
- Adoption of 2015 Addendum

July 1st

- Submit UWMP, WSCP and 2015 Addendum to DWR

* Not included in UWMP

UWMP Orientation

UWMP | Why a 2020 Update?

- Required by California UWMP Act every five years
- Updates planning evaluations of the availability, reliability and quality of water supplies that informs other planning:
  - Water Supply Assessments and Water Supply Verification for new developments greater than 500 dwelling units
  - Groundwater Sustainability Plan
  - Water supply capital investment planning
- Maintain eligibility for State grants

UWMP Requirements

Description of **water use** by sector

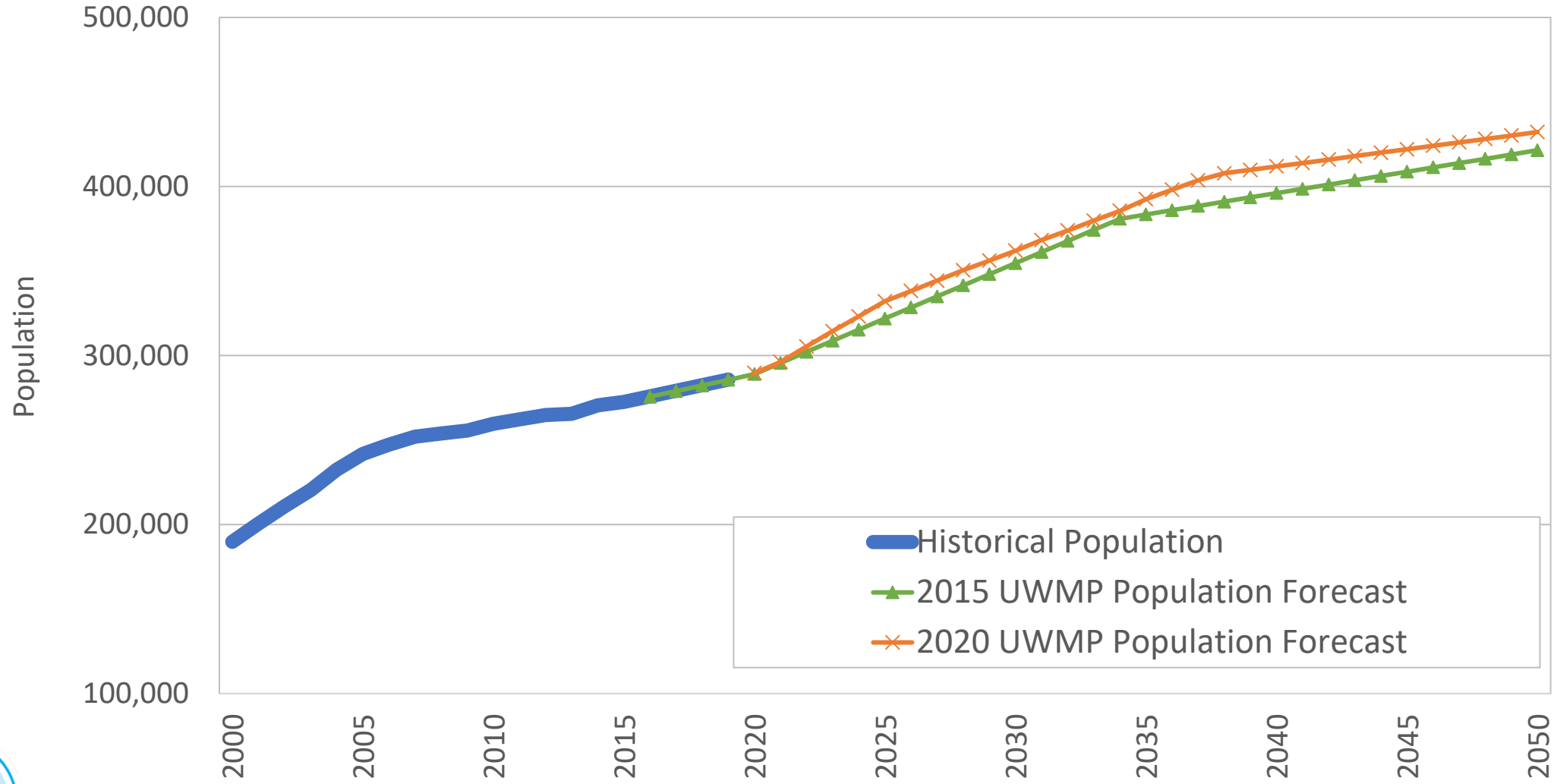
Detailed description of all **supply sources** (imported, surface, recycled, groundwater)

Description of **water quality** issues that could impact supplies

Evaluation of **water supply reliability** to meet current and future demands in all hydrologic year types (normal, multiple dry, critical dry)

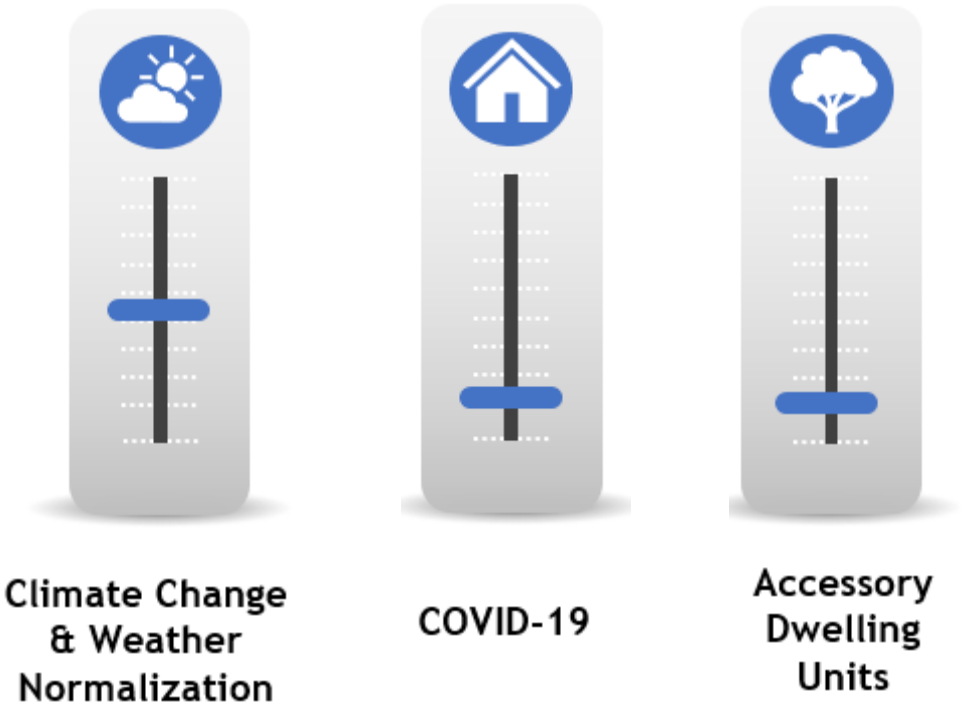
Population and Demand Forecasting

Valley-Wide Population Forecast 2020-2050 Buildout

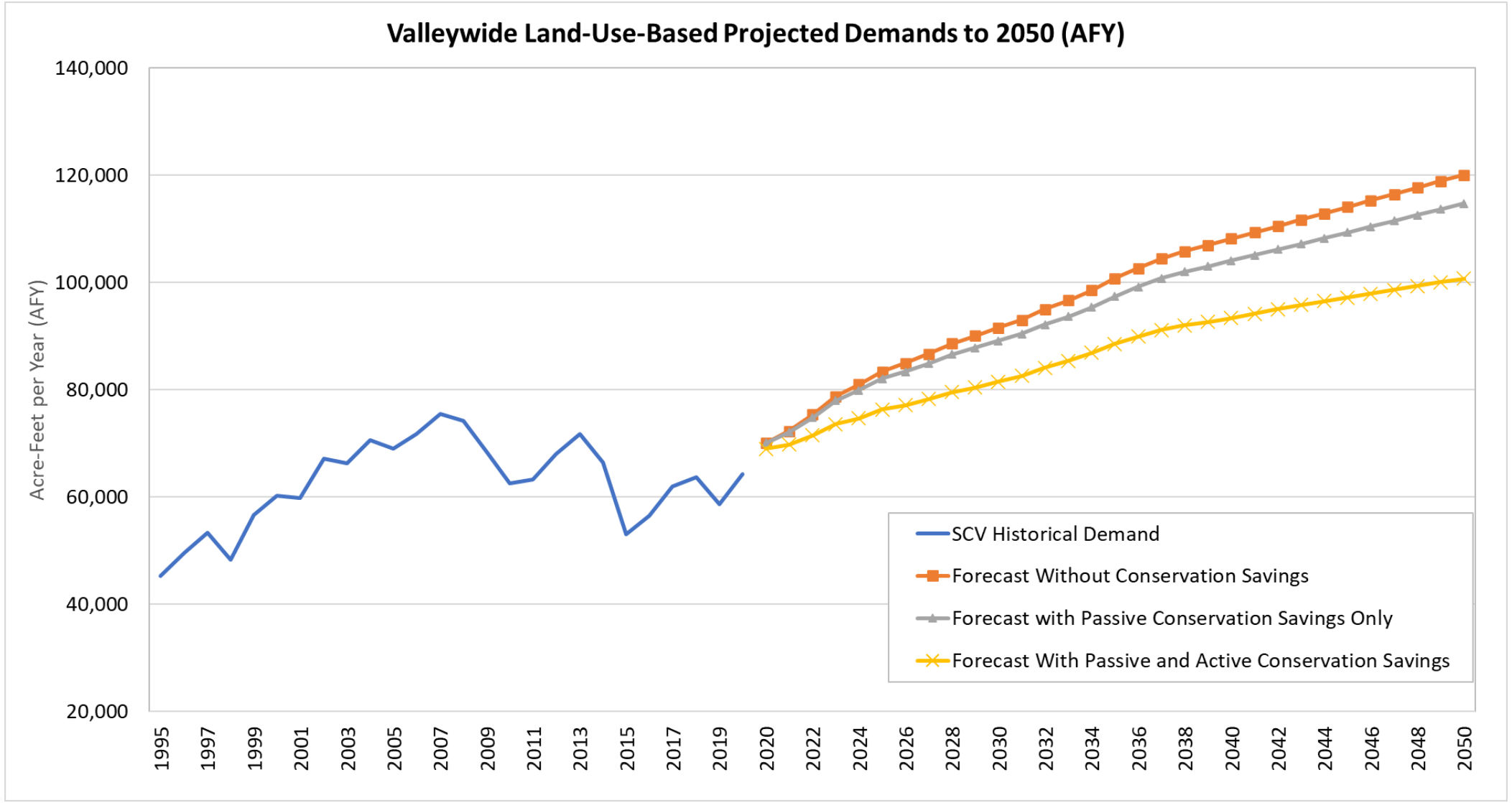


How Demand Forecasts are Updated

- Review Historical Trends
- Basis for Future Projections
  - One Valley One Vision (OVOV) General Plan
  - Near-term projection coordinated with:
    - City Land Use Planners
    - County Land Use Planners
- Apply Adjustment Factors



Valley-Wide Demand Forecast



SBx7-7 Compliance

SBx7-7 Compliance

- Water Conservation Act of 2009 (Senate Bill x7-7) was enacted in by State of California in November 2009
- Requires 20% reduction in per capita water use by 2020
- Measured in gallons per capita per day (GPCD)
- SCV Water has successfully met the requirements by developing and implementing conservation programs over the last two decades

Achieved 2020 SBx7-7 Target

SCV Water	Gallons per capita per day (GPCD)
Historical Baseline Water Use	275
2020 Goal	220
2020 Annual Daily Per Capita Water Use	205
Goal Met?	YES

2020 Distribution System Population = 280,192 (persons)

2020 Annual System Gross Water Use = 64,266 (AFY)

Water Supplies

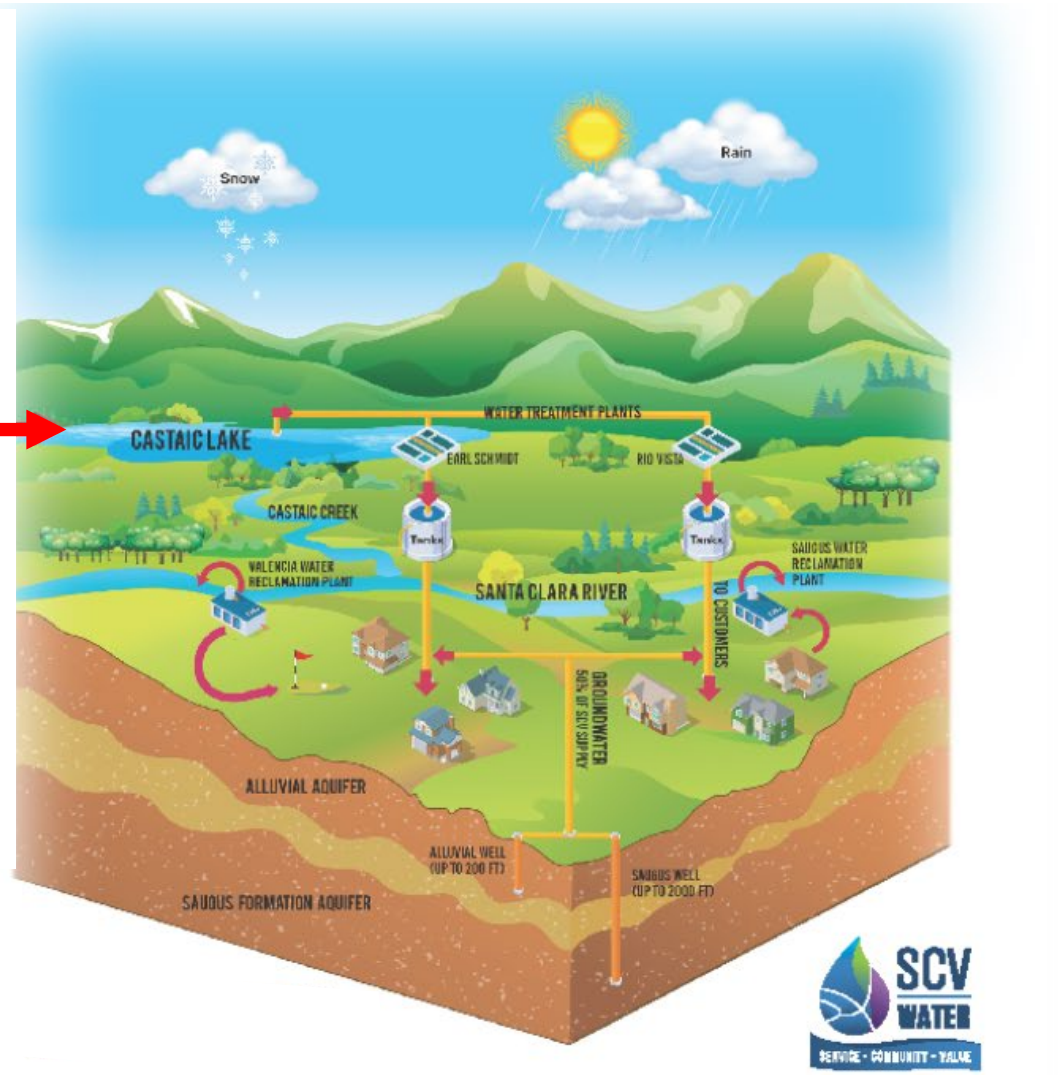
SCV Existing Water Supply Portfolio

Imported Supplies

- State Water Project
- Water Banking Programs
- Water Transfers

Local Supplies

- Groundwater
- Recycled Water



Planned Water Supplies

Local

- Restored Water Quality Impacted Wells
- Dry Year Saugus Wells
- New Recycled Water
- Newhall Land Agricultural to Municipal Use

Imported

- Additional Rosedale Groundwater Bank Recovery Capacity

Water Quality

Addressing Water Quality

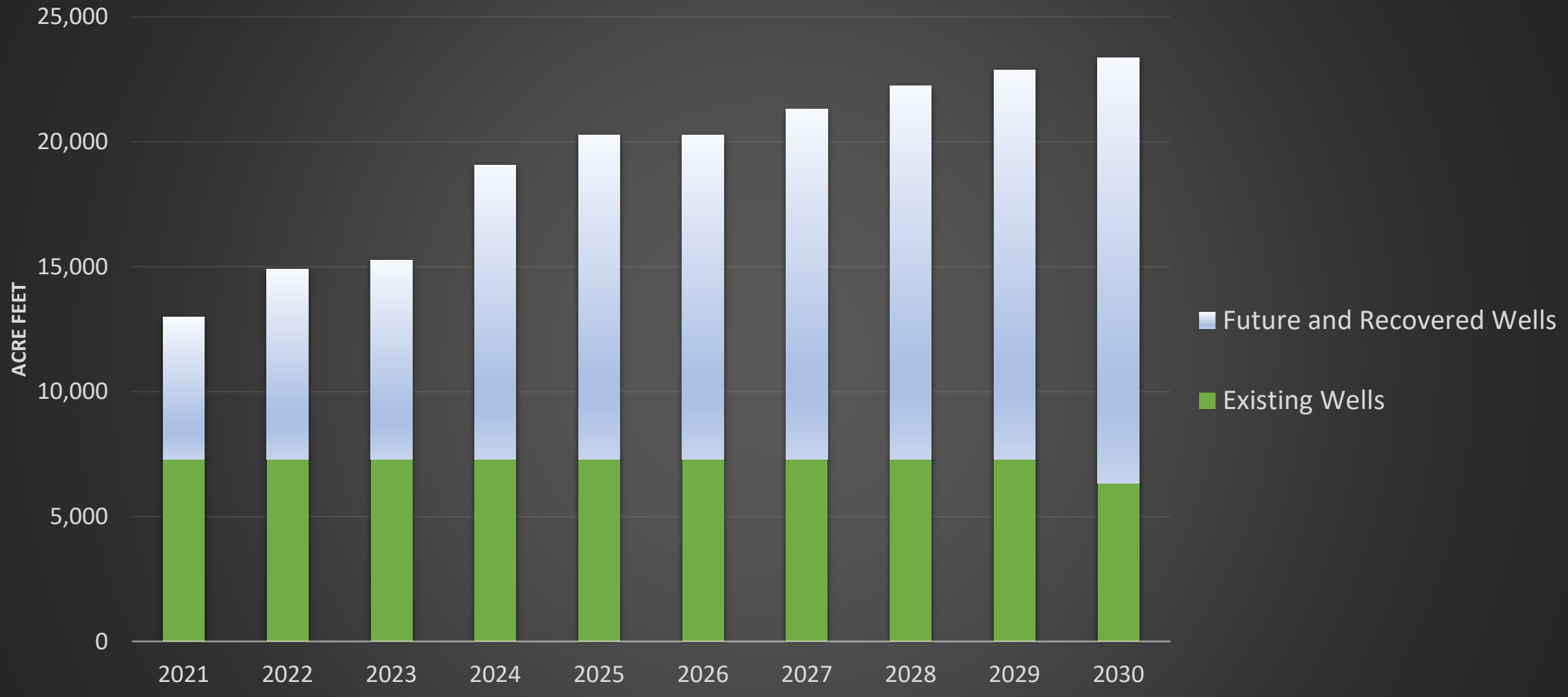
- SCV Water meets or exceeds all drinking water quality standards
- Imported supplies generally not anticipated to have water quality issues
- Proactively addressing needed treatment to utilize supplies
  - PFAS - Implementing program to recover groundwater capacity by 2030
  - Perchlorate - Well 201 treatment facilities completed, Well 205 treatment under design and online in 2024
  - VOCs - conditions and studies

Existing and Planned Groundwater Usage

Alluvium Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	7,300	6,330	6,330	6,330	6,330	6,330
Purveyors Future and Recovered	12,970	17,020	19,760	19,760	19,760	19,760
Purveyors Total	*20,270*	*23,350*	*26,090*	*26,090*	*26,090*	*26,090*
Non Purveyors (Agricultural & Other)	11,540	9,150	6,410	6,410	6,410	6,410
Total Alluvium Production	**31,810**	**32,500**	**32,500**	**32,500**	**32,500**	**32,500**
Alluvial Operating Plan Range Single Dry Year (30,000-35,000)						

Saugus Formation Supplies	2025	2030	2035	2040	2045	2050
Purveyors Existing	17,880	17,880	17,880	17,880	17,880	17,880
Purveyors Future and Recovered	7,890	15,920	15,920	15,920	15,920	15,920
Purveyors Total	*25,770*	*33,800*	*33,800*	*33,800*	*33,800*	*33,800*
Non purveyors	1,200	1,200	1,200	1,200	1,200	1,200
Total Saugus	**26,970**	**35,000**	**35,000**	**35,000**	**35,000**	**35,000**
Saugus Operating Plan Range Single Dry Year (21,000-35,000)						

Alluvial Well Production



Alluvial Operating Plan Range Single Dry Year 30,000-35,000 Acre Feet per Year

Recycled Water

Existing and Projected Recycled Water Demand

Phase/Project	Demand (AFY)	Timeframe for Coming Online	Source of Recycled Water	Location of Use/Water Service Area
Phase 1	450	Existing	Valencia WRP	VWD
Phase 2A	560	2029	Valencia WRP	NCWD, VWD
Phase 2B	300	2021-2023	Vista Canyon Water Factory	SCWD
Phase 2C	759	2021-2023	Valencia WRP	NCWD, VWD
Phase 2C – Golf Course[(a)]	600	2023	Valencia WRP	Valencia Golf Course
Phase 2D	221	2021-2023	Valencia WRP	VWD
FivePoint[(b)]	5,174-6,505	2021-2043	Newhall Ranch/ Valencia WRP	Newhall Ranch/Five Point
Total	**8,064-9,395**	2050	As shown above	As shown above
Total w/ CC	**8,368-9,749[(c)]**	2050		

Notes:

(a) Raw water conversion to recycled water (not an existing potable offset)

(b) Range reflects estimated demand using MEWLO and observed over watering of 25.6% in recently developed irrigation systems.

(c) Assumes 3.77% demand increase due to climate change.

Projected Recycled Water Use

	2025	2030	2035	2040	2045	2050
Existing Recycled Water Use	450	450	450	450	450	450
New Recycled Water Use	1,849	3,696	5,091	6,498	7,499	8,511
Total Projected Recycled Water Use[(a)]	**2,299**	**4,146**	**5,541**	**6,948**	**7,949**	**8,961**
Total Potential Recycled Water Demand[(b)]	**4,559**	**6,514**	**8,441**	**9,191**	**9,469**	**9,749**

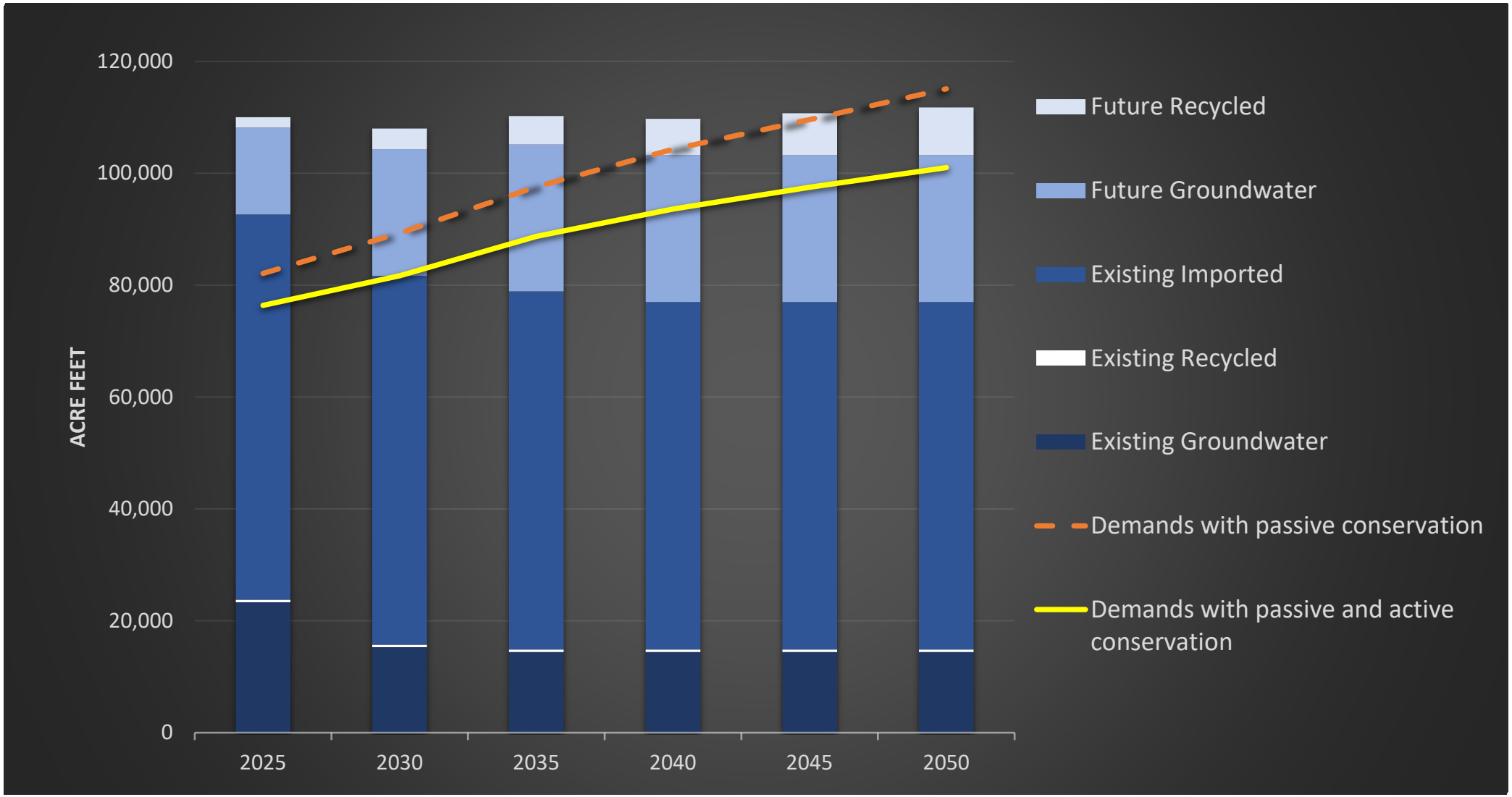
Notes:

(a) Total projected water use is equal to total projected recycled water supply as total potential recycled water demand exceeds total projected supply.

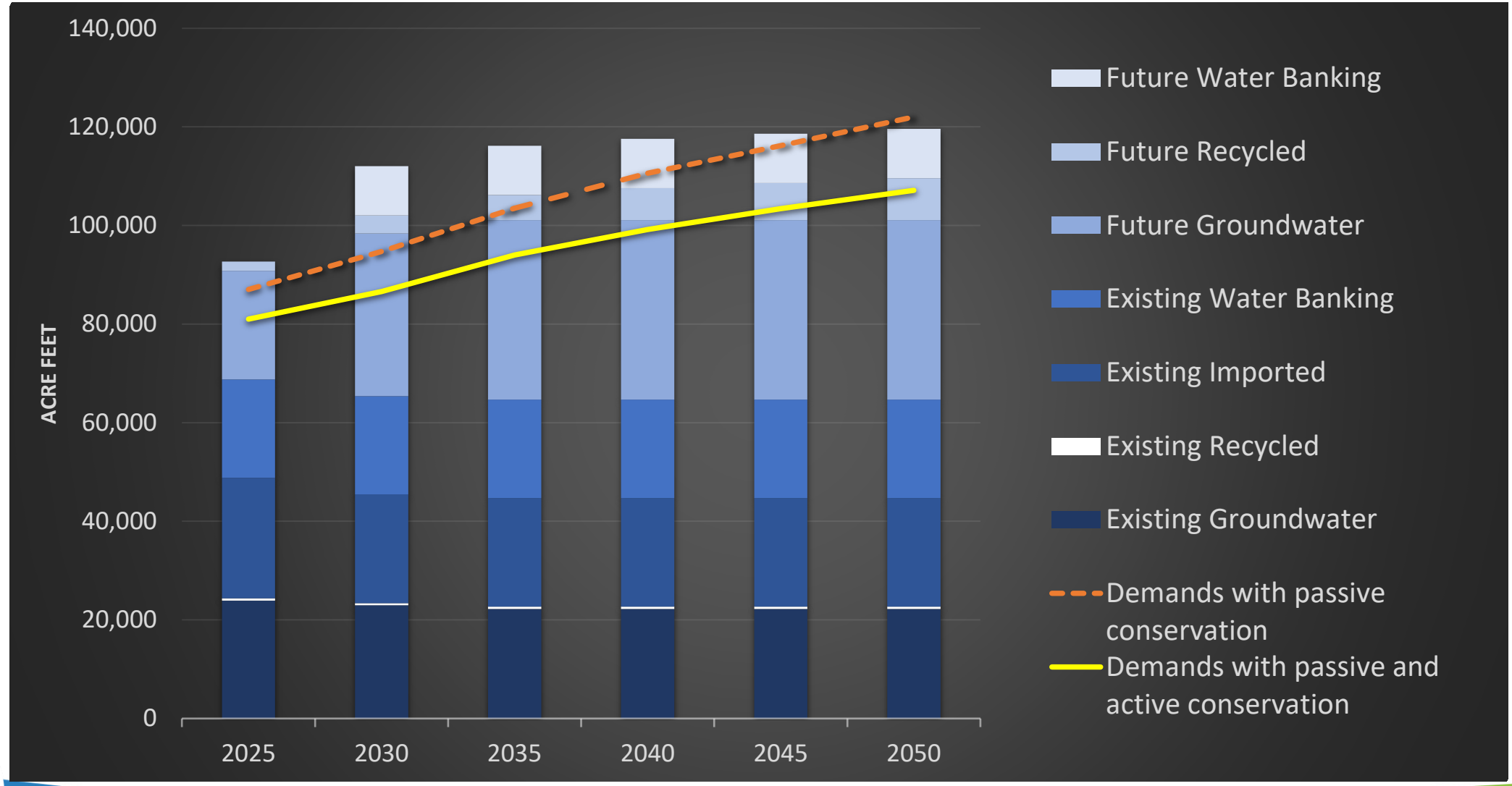
(b) Difference in recycled water supply and total potential recycled water demand will be made up by potable water supplies, i.e., make-up water. See Table 2-12.

Water Reliability

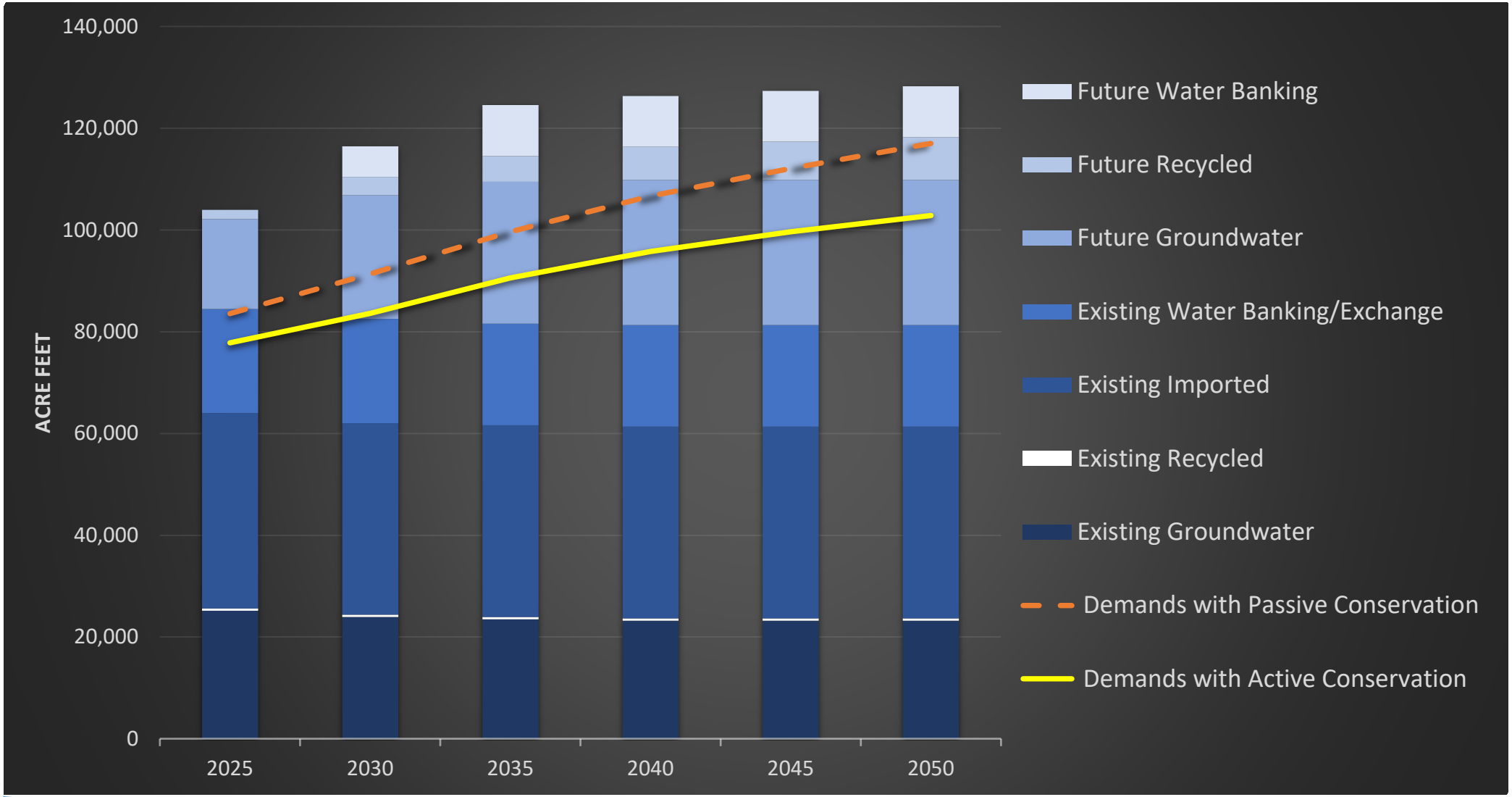
Projected Water Supply in Normal Years



Single-Dry Year Projected Water Supply



Multiple-Dry Year Projected Water Supply



Alternative Resiliency Programs

- Future opportunities to diversify SCV Water's water supply portfolio
  - AVEK Water Bank
  - Aquaterra Water Bank
  - Sites Reservoir Participant

Water Reliability Assessment Conclusions

- Sufficient existing and planned water supplies available to support buildout demands in normal years and dry years.
- Needed investments:
  - PFAS and Perchlorate treatment for impacted wells
  - New Dry Year Saugus Formation wells
  - Expansion of Recycled Water Program
  - Expansion of water banking recovery capacity
  - Active Conservation
- Alternative dry year water supply investments exist to achieve additional reliability

Drought Risk Assessment

Five-Year Drought Risk Assessment (AFY)

	2021	2022	2023	2024	2025
Total Water Use	70,290	74,380	76,800	75,190	77,910
Total Water Supplies	65,410	103,770	59,590	78,300	78,330
Surplus/Shortfall w/o* WSCP Action	**(4,880)**	**29,390**	**(17,210)**	**3,110**	**420**
Planned* WSCP Actions (use reduction and supply)					
*WSCP - supply augmentation benefit	27,010	27,010	27,010	27,010	27,010
*WSCP - use reduction savings benefit	-	-	-	-	-
Revised Surplus/(shortfall)	22,130	56,400	9,800	30,120	27,430
Resulting % Use Reduction from* WSCP action	-	-	-	-	-

*WSCP – Water Shortage Contingency Plan

Five-Year Drought Risk Assessment (AFY)
(Assume 5% State Water Project Allocation in 2021)

	2021	2022	2023	2024	2025
Total Water Use	74,020	74,383	76,796	75,187	77,908
Total Water Supplies	59,700	103,770	59,580	78,300	78,330
Surplus/Shortfall w/o WSCP Action	**(14,320)**	**29,387**	**(17,216)**	**3,113**	**422**
Planned WSCP Actions (use reduction and supply augmentation)					
WSCP - supply augmentation benefit	27,010	27,010	27,010	27,010	27,010
WSCP - use reduction savings benefit	-	-	-	-	-
Revised Surplus/(shortfall)	**12,690**	**56,397**	**9,794**	**30,123**	**27,432**
Resulting % Use Reduction from WSCP action	-	-	-	-	-

Errata 1

Errata 1

- Minor text error adjustments
- Added missing total row at the bottom of table 4-8 B in Appendix
- Updated table 1-2 Summary of Agency Coordination
  - Checked boxes for those that received an email link to the draft UWMP
- Slight reduction of Saugus pumping in normal years
  - Inconsistency with the UWMP and Water Budget Analysis with the GSP
  - Rippled through many tables throughout the plan
  - Overall conclusions regarding water supply reliability unchanged
  - No change to water supplies in dry years when the system is most stressed

Addendum to 2015 Urban Water Management Plan

2015 UWMP Addendum

- Sacramento-San Joaquin Delta Reform Act of 2009 requires SCV Water to reduce reliance on water from the Delta
- Requires state and local public agencies proposing a ‘covered action’ in the Delta prepare written certification of consistency with the legislation
- Covered actions include importing water from the Delta, transfers, exchanges, including State Water Project supply
- Required for the 2020 UWMP update
- DWR recommends amending the 2015 UWMP, if not included

Reduced Reliance on Delta Water Supplies

- SCV Water is implementing projects to reduce reliance on the Delta
  - Water Use Efficiency
  - Water Recycling
  - Local and Regional Water Supply and Storage Projects
- SCV Water's plan includes reduced reliance on the Delta projected through 2050

Public Comment Period

Public Comment Summary

- Timeframe - April 27 - May 26, 2021
- Comment Submissions by: Mail, email, online comment form
- 12 responses received - UWMP

UWMP Comments Received

- Comment categories
  - Errata 1 – Extension of Public Comment Period Requests (5)
  - Commentor expressed concerns about the overall health of the watershed including areas along the main stem and canyons (1)
  - Questions reliability of banked supplies with drought and climate change (1)
  - Table 4-1 misleading (2)
  - Seek grant funding, encourage more diverse participation in water issues (1)
  - Housing crisis. Create plan that supports growth in addition to water resiliency (1)
  - Increase water rates for “high water users”, moratorium on new swimming pool construction (1)
  - Inadequate supply for future development (1)
  - Recycled water programs have been slow to materialize, want to know the plan for purple pipe program (1)

Response to UWMP Comment

Comment – Requests for extension of comment period to sufficiently review edits in Errata 1

Response

- No statutory requirement regarding public comment period for draft UWMP updates or notification for changes to draft documents
- Public can make comments anytime prior to adoption
- Organizations concerned with Errata 1 content are encouraged to provide unrelated comments at this time

Response to UWMP Comment

Comment –Commentor expressed concerns about the overall health of the watershed including areas along the main stem and canyons.

Response

- Agency staff recognizes concerns raised regarding the health of the watershed. Some of the issues raised will be the subject of further studies by the Agency as provided for in the FY 21/22 – 22/23 budget.

Response to UWMP Comment

Comment –Question reliability of banked supplies with drought and climate change

Response

- Agency groundwater banking programs are performing as anticipated
- Implementation of GSP's in the San Juaquin Valley should stabilize groundwater levels

Response to UWMP Comment

Comment – Table 4-1 misleading

Response

- This table has caused confusion in the past, but is required by DWR
- It contains an inventory of all normal and dry year supplies, which in reality are not additive but nevertheless required by DWR
- Footnotes are included to clarify the characteristics of various supplies
- Subsequent tables detail normal and dry year supplies

Response to UWMP Comment

Comment –Seek grant funding, encourage more diverse participation in water issues (deploy linguistically relevant and culturally sensitive information dissemination tools to solicit public interest in water issues)

Response

- Agency has robust outreach program
- Agency currently is participating in grant programs
  - Prop 84 (Round 1) Implementation Grant – Integrated Regional Water Management program which includes SCV Water recycled water projects
  - Prop 1 & Prop 68 – Groundwater Sustainability Plan
  - Prop 1 (Round 1) Implementation Grant – Integrated Regional Water Management programs which includes an outreach program for engaging disadvantaged communities in water issues
- Agency is proactively seeking additional sources of grant funding

Response to UWMP Comment

Comment – Housing crisis. Create plan that supports growth in addition to water resiliency

Response

- SCV Water utilized the City of Santa Clarita's and County's General Plan (One Valley One Vision-OVOV) data to anticipate growth and increased water demands between now and build-out (estimated at 2050)

Response to UWMP Comment

Comment –Increase water rates for “high water users”, moratorium on new swimming pool construction

Response

- Agency does not utilize a tiered rate structure
- Agency notifies “high water users” if water budgets are exceeded to promote water efficiency practices and assist customers with finding potential leaks
- Agency does not have permitting authority over pool construction

Response to UWMP Comment

Comment – Inadequate supply for future development

Response

- SCV Water utilized City of Santa Clarita's and County's General Plan (One Valley One Vision-OVOV) data to anticipate growth and increased water demands between now and build-out (estimated at 2050)
- UWMP details existing and future water supplies
  - Supply analysis for normal, dry and multiple dry year periods shows how we will meet demands with active conservation in each scenario.
  - Agency has acquired multiple supplies for both current and future residents.
  - Investments to treat local groundwater supplies, access dry year Saugus supplies, and supplement dry year imported supplies, are anticipated to balance supply and demands

Response to UWMP Comment

Comment – Recycled water programs have been slow to materialize, want to know the plan for purple pipe program

Response

- Table 5-2 reflects anticipated recycled water project development
- Recycled water availability is tied to flows generated by new construction

Related Comments Received Through Water Shortage Contingency Plan Process

- Comments
  - Plan relies on contaminated water supplies
  - Accuracy of State Water Project (SWP) supplies
  - Unclear ownership of Semitropic bank and arsenic treatment needs
  - Promote local groundwater recharge to supplement existing supplies
    - permeable pavement
    - preservation for recharge areas including streambeds
  - Basis for estimated quantities of new recycled water supply is unclear
  - Recycled water would appear to only be available to the Newhall Ranch project and Vista Canyon
  - Is the quality of recycled water from the Vista Canyon plant consistent with the requirements of the Salt and Nutrient Management Plan
  - Water demands do not include agriculture, grading, Honor Ranch, private wells.
  - Seismic Risk Assessment does not include interruption at the Edmonston Pumping Plant
  - Don’t understand why there isn’t enough water when we live near an ocean
  - Viability of Groundwater Operating Plan

Response to WSCP Comment

Comment – Plan relies on contaminated water supplies

Response

- UWMP anticipates continued investment in treatment facilities to recover impacted groundwater supplies
  - Appendix I provides a detailed schedule and cost estimates for implementing proven treatment technology to recover impacted supplies
  - First PFAS treatment facility came online in 2020 (three N wells included)
    - Valley Center well under construction
  - V201 Perchlorate treatment facility completed, awaiting final permitting from DDW
  - Program included in Agency capital plan
  - Financial plan developed – pending approval

Response to WSCP Comment

Comment –Accuracy of State Water Project (SWP) supplies

Response

- References for SWP reliability are from the updated 2019 Delivery Capability Report
  - Modeled reliability for normal years for existing and future conditions was reported at 58% of allocated supply shifting down to 52% by 2040 due to anticipated climate change impacts.
  - Modeled reliability for single-dry year with existing conditions was stated at 7% of allocated supply. SCV Water reduced this assumption to 5% to represent the “worst-case” scenario experienced in 2014 and 2021

Response to WSCP Comment

Comment – Unclear ownership of Semitropic bank and arsenic treatment needs

Response

- SCV Water is a participant in the Semitropic Water Storage Districts (Semitropic) water banking program
- Semitropic must comply with DWR water quality requirements to pump water into the State Water Project(SWP) aqueduct
- Semitropic has an on-site treatment facility to address water quality issues with their groundwater prior to delivery into the SWP aqueduct
- Additional water is assumed to be available from NLF Semitropic program

Response to WSCP Comment

Comment – Promote local groundwater recharge to supplement existing supplies

- permeable pavement
- preservation for recharge areas including streambeds

Response

- SCV Water's current groundwater recharge activities
  - Potential to spread imported water directly into Alluvial Aquifer at multiple sites (east and west side of Valley)
  - Coordination with City to utilize future stormwater detention facilities for recharge

Response to WSCP Comment

Comment – Basis for estimated quantities of new recycled water supply is unclear

Response

- Quantities of new recycled water are based on estimated indoor water use from new development.
- Quantitative analysis is included in the UWMP Appendix F

Response to WSCP Comment

Comment – Recycled water would appear to only be available to the Newhall Ranch project and Vista Canyon

Response

- At buildout, the Agency anticipates sufficient supplies to provide recycled water for Westside Communities, its Phase 2 projects, and Vista Canyon
  - Reference Figure 5-2 of the 2020 UWMP

Response to WSCP Comment

Comment – Is the quality of recycled water from the Vista Canyon plant consistent with the requirements of the Salt and Nutrient Management Plan

Response

- Current data shows water quality produced by Vista Canyon WRP meets SNMP objectives in relative zone

Response to WSCP Comment

Comment - Seismic Risk Assessment does not include interruption at the Edmonston Pumping Plant

Response

- Section 9 in the 2020 UWMP reviewed several failure modes on the SWP and analyzed a disruption of a 12-month outage.
  - See table 9-1 in the 2020 UWMP

Response to WSCP Comment

Comment –Water demands do not include agriculture, grading, Honor Ranch, private wells.

Response

- Both Agency and non-Agency groundwater pumping are accounted for in the UWMP and are within the limits of the Groundwater Operating Plan and the draft SCV-GSA Water Budget Analysis as shown in Section 4 tables
  - Normal year Tables 4-10
  - Single-Dry Year Tables Table 4-11
  - Multiple-Dry Year Table 4-12

Response to WSCP Comment

Comment - Don’t understand why there isn’t enough water when we live near an ocean

Response

- Feasibility of ocean desalinization is dependent on several factors
  - Cost, permitting, conveyance, feasibility of conveying water
- Agency would have to rely upon a water exchange to implement program
- More cost effective alternatives exist

Response to WSCP Comment

Comment - Viability of Groundwater Operating Plan

Response

- Historical operating experience confirms viability of the modeled operating plan

Comment on Groundwater Operating Plan

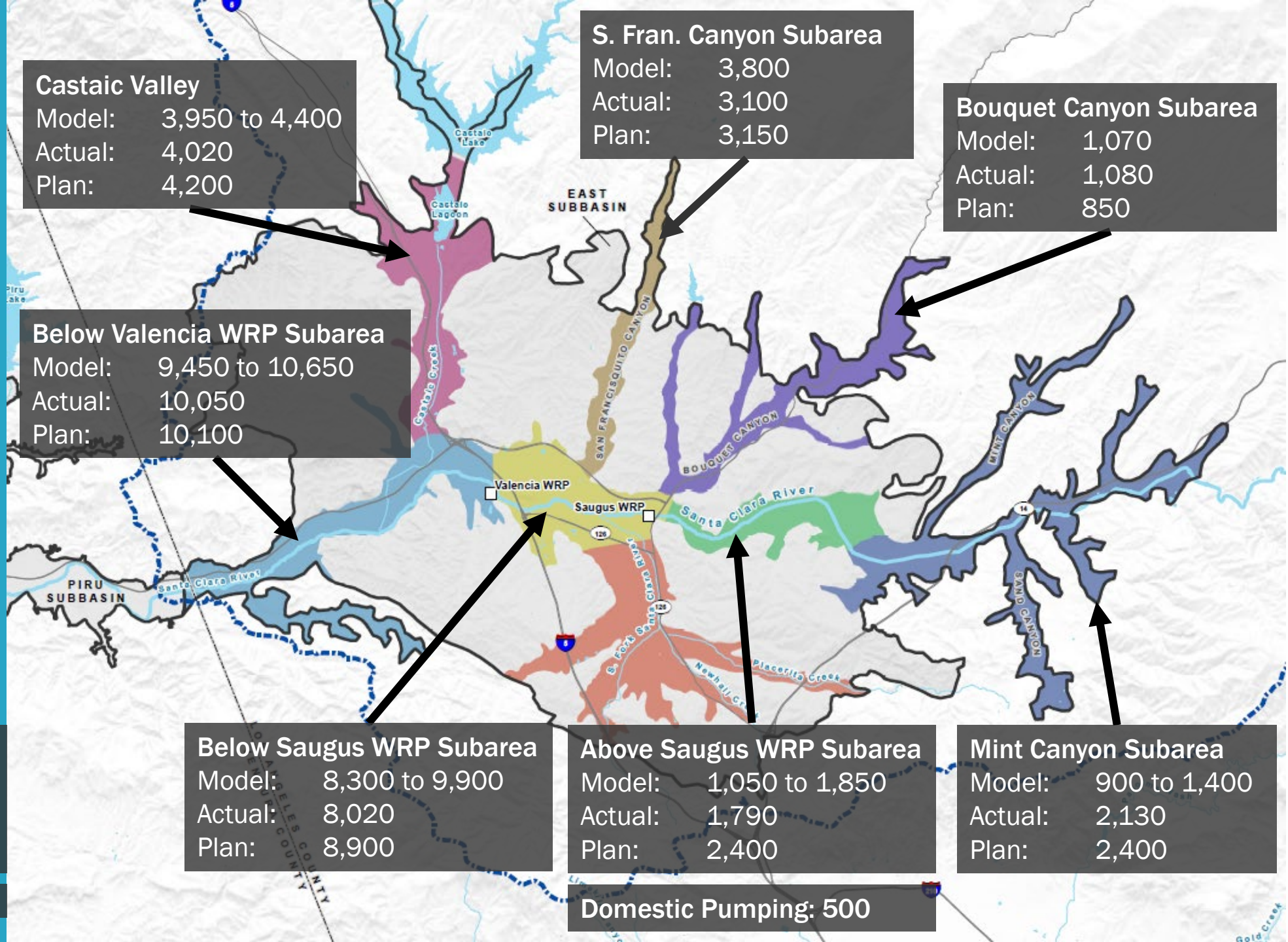
"The Agency has stated that it has an alluvial supply of 30,000 to 40,000 AF of water based on its operating plan. However, that operating plan didn't work in the 2010–2015 drought."

"The drought year operating plan should be reduced in the face of this actual loss of well production."

Note: This comment cites a "2015 technical memorandum" report by GSI Water Solutions, Inc.
(The actual date for the memorandum was December 15, 2014.)
(This document was a draft and was never finalized.)

Dry-Year Pumping in Alluvial Subareas

(Acre-Feet Per Year)



Total

Model: 29,020 to 33,570
Actual: 30,690
Plan: 32,500

Note: Actual values are for calendar year 2015.

Key Points

- Actual pumping of the Alluvial Aquifer in 2015 was within the range predicted by the model
- Future pumping during dry years (32,500 AFY) will be within the range predicted by the model in 2015 (29,020 to 33,750 AFY)

Key Points

- These are basin-wide values (SCV Water and others)

Future dry-year alluvial pumping by SCV Water:	26,100 AFY
Future dry-year alluvial pumping by others:	6,400 AFY
Future dry-year alluvial pumping total:	**32,500 AFY**

- The total dry-year value is within the range for alluvial pumping called for in the basin's current groundwater operating plan during dry years (30,000 to 35,000 AFY)

Next Steps

- Public Hearing for Water Shortage Contingency Plan (WSCP)
  - Adoption of WSCP
  - June 9, 2021, 6:00 p.m.
- Part 2 Public Hearing for 2020 UWMP
  - Adoption of 2020 UWMP & 2015 UWMP Addendum
  - June 16, 2021, 6:00 p.m.
- July 1, 2021 UWMP Submitted to DWR
  - Distribute to City and County Land Use Planners
  - Send to Ca State Library in Sacramento and local libraries
- DWR approval of UWMP Act compliance

Thank You