



**SCV**  
**WATER**

# The Trails at Lyons Canyon Water Supply Assessment

Water Resources and Watershed Committee  
March 9, 2022  
Item 4  
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# Presentation Outline



**SB 610 WSA Process and Requirements**



**Project Description & Water Demands**



**Available and Anticipated Water Supplies**



**Review and Management of Demand and Water Supply Risks**



**Review of SCV Water's Historical Operations**



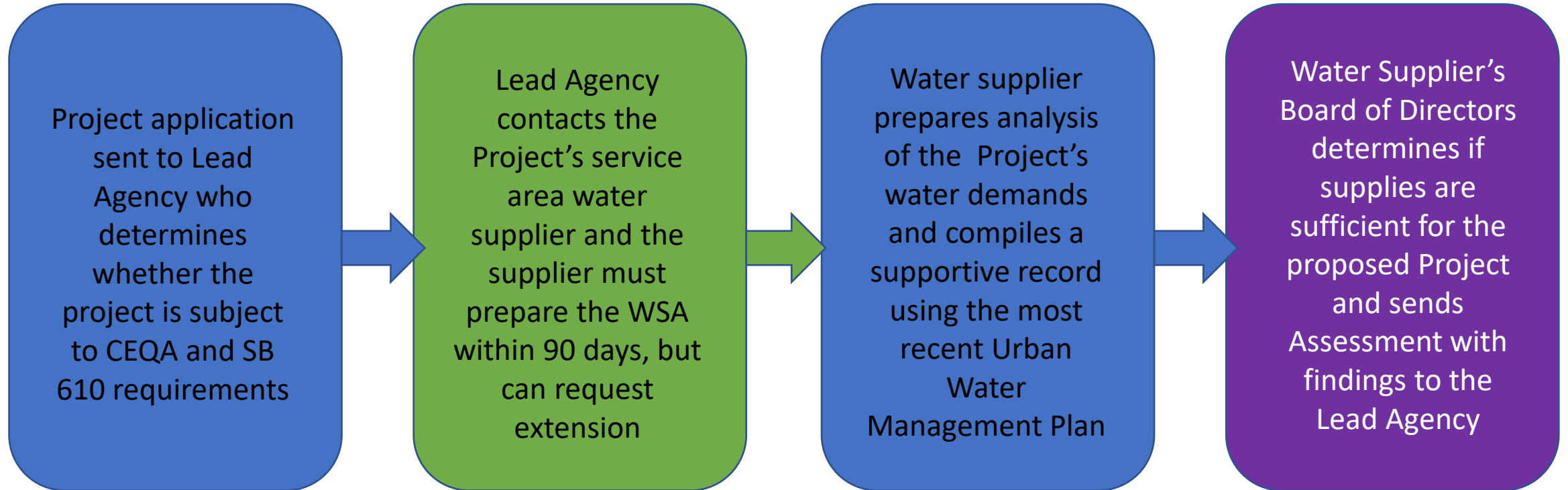
**Supply and Demand Comparisons**



**Conclusions and Recommendations**



# SB 610 Water Supply Assessment Process



# SB 610 Water Supply Assessment Requirements

- Analyze the Project's water demand
- Quantity of water received by Water Supplier in prior years from:
  - Water Supply Entitlements
  - Water Service Contracts
  - Groundwater
- WSA to show 20-year projected supply will meet demands
  - For normal, single dry and multiple dry years for the Project + existing and planned future uses
  - Future planned supplies can be considered in projections
- Water Supplier Board of Directors approval of the WSA

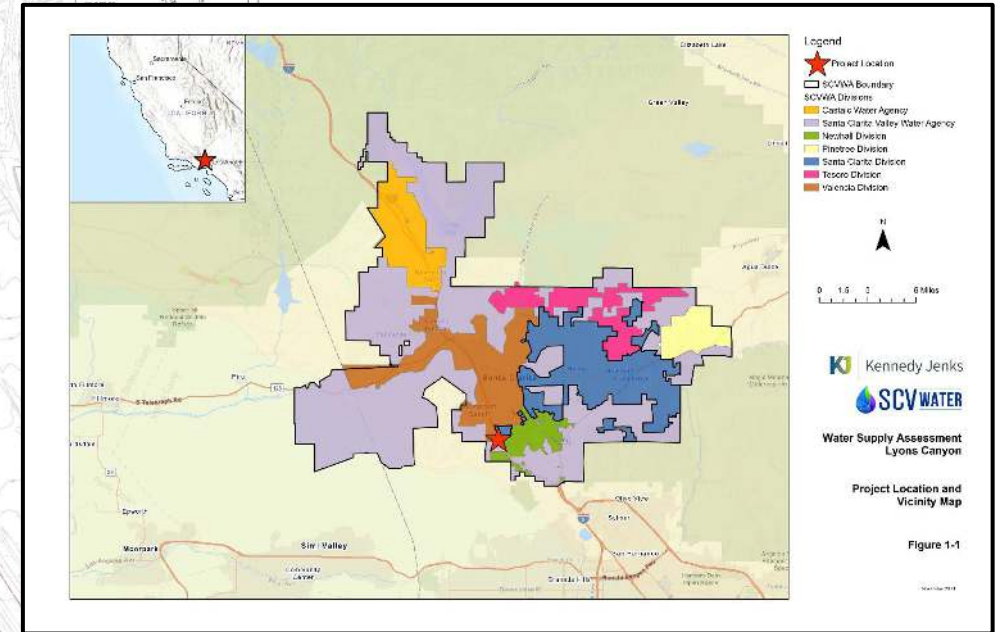
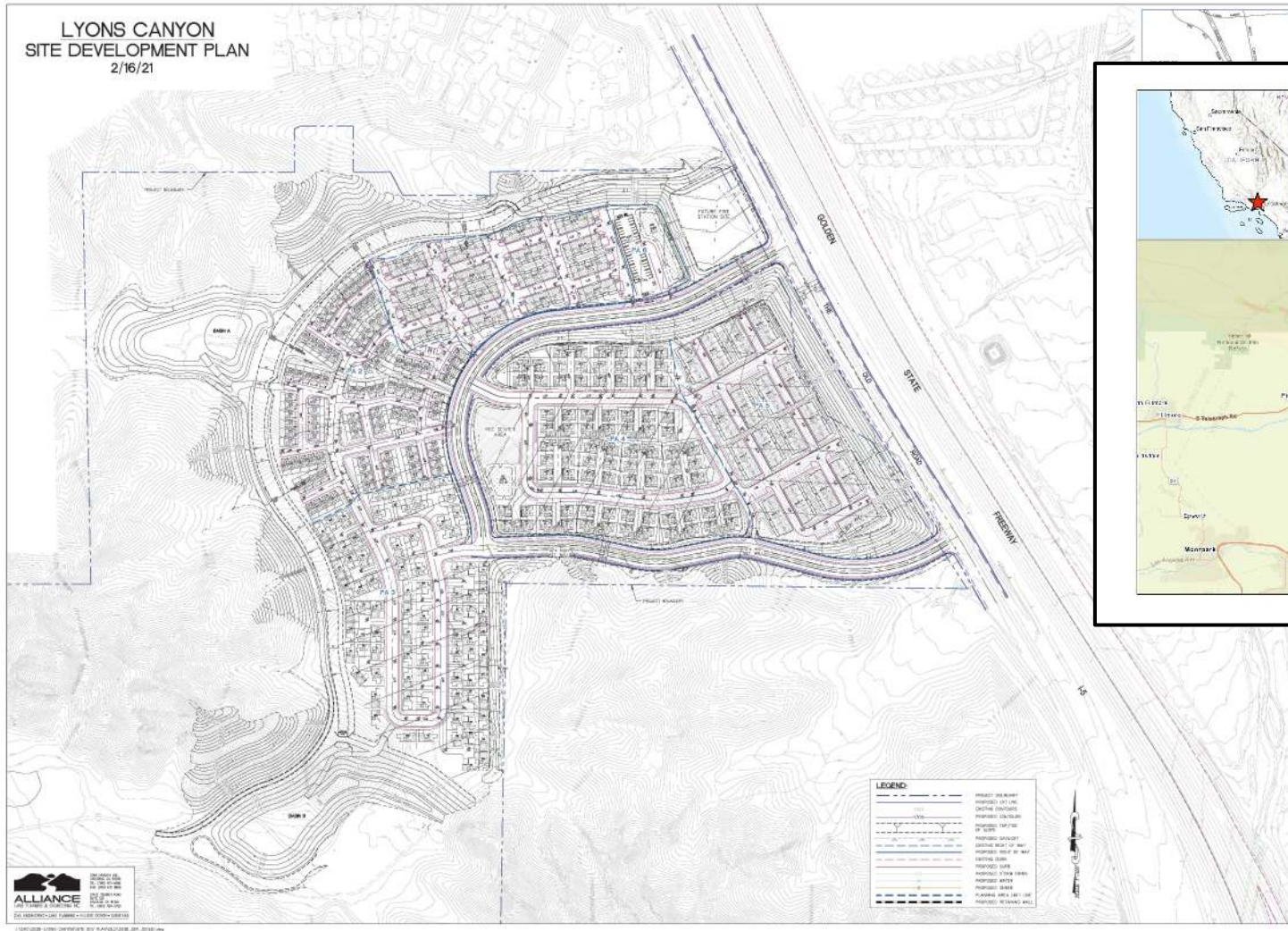


# The Trail at Lyons Canyon Project Description

- The Project is within the SCV Water service area
- The Project is on 233 acres within six planning areas
- The Project consists of 517 dwelling units located in 2-3 story detached condominiums and 43 affordable senior apartments
- The Project will also have a community recreation area, drainage basins and a site for a future fire station



# The Trail at Lyons Canyon Location



- The Project is located near the SW corner of Sagecrest Circle and The Old Road, in unincorporated LA County.



# SB 610 Requirement:

## The Trail at Lyons Canyon Demand Assessment Analysis

PROJECTED DEMANDS			
Land Use	# of units	Unit	Demand (AFY)
Multi-Family Condominium	517	DU	102.51
MF Condo Open Space	31.9	Acres	100.17
Landscaped Areas	2	Acres	6.28
Senior Apartment	36	DU	3.77
Fire Station	60.1	TSF	13.94
Drainage Basin	N/A	N/A	0
Recreation Center	29.6	TSF	6.86
<b>Total Average Year Demands (AFY)</b>			<b>234</b>
<b>Projected Single Dry Year Demands (AFY)</b>			<b>248</b>
<b>Projected Multiple-Dry Year Demands (AFY)</b>			<b>239</b>

- Project is part of the City of Santa Clarita and Los Angeles County One Valley-One Vision General Plan, as such, demands were incorporated into the 2020 UWMP



# Water Supply Approach

- Project's WSA relies on current and future SCVWA water supply portfolio
- The WSA references the supply portfolio as described in the 2020 UWMP with modifications due to:
  - DWR's December 2021 Draft Delivery Capability Report
  - Modified schedules for the recovery of impacted well capacity due to PFAS, VOC and Perchlorate contamination





# 2021 SWP Delivery Capability Report

- Draft Report Issued December 31, 2021
- Uses Updated Model (CALSIM3) with longer hydrologic record
- Draft Report indicated reduction of average reliability from 58% to 56% and single dry-year from 7% to 5%
- Analysis was updated using currently available data
- *Resulted in minor modifications to reliability tables*



# Modified Schedule of Well Restoration

- Saugus Well 201
  - On-line date deferred from 2022 to 2024
  - Accommodated installation and permitting for additional VOC treatment
- Saugus Well 205
  - On-line date deferred from 2022 to 2024
  - Currently in design for Perchlorate & VOC treatments
- PFAS impacted Alluvial Wells
  - Well supply of 15,270 AFY to return by 2025
  - Additional Well supply of 6,420 AFY to return by 2030
  - *Resulted in minor modifications to reliability tables*



# Current Supply Portfolio

Current Supply	Amount (AFY)
SWP Table A Amount (single dry - normal)	4,760-53,300
<b>Groundwater</b>	
Alluvium	15,000-16,000
Saugus	7,500-15,000
<b>Groundwater Banking Programs</b>	
Semitropic	5,000
Rosedale-Rio Bravo	10,000
<b>Transfers &amp; Exchanges</b>	
AVEK - 2 for 1 Exchange	5,174
UWCD - 2 for 1 Exchange	500
BV-RRB Transfer Agreement	11,000
Yuba Accord Water	1,000
Recycled Water	450



# Future & Proposed Supplies

Planned Supplies	Amount (AFY)	Proposed On-Line Date
Future and Recovered Groundwater		
Saugus Wells 201 & 205	5,210	2025
Saugus Wells 3 & 4	8,060	2025
Saugus Wells 5 & 6	6,460	2027
Saugus Wells 7 & 8	6,460	2030
Recoverd Alluvial Wells	23,490	2030
Recycled Water		
Phase 2 Projects	2,440	2023
FivePoint Westside Communities	5,174	2021-2043
Banking Programs		
Rosedale-RB Additional Extraction	10,000	2030
Semitropic - NLF	4,950	2035
Nickel Water - NLF	1,607	2035



# Groundwater Quality

- Groundwater Quality Issues
  - Restoration of PFAS impacted wells
  - Restoration of perchlorate impacted wells
  - Permitting of additional Saugus wells
- Approach consistent with 2020 UWMP
  - Historical and Current Conditions Assessed
  - Treatment methods and scheduling identified
  - Permitting path documented



# Climate Change

- Restructured UWMP Information to provide additional text in main report
- Water Demand anticipated to increase by 3.77% by 2050 consistent with DWR's SGMA approach
- Groundwater supplies are based on modeling that incorporated the DWR's same SGMA approach
- SWP Reliability 2019 Delivery Capability Report (DCR)
  - Incorporates a sea level rise of 45 cm

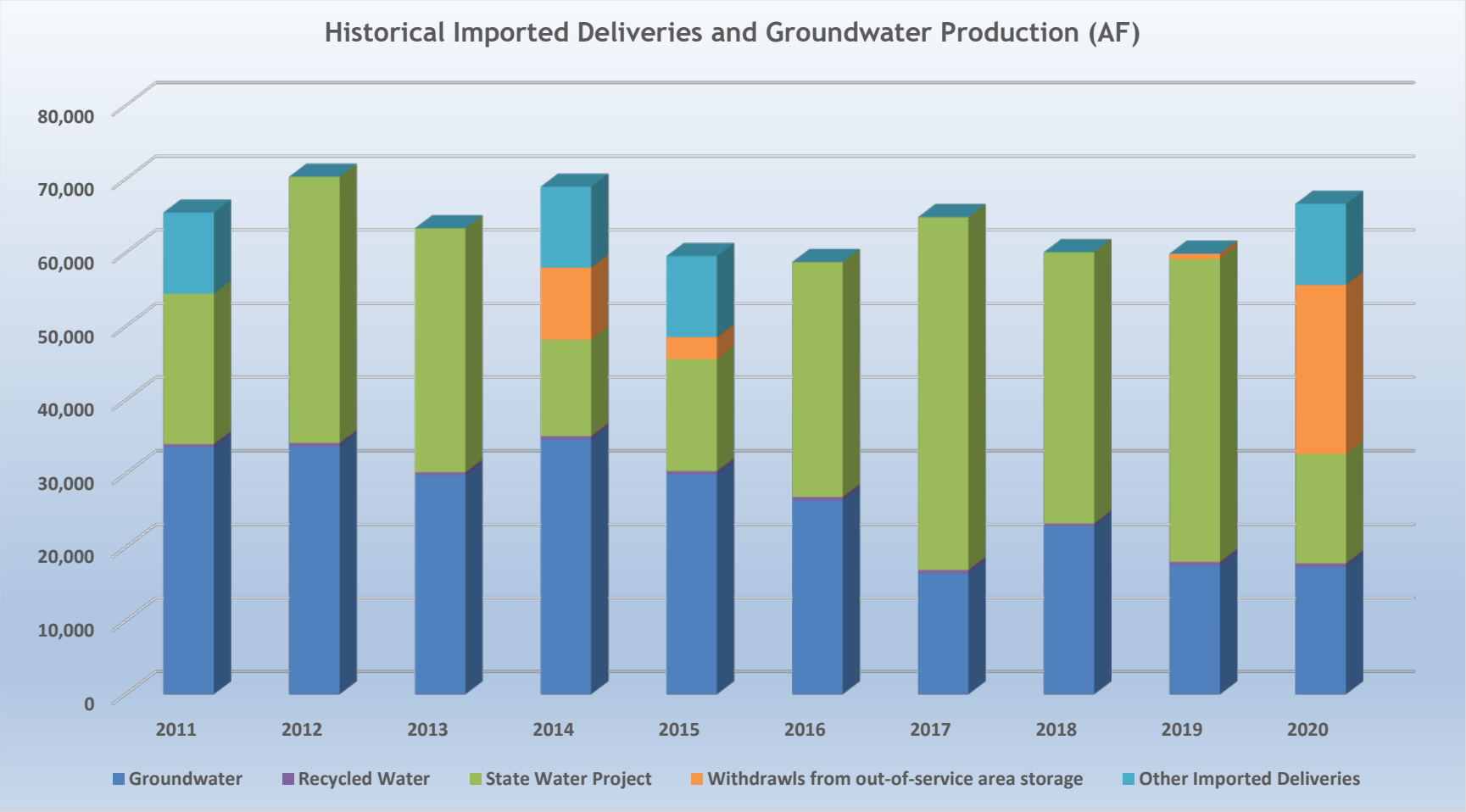


# Pending Water Conservation Regulations

- Potential reduction of Indoor water use to 42 gpcd
- Potential regulation to mandate irrigation water efficiency
  - *Irrigation efficiencies gains would offset reduced recycled water availability*



# SB 610 Requirement: Assessment of Recent Operations



Conclusion: SCV Water demonstrated an ability to conjunctively use its imported surface water and groundwater along with recycled water and conservation to meet water demands facing the dual challenges of severe drought and restricted groundwater supplies.





# SB 610 Requirement

## Water Balance Analysis Performed for:

- Normal
- Multiple Dry-Years
- Single Dry-Year

Projected Normal Year Supplies and Demands (AF)						
	2025	2030	2035	2040	2045	2050
<b>Existing Supplies</b>						
Existing Groundwater <sup>(a)</sup>						
Alluvial Aquifer	8,900	8,180	7,300	7,300	7,300	7,300
Saugus Formation	14,440	7,110	7,110	7,110	7,110	7,110
<b>Total Groundwater</b>	<b>23,340</b>	<b>15,290</b>	<b>14,410</b>	<b>14,410</b>	<b>14,410</b>	<b>14,410</b>
Recycled Water <sup>(b)</sup>						
<b>Total Recycled</b>	<b>450</b>	<b>450</b>	<b>450</b>	<b>450</b>	<b>450</b>	<b>450</b>
Imported Water						
State Water Project <sup>(c)</sup>	52,360	51,410	50,460	49,500	49,500	49,500
Flexible Storage Accounts <sup>(d)</sup>						
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land <sup>(e)</sup>	-	-	1,607	1,607	1,607	1,607
Yuba Accord Water <sup>(f)</sup>	1,000	-	-	-	-	-
<b>Total Imported</b>	<b>64,360</b>	<b>62,410</b>	<b>63,067</b>	<b>62,107</b>	<b>62,107</b>	<b>62,107</b>
Existing Banking and Exchange Programs <sup>(g)</sup>						
Rosedale Rio-Bravo Bank <sup>(g)</sup>	-	-	-	-	-	-
Semitropic Bank <sup>(g)</sup>	-	-	-	-	-	-
Semitropic - Newhall Land Bank <sup>(g)</sup>	-	-	-	-	-	-
Antelope Valley West Kern Water Agency Exchange <sup>(g)</sup>	-	-	-	-	-	-
United Water Conservation District Exchange <sup>(g)</sup>	-	-	-	-	-	-
<b>Total Bank/Exchange</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Existing Supplies</b>	<b>88,150</b>	<b>78,150</b>	<b>77,927</b>	<b>76,967</b>	<b>76,967</b>	<b>76,967</b>
<b>Planned Supplies</b>						
Future and Recovered Groundwater <sup>(h)</sup>						
Alluvial Aquifer <sup>(i)</sup>	10,340	19,870	23,490	23,490	23,490	23,490
Saugus Formation <sup>(i)</sup>	3,010	2,790	2,790	2,790	2,790	2,790
<b>Total Groundwater</b>	<b>13,350</b>	<b>22,660</b>	<b>26,280</b>	<b>26,280</b>	<b>26,280</b>	<b>26,280</b>
Recycled Water <sup>(k)</sup>						
<b>Total Recycled</b>	<b>1,849</b>	<b>3,696</b>	<b>5,091</b>	<b>6,498</b>	<b>7,499</b>	<b>8,511</b>
Planned Banking Programs						
Rosedale Rio-Bravo Bank <sup>(h)(i)</sup>	-	-	-	-	-	-
<b>Total Banking</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Planned Supplies</b>	<b>15,199</b>	<b>26,356</b>	<b>31,371</b>	<b>32,778</b>	<b>33,779</b>	<b>34,791</b>
<b>Total Supplies (Existing and Planned)<sup>(m)</sup></b>	<b>103,349</b>	<b>104,506</b>	<b>109,298</b>	<b>109,745</b>	<b>110,746</b>	<b>111,758</b>
<b>Demands<sup>(n)</sup></b>						
Demands with passive conservation <sup>(n)</sup>	82,100	89,300	97,600	104,300	109,600	115,100
Demands with passive and active conservation <sup>(n)</sup>	76,400	81,700	88,700	93,600	97,500	101,000



# SB 610 Requirement: Supply exceeds Demand

SUPPLY AND DEMAND COMPARISON with The Trails at Lyons Canyon Project									
Year	Normal Year Supply (AF)	Normal Year Demand (AF) with Project	Remaining Balance (AF)	Single-Dry Year Supply (AF)	Single-Dry Year Demand (AF) with Project	Remaining Balance (AF)	5-Year Dry Period Supply (AF)	5-Year Dry Period Demand (AF) with Project	Remaining Balance (AF)
2025	103,349	76,400	26,949	83,419	81,000	2,419	101,303	77,830	23,473
2030	104,506	81,700	22,806	106,736	86,600	20,136	114,033	83,620	30,413
2035	109,298	88,700	20,598	117,428	94,000	23,428	125,559	90,570	34,989
2040	109,745	93,600	16,145	118,835	99,200	19,635	130,085	95,780	34,305
2045	110,746	97,500	13,246	119,836	103,400	16,436	131,015	99,670	31,345
2050	111,758	101,000	10,758	120,848	107,100	13,748	128,715	102,870	25,845

**Conclusion: Water Supply exceed projected demands in normal, multi dry-years and single dry-years throughout the study period**



# Conclusion:

- Staff has evaluated the long-term water demand and has compared these needs against existing and planned water supplies
- Demand projections were based on:
  - Population projections
  - County and City land use plans
  - Both active and passive conservation
  - Climate change impacts
- The WSA concluded that the total projected water supplies over the 30-year projection period are sufficient to meet the projected demands associated with the proposed Trails at Lyons Canyon Project as well as existing and planned future uses



# Recommendation

Staff recommends that the Water Resources and Watershed Committee recommend that the Board of Directors of the Santa Clarita Valley Water Agency adopt a resolution approving the SB 610 Water Supply Assessment for the Trail at Lyons Canyon Project and direct staff to submit the WSA to the County of Los Angeles.





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**Questions?**

