Status of 2021 Water Supplies

SCV Water Board of Directors
January 19, 2021
Item 6.3

Overview

Water Supplies

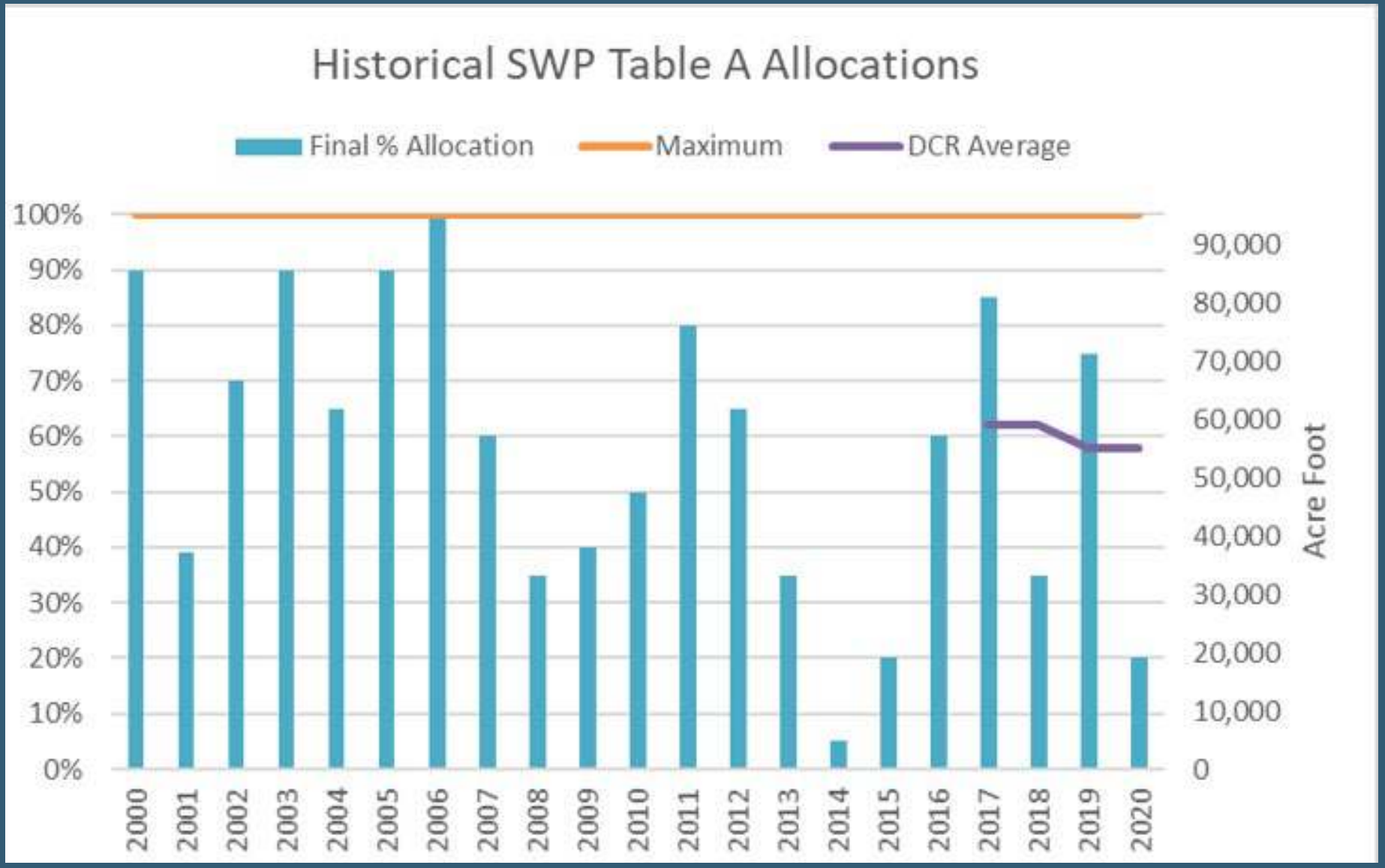
- SWP Table A
- BVRRB
- Water Banks
- Water Exchanges

Water Supply Update

- 2020 Water Supply
- 2021 Conditions
- 2021 Operating Plan

SWP Table A

- Imported Water
- 50% of demands in average year
- Annual variability
  - Precipitation (rain, snow, runoff)
  - Pumping capacity (California Delta)
  - Water quality
  - Environmental regulations (wildlife)
- SCV Water Contracted Amount
  - 95,200 AFY– 100%
- Wet years stored in banking programs


Historical SWP Table A Allocations
Final % Allocation
Maximum
DCR Average
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Acre Foot
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020

SWP Article 56 Carryover Supply

- Balance January 2021 = 13,500 AF
- Maximum based on available storage in San Luis Reservoir
- Delivery capacity limited between 25-50% of Table A amount
- Subject to "spill"
- No cost to store or extract

Operating Constraints: Balancing risk of spill with alternative water management actions

BVRRB - Buena Vista Rosedale-Rio Bravo

- Water purchase agreement
  - Term 2007-2036
    - Plus term of SWC extension
  - 11,000 AFY (every year)
  - Non project water
- Critical supply for dry years
- Costs
  - Tied to CPI and SWP Costs
  - 2021 - $888/AF

Water Banking Programs

Rosedale-Rio Bravo Water Storage District (RRB)

Storage Capacity

- 200,000 AF cycled through program
  - Maximum storage at any given time 100,000 AF
  - 98,800 AF current balance
- Delivery Capacity Rate (put)– 20,000 AFY
  - 11% recharge loss
- Extraction Capacity (take)– 20,000 AFY (contractual maximum)
  - Combination of Agency financed wells (7,000 AF (2018)) and 1st right to unused well capacity (3,000 AF est. minimum)
  - Annual assessment of additional unused well capacity
- Exchange of Table A

Term of Contract

- Based on cycling through 200,000 AF

Costs

- Negotiation Fee $600,000
- Capital
  - $6,000,000 (initial capital)
  - $9,736,000 (firm extraction capacity)
  - Extraction facilities (grant funding & 1% property tax)
  - Annual – None
- Usage Fees (reserve fund)
  - Recharge Fees Prepaid ($30 per AF for 200 TAF)
  - Recharge – O/M & Transportation Fee - $9 per AF
  - Extraction Fee - $70 per AF from RRB wells
  - Extraction Fee - $2 per AF from SCVWA wells
  - Power costs for extractions - $80 per AF
  - Cross Valley Canal costs

Semitropic SWRU-
Stored Water Recovery Unit

- Part of a Larger Water Bank
  - 1.65 MAF of storage capacity
  - 15 participants (6 Original; 9 SWRU)
  - Total Extraction 2013-2016 = 410,000 AF
  - Successfully dealt with Water Quality Issues
- Storage Capacity
  - 15,000 AF plus 31,000 AF surcharge
  - 40,278 AF current balance
- Delivery Capacity (put) – 5,000 AF minimum
  - 10% evaporative and aquifer losses
- Extraction Capacity (take) – 5,000 AFY firm; plus exchange rights
- Exchange of Table A

Costs

- Capital - $8,450,000 (5,000 shares)
  - 75% funded through Prop 84 grant
- Annual Payments
  - Funding - capital planning projects
  - Management Fee - $35,057 ($7.01/share in 2021)
  - Maintenance Fee - $40,000 ($8.00/share)
- Usage Fees (2021 rates)
  - Funded through reserves
  - $14.01 per AF stored
  - $98.11 per AF recovered
  - $30.00 per AF treatment
  - Average unit power cost for pumping recovery (~$120/AF)

Term of Contract

2015 to 2035

Option for two 10-year term extensions

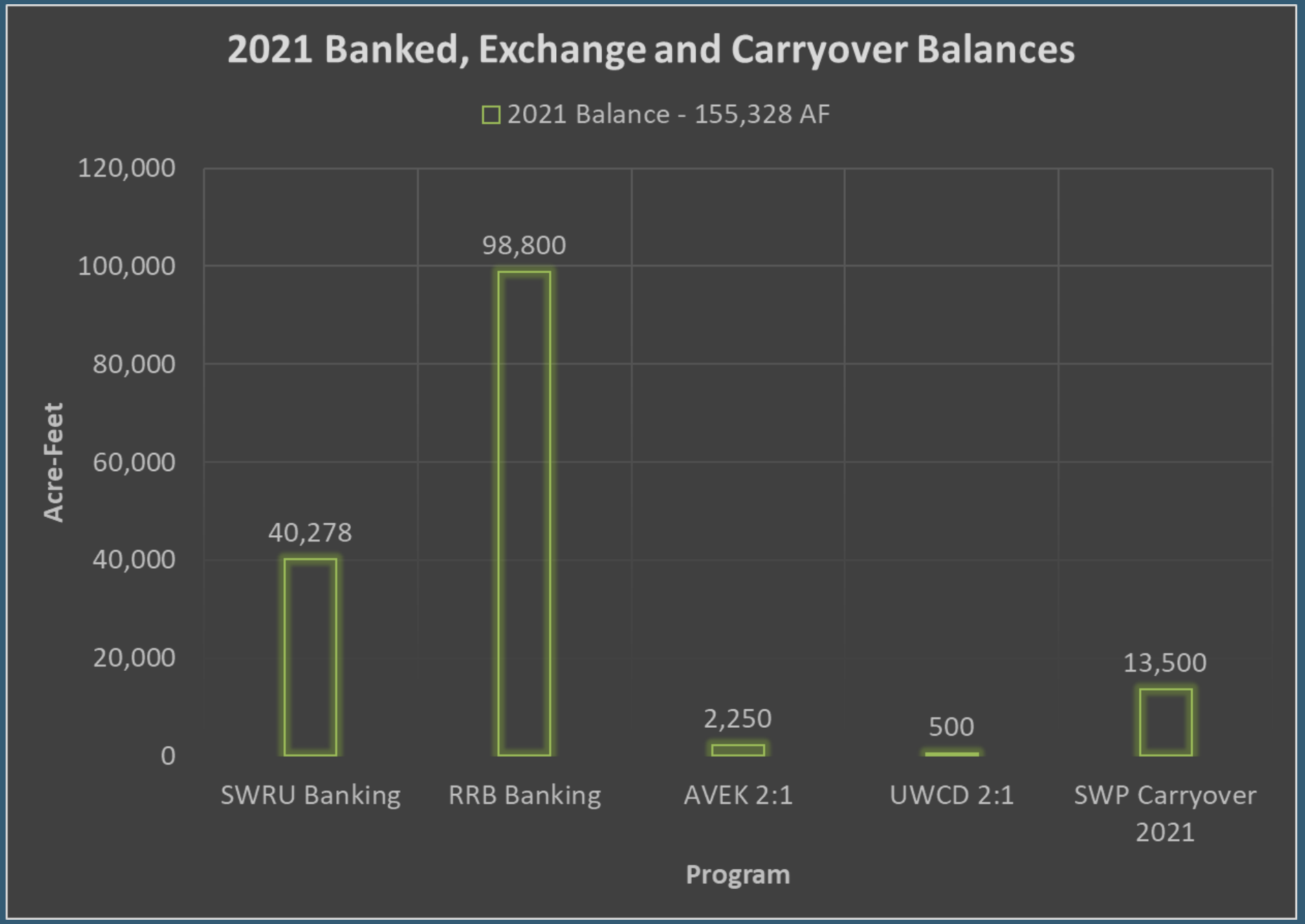
AVEK 2:1 Water Exchange

- 2019 Exchange with Antelope Valley-East Kern Water Agency (AVEK)
- Quantity Delivered –7,500 AF
  - 3,750 AF Return Obligation
  - Return in any year > 30% SWP allocation
- 2020 Return – 1,500 AF
- Existing Return Obligation – 2,250 AF by 2029

UWCD 2:1 Exchange

- 2019 Exchange with United Water Conservation District (UWCD)
- Quantity Delivered –1,000 AF
  - 500 AF Return Obligation
  - Return in any year > 30% SWP allocation
  - 500 AFY return maximum
- Existing Return Obligation – 500 AF by 2029

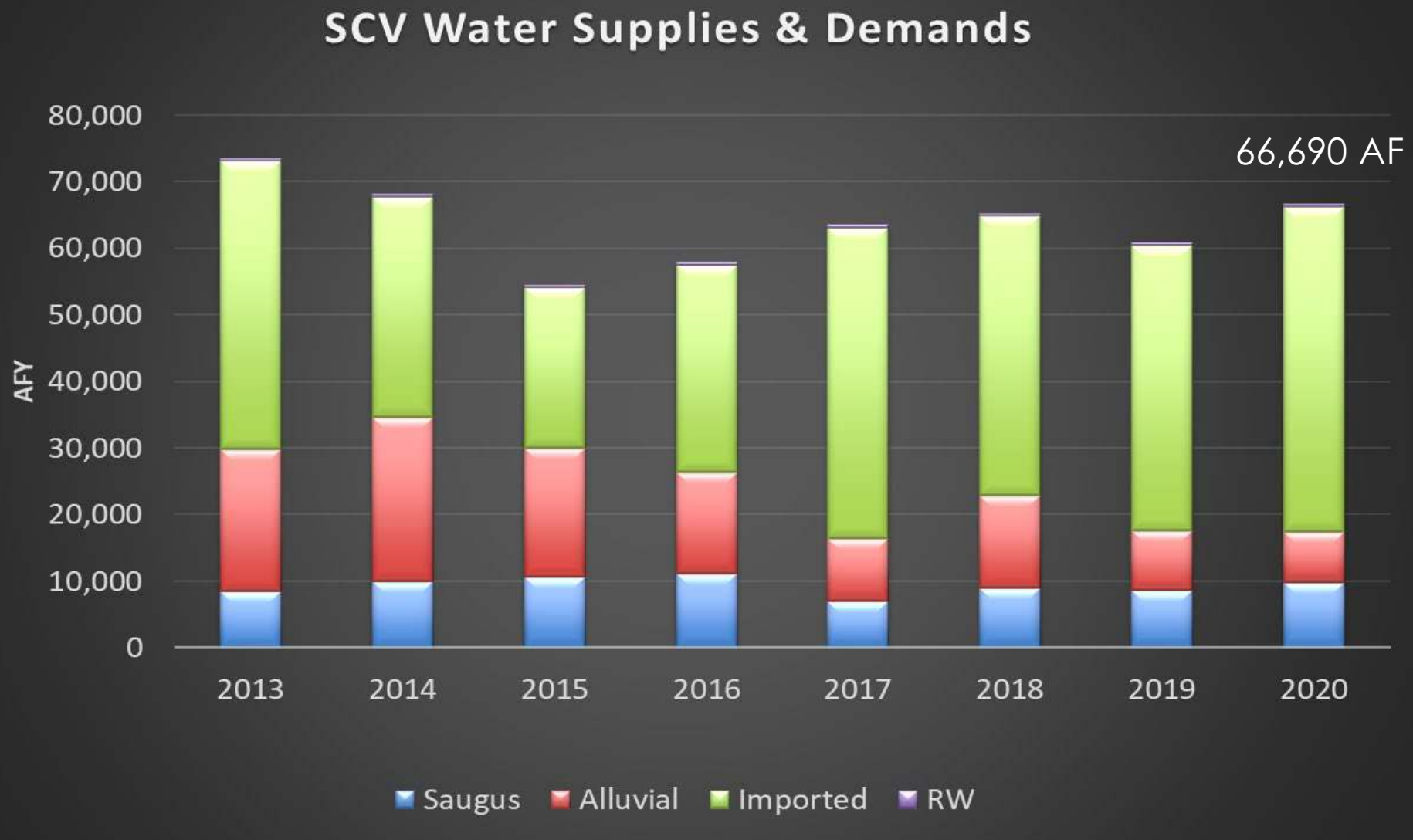
United Water
CONSERVATION DISTRICT


2021 Banked, Exchange and Carryover Balances
2021 Balance - 155,328 AF
120,000
100,000
80,000
60,000
40,000
20,000
0
Acre-Feet
40,278
98,800
2,250
500
13,500
SWRU Banking
RRB Banking
AVEK 2:1
UWCD 2:1
SWP Carryover 2021
Program

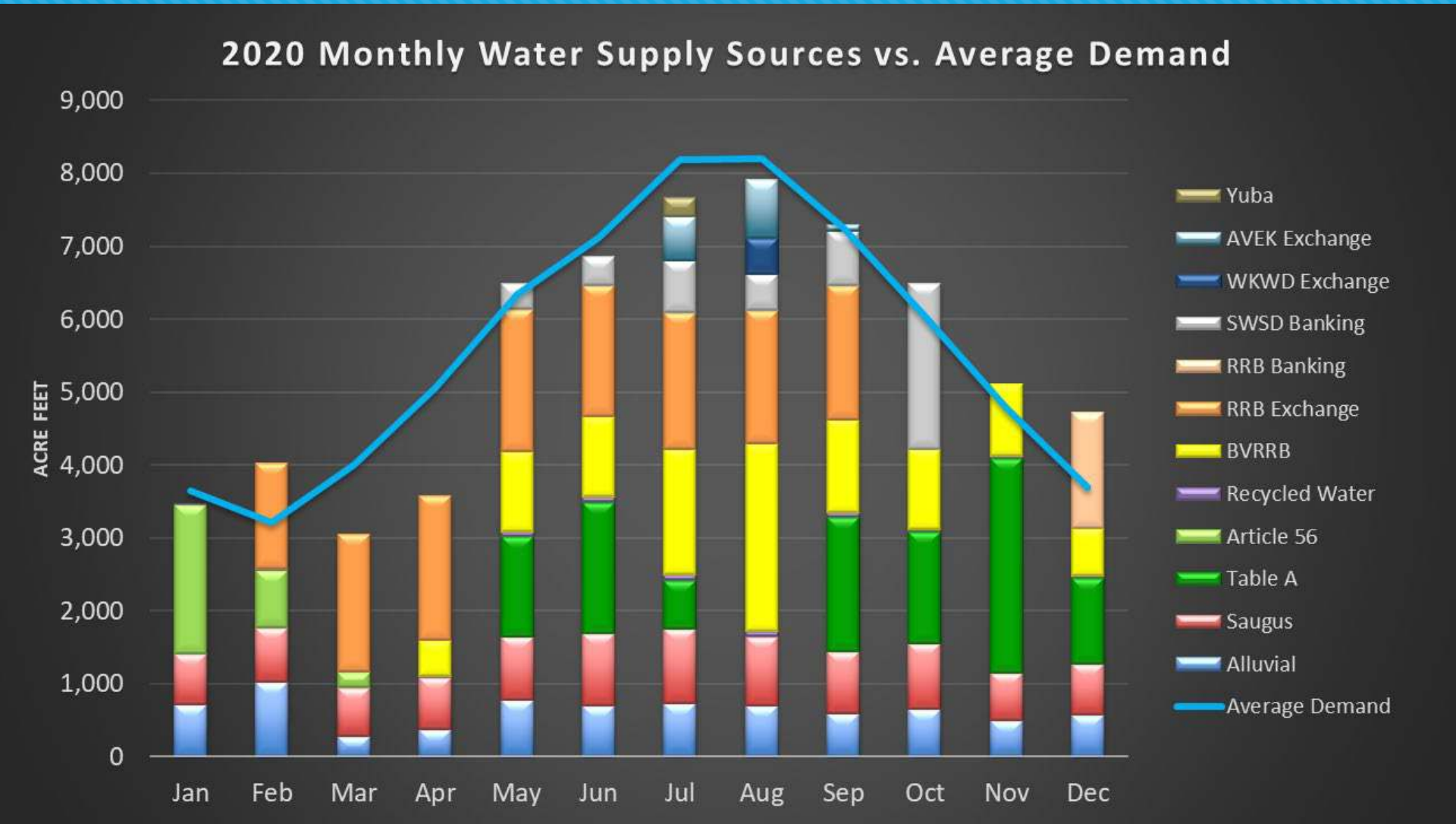
2020 Water Supply Overview

- About Average Precipitation for Santa Clarita
- Dry Year Classification (statewide)
- 20% Allocation
- Local Water Quality Challenges

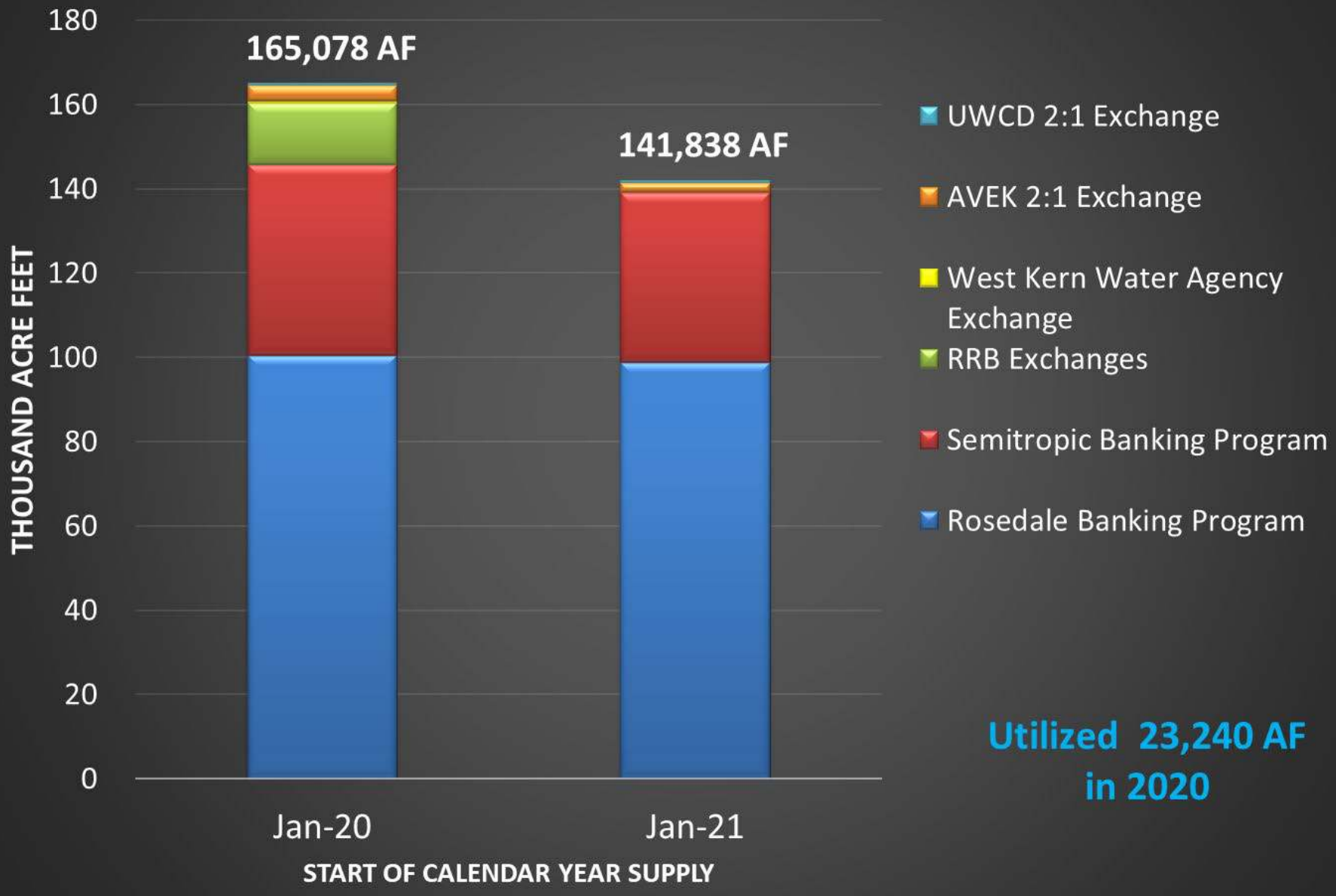
2020 vs. Historical Demands



2020 Supply & Demands



Dry Year Storage Use in 2020



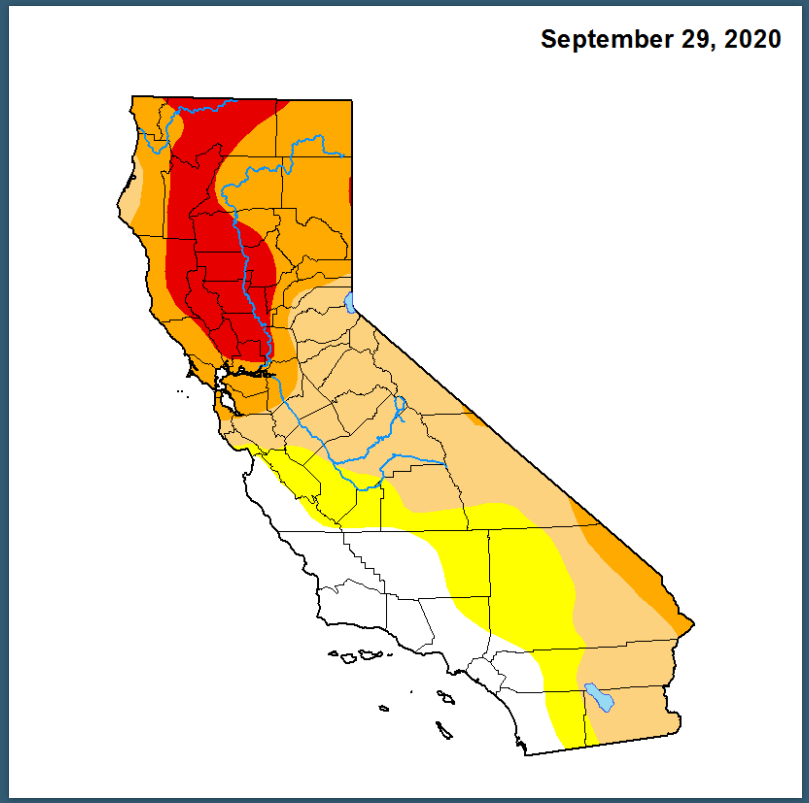
Utilized 23,240 AF in 2020

2021 Water Supply Update

2021 Drought Classification

Jan. - One Year Ago

2021 Water Year



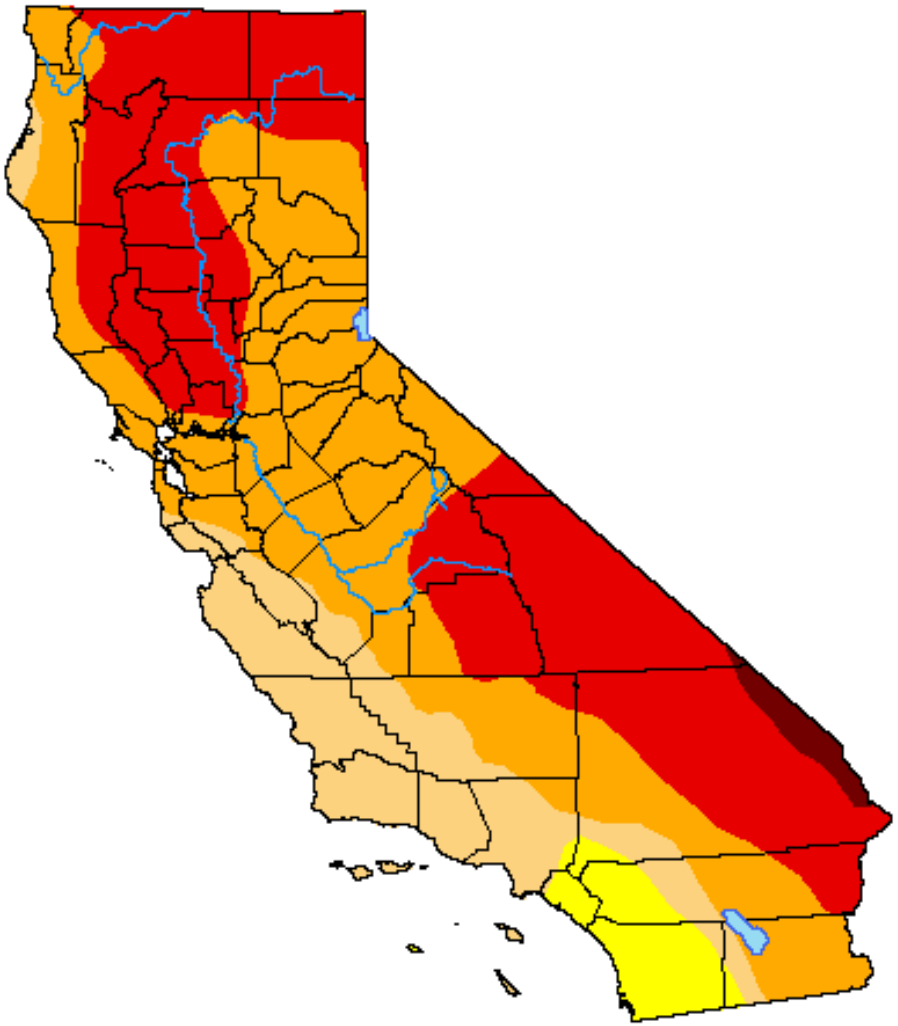
U.S. Drought Monitor

California

January 12, 2021

(Released Thursday, Jan. 14, 2021)

Valid 7 a.m. EST



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

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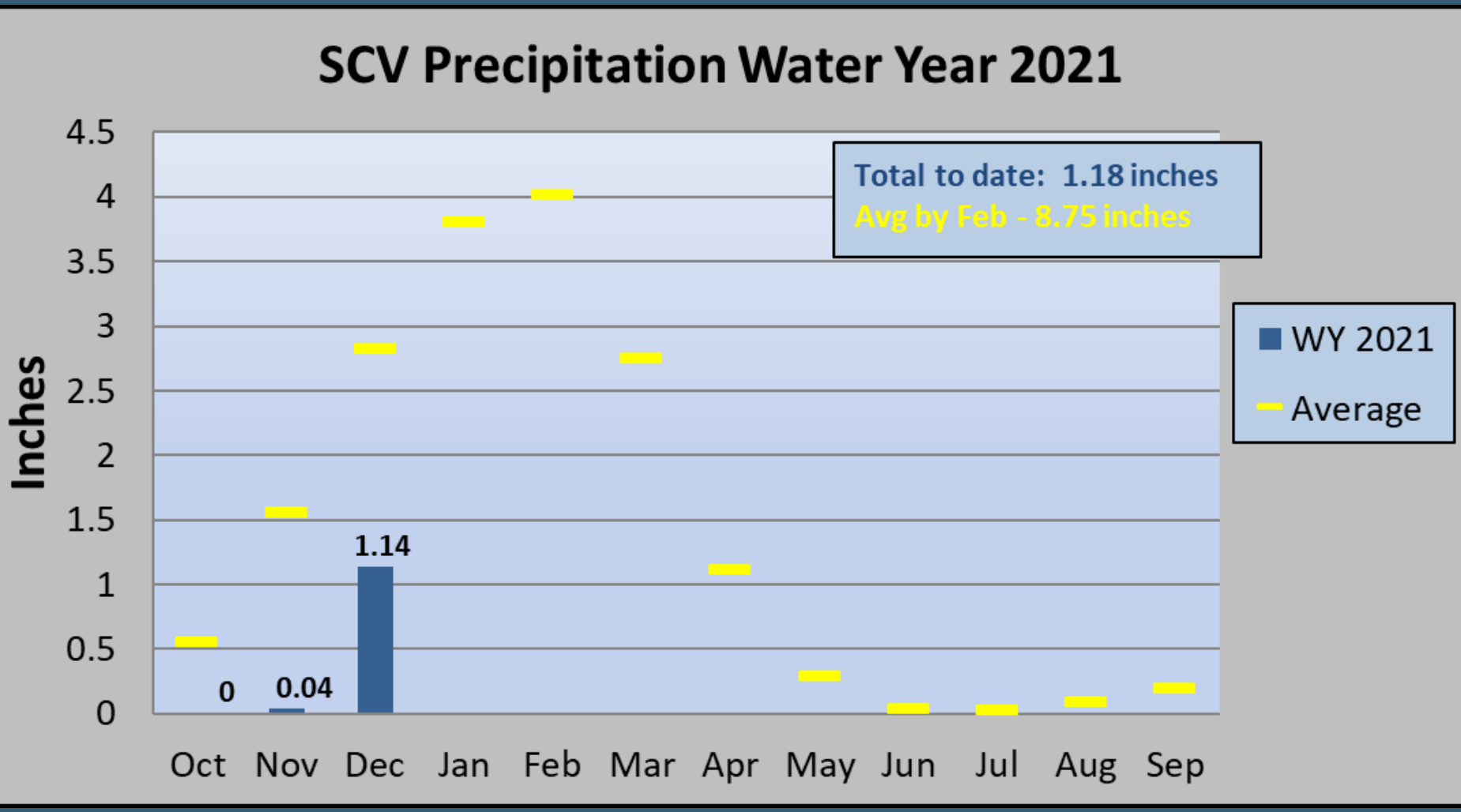
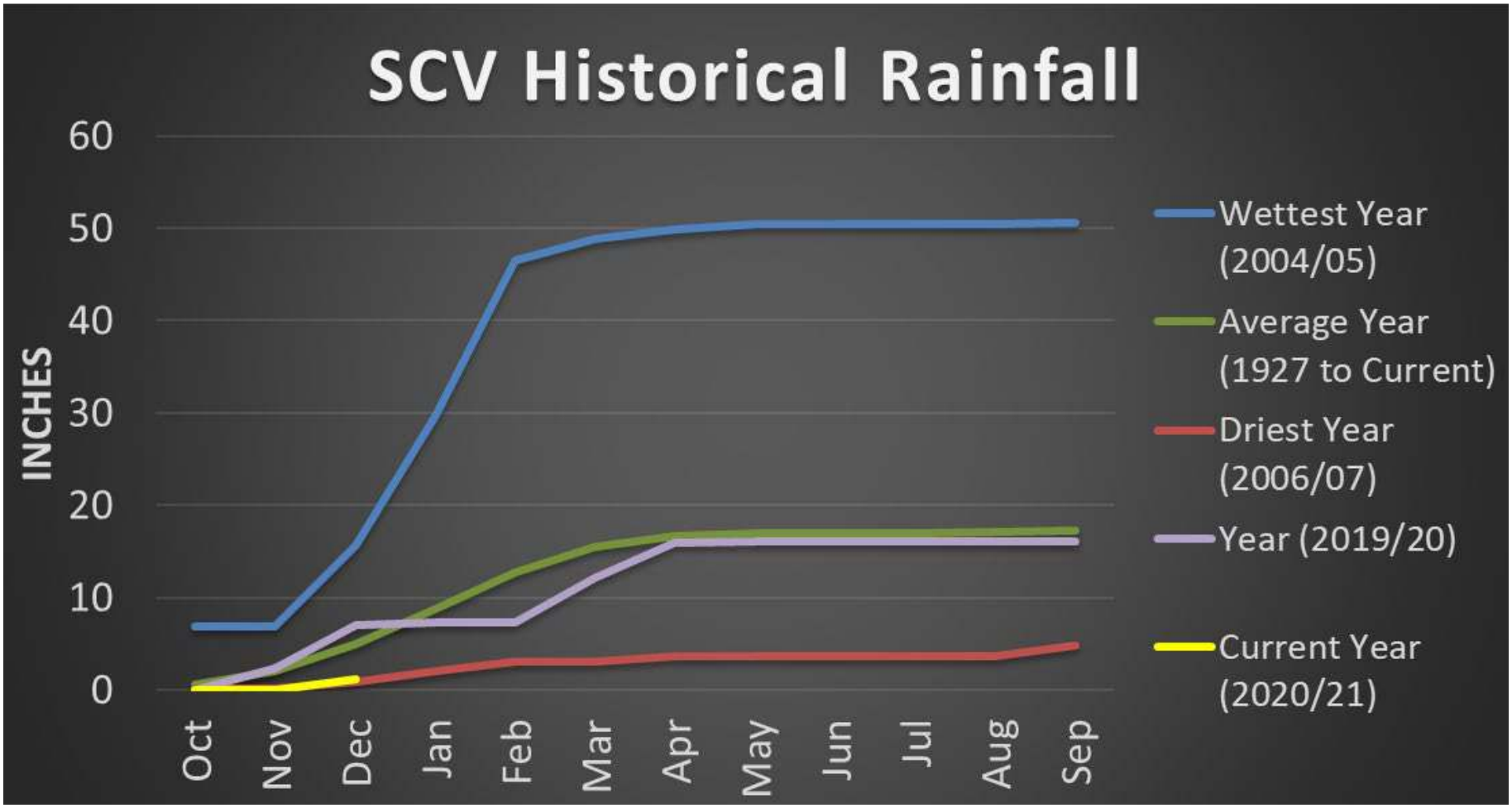
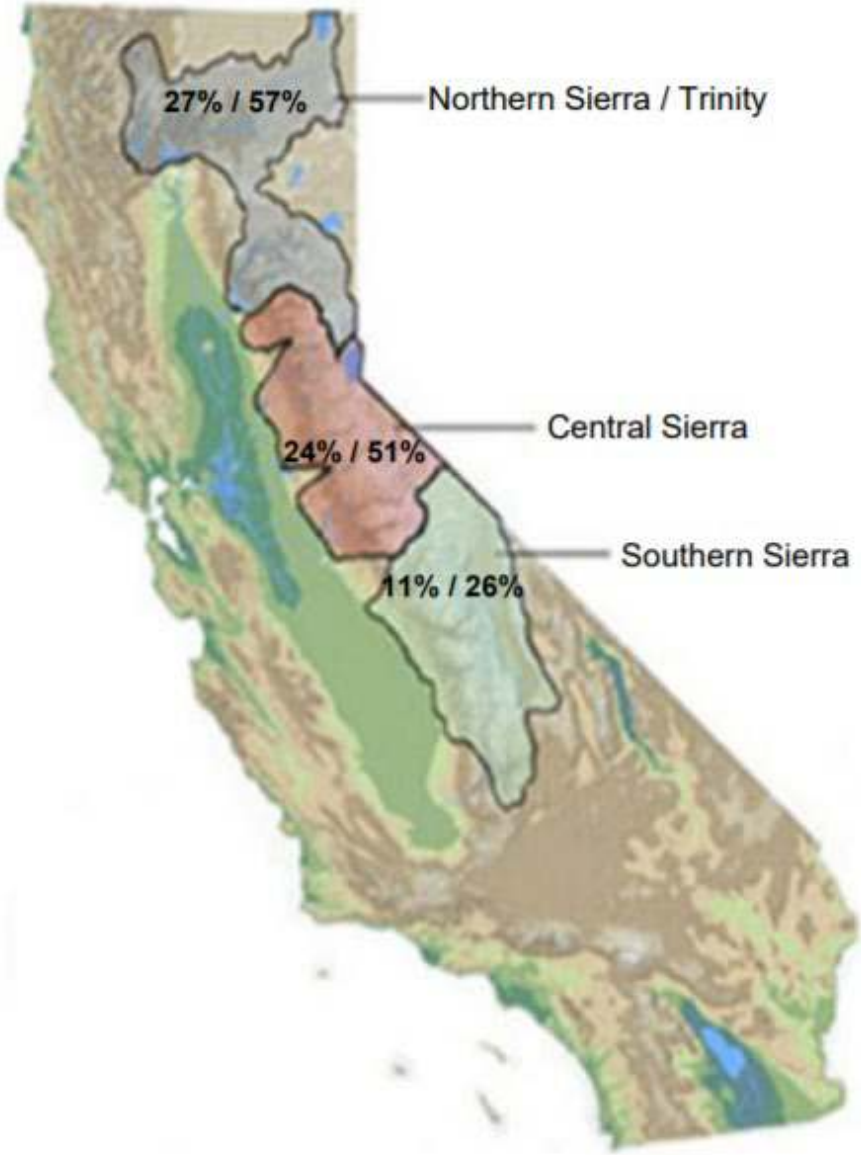
National Drought Mitigation Center

droughtmonitor.unl.edu


SCV Precipitation Water Year 2021
Inches
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Total to date: 1.18 inches
Avg by Feb - 8.75 inches
WY 2021
Average
0
0.04
1.14
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep


SCV Historical Rainfall
INCHES
60
50
40
30
20
10
0
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Wettest Year (2004/05)
Average Year (1927 to Current)
Driest Year (2006/07)
Year (2019/20)
Current Year (2020/21)

% of April 1 Average / % of Normal for This Date



NORTH	
Data as of January 14, 2021	
Number of Stations Reporting	32
Average snow water equivalent (Inches)	7.8
Percent of April 1 Average (%)	27
Percent of normal for this date (%)	57

CENTRAL	
Data as of January 14, 2021	
Number of Stations Reporting	44
Average snow water equivalent (Inches)	7.1
Percent of April 1 Average (%)	24
Percent of normal for this date (%)	51

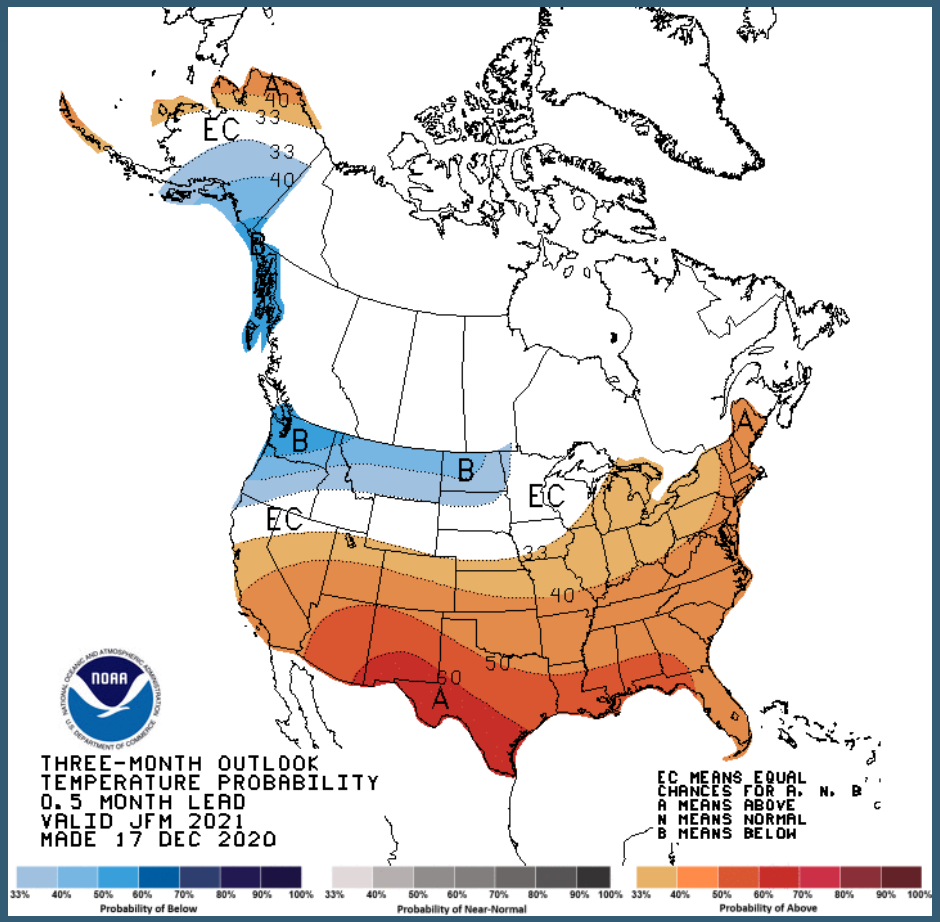
SOUTH	
Data as of January 14, 2021	
Number of Stations Reporting	26
Average snow water equivalent (Inches)	2.8
Percent of April 1 Average (%)	11
Percent of normal for this date (%)	26

STATE	
Data as of January 14, 2021	
Number of Stations Reporting	102
Average snow water equivalent (Inches)	6.2
Percent of April 1 Average (%)	22
Percent of normal for this date (%)	48

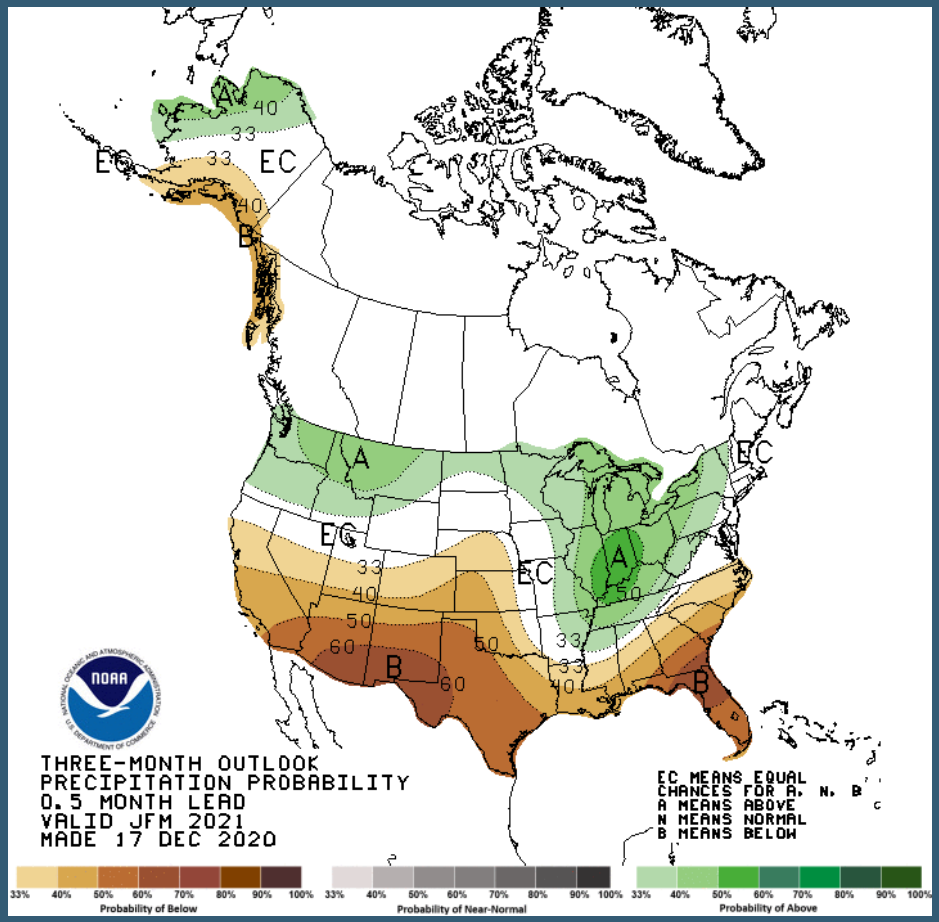
Statewide Average: 22% / 48%

Three Month Outlook (Jan-Mar)

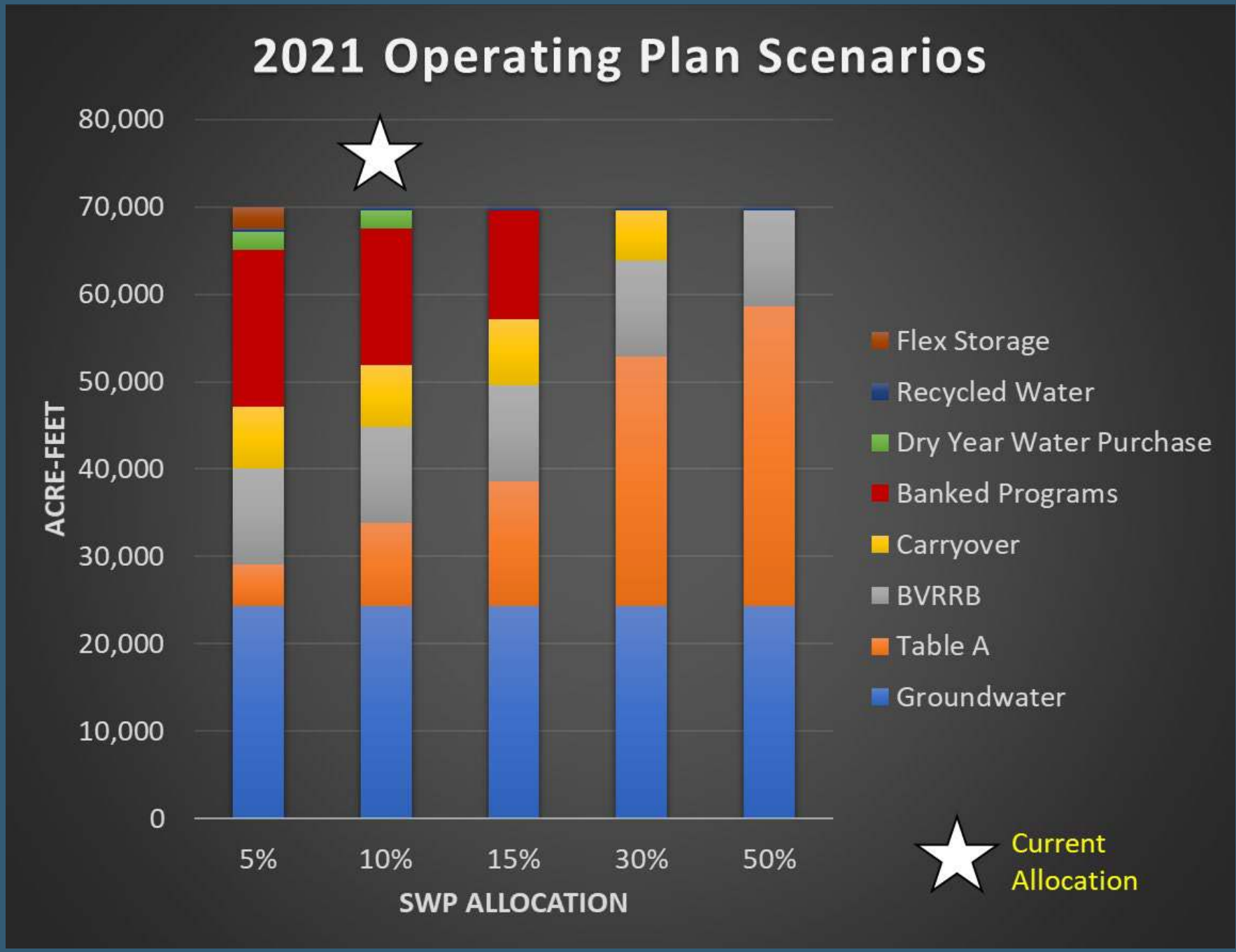
Temperature



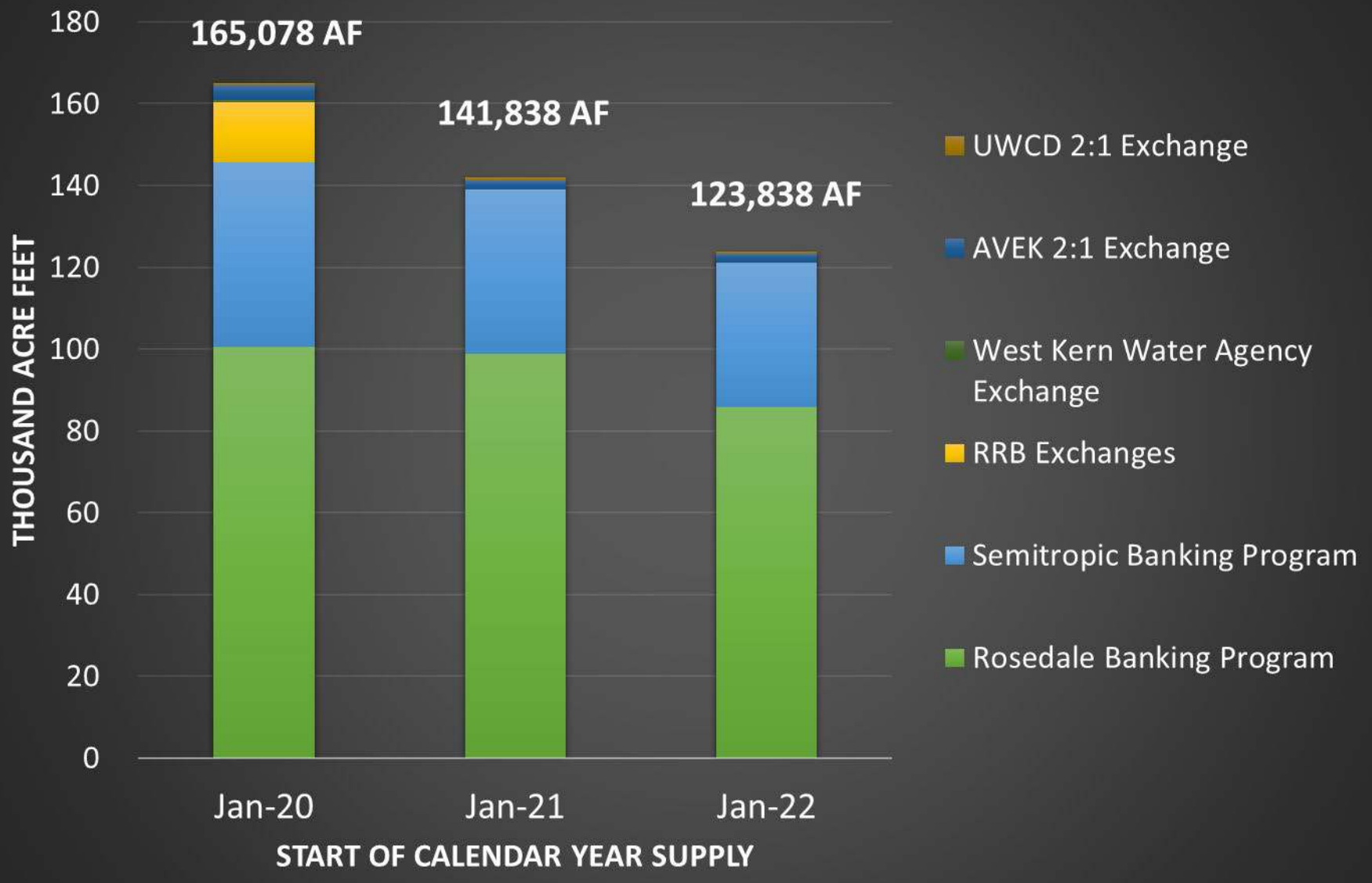
Precipitation



2021 Operating Plan (Acre-Feet)	2021 5% SWP Allocation	2021 10% SWP Allocation	2021 30% SWP Allocation	2021 50% SWP Allocation	2022 5% SWP Allocation
Demand	**70,000**	**70,000**	**70,000**	**70,000**	**71,100**
Groundwater[1]	24,345	24,345	24,345	24,345	30,000
Alluvium	12,345	12,345	12,345	12,345	**13,000**
Saugus	12,000	12,000	12,000	12,000	17,000
Recycled Water	450	450	450	450	1,480
Imported Demand	**45,205**	**45,205**	**45,205**	**45,205**	**39,620**
Imported Supplies					
SWP Table A	4,760	9,520	28,560	47,600	4,760
BVRRB	11,000	11,000	11,000	11,000	11,000
Total Available Imported Supplies	**15,760**	**20,520**	**39,560**	**58,600**	**15,760**
Excess Imported Supplies (neg = shortfall)	(29,445)	(24,685)	(5,645)	13,395	(23,860)
Dry Year Water Supplies					
SWP Carryover Delivered (not always guaranteed)	7,000	7,000	5,645		6,500
Devil's Den Delivery				1,500	
Rosedale Banking	13,000	10,685			10,000
Semitropic Enhanced Recovery Unit (Banking)	5,000	5,000			5,000
AVEK and or UWCD Exchange					
Yuba Accord	1,000	1,000			1,000
Dry Year Water Purchase	1,000	1,000			
Semitropic Banking Program - Newhall Land					
Nickel Water - Newhall Land					
Water Sales				(5,500)	
Flexible Storage (up to 6,060 AF)	2,445				1,360
2021 SWP Carryover into 2022	0	0	0	9395	0
Total Imported Supplies	**45,205**	**45,205**	**45,205**	**63,995**	**39,620**


2021 Operating Plan Scenarios
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
ACRE-FEET
5%
10%
15%
30%
50%
SWP ALLOCATION
Flex Storage
Recycled Water
Dry Year Water Purchase
Banked Programs
Carryover
BVRRB
Table A
Groundwater
Current Allocation

Dry Year Storage Use Estimates 2021



2021 Dry Year Water Supply Budget Estimates

Dry Year Water Program	2021 Recovery (AF)	$/AF	Total Costs
Rosedale (RRB)	**13,000**	**$80**	**$1,040,000**
Semitropic (SWRU)	**5,000**	**$250**	**$1,250,000**
Dry Year Water Purchase	**1,000**	**TBD**	**TBD**
Yuba Accord	**1,000**	**$447**	**$447,000**
AVEK Exchange	0	$-	$-
UWCD Exchange	0	$-	$-
NLF Semitropic Storage	0	TBD	$-
Nickel	0	$800	$-
Total	**20,000**		**$2,737,000**

Questions?