Solano Irrigation District

Water Reliability: Physical and Regulatory Challenges

February 18, 2026

First Off …

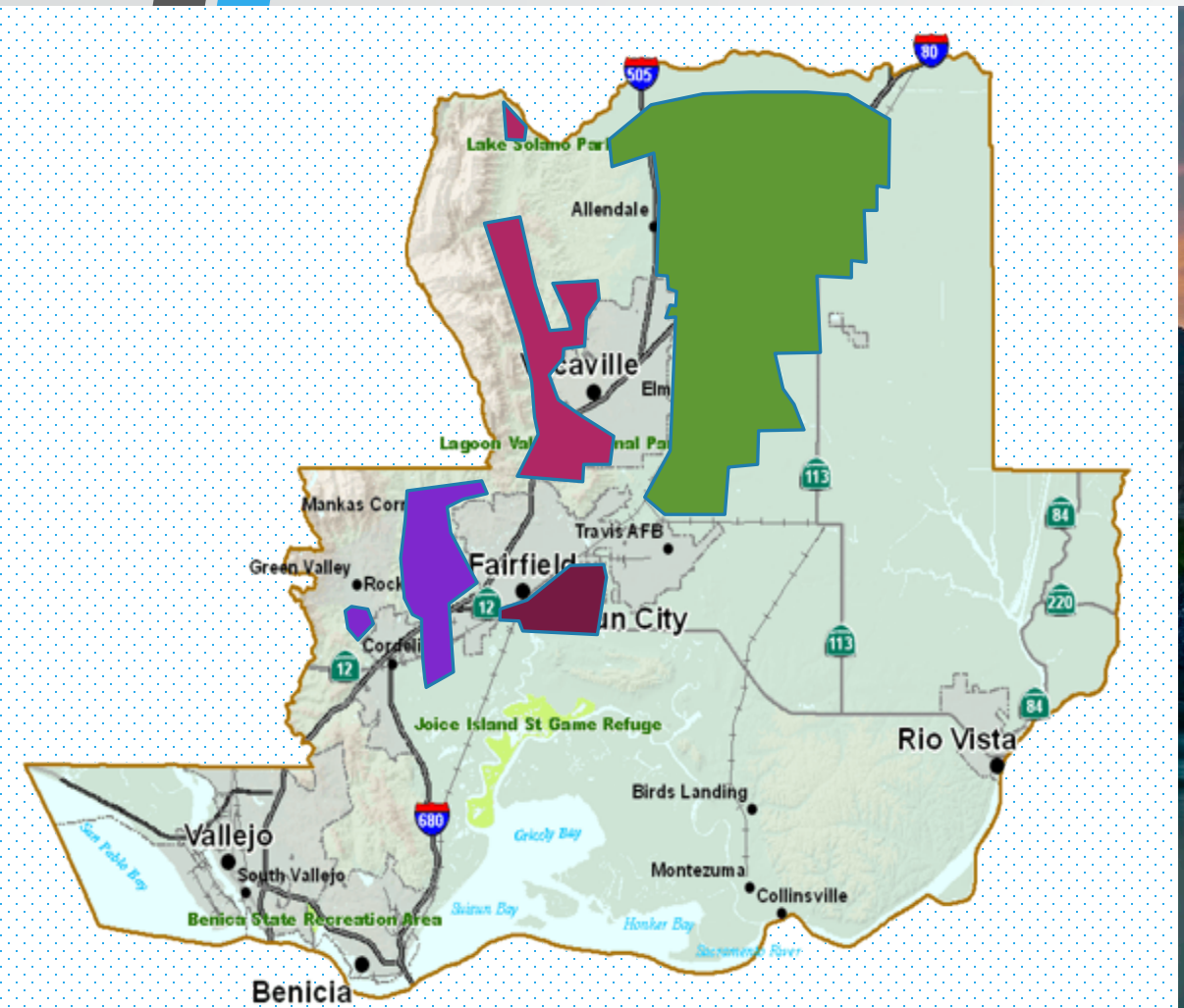
- As Vintners in Suisun Valley, **you're going to get all the water you need in 2026**.
- **March 16 – April 6 Start (Weather Dependent)**
- Est allocation of **4.2 AF/acre – Spills may impact**
- **But the future is less certain.**

Second …

The Rest of the Presentation

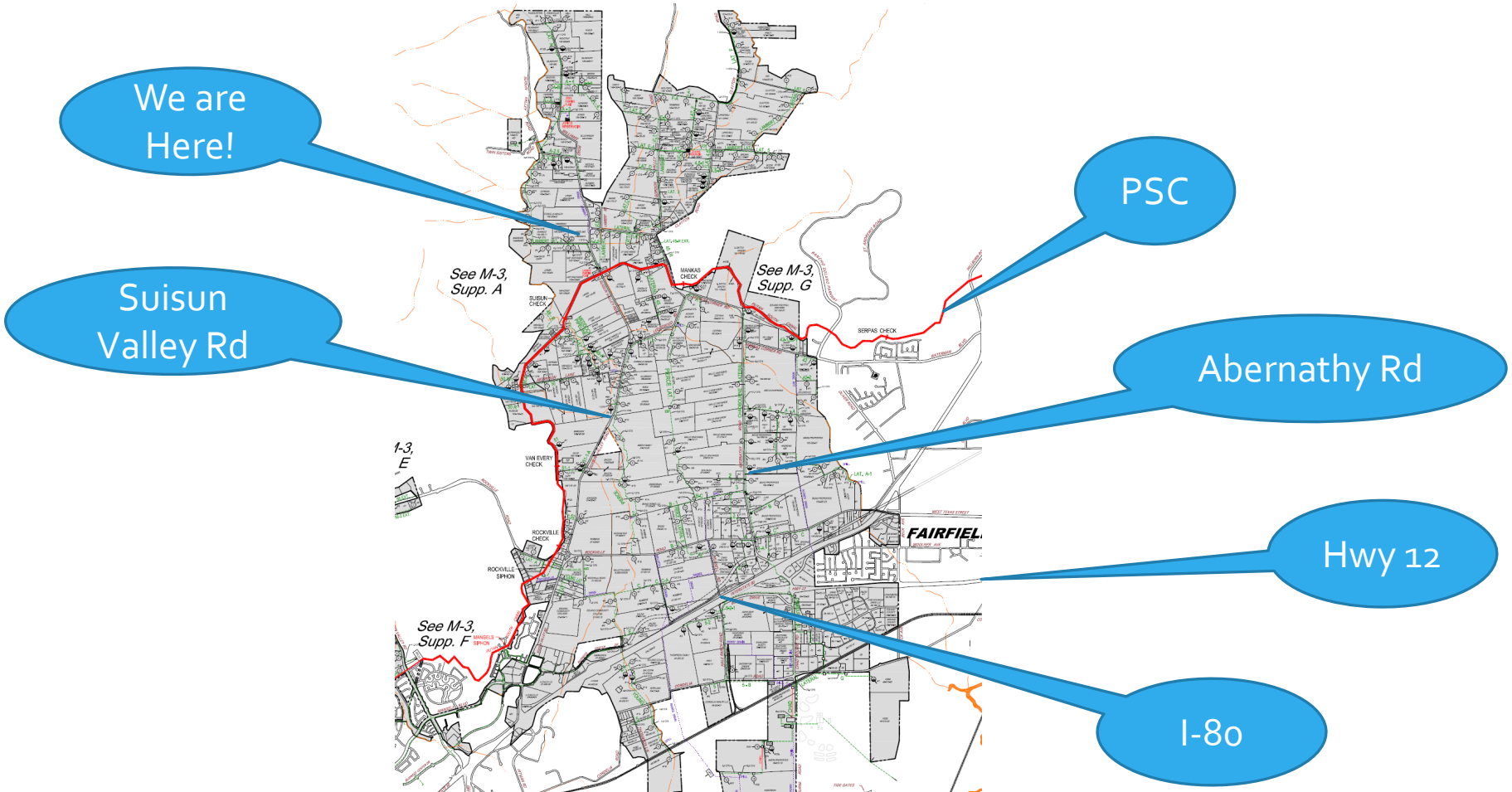
- ✓ SID Overview
- ✓ Construction Projects in SSV
- ✓ Water Supply and Threats from the State
- ✓ Wrap Up with thoughts for long term planning

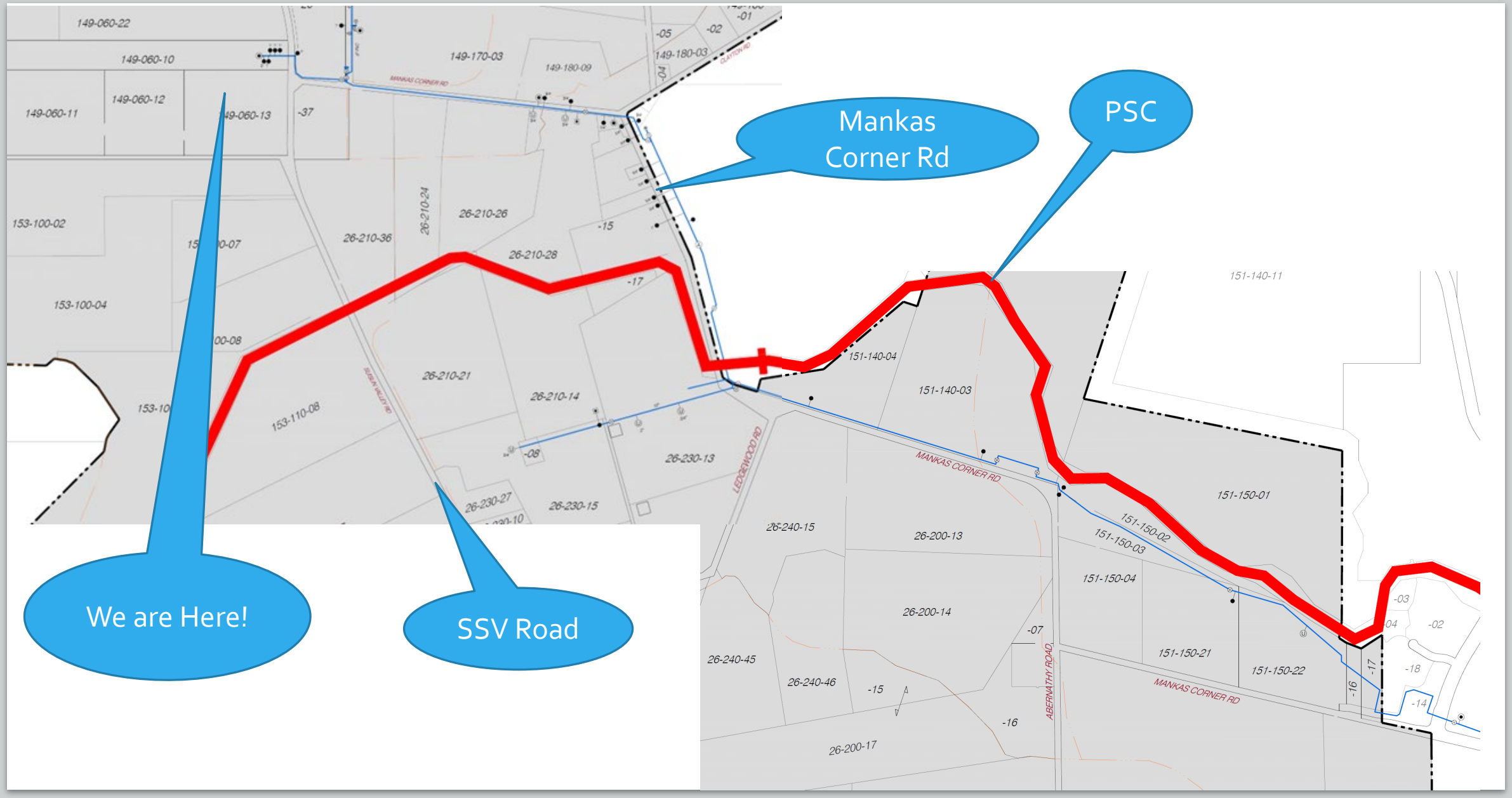
We're the Solano Irrigation District



Surface Water

- Our supply is Lake Berryessa and its watershed
  - We call this **"The Solano Project"**
- Built as a US Bureau of Reclamation project between 1953 and 1958
- First delivered water in 1959
- Ag and Potable Water in SSV

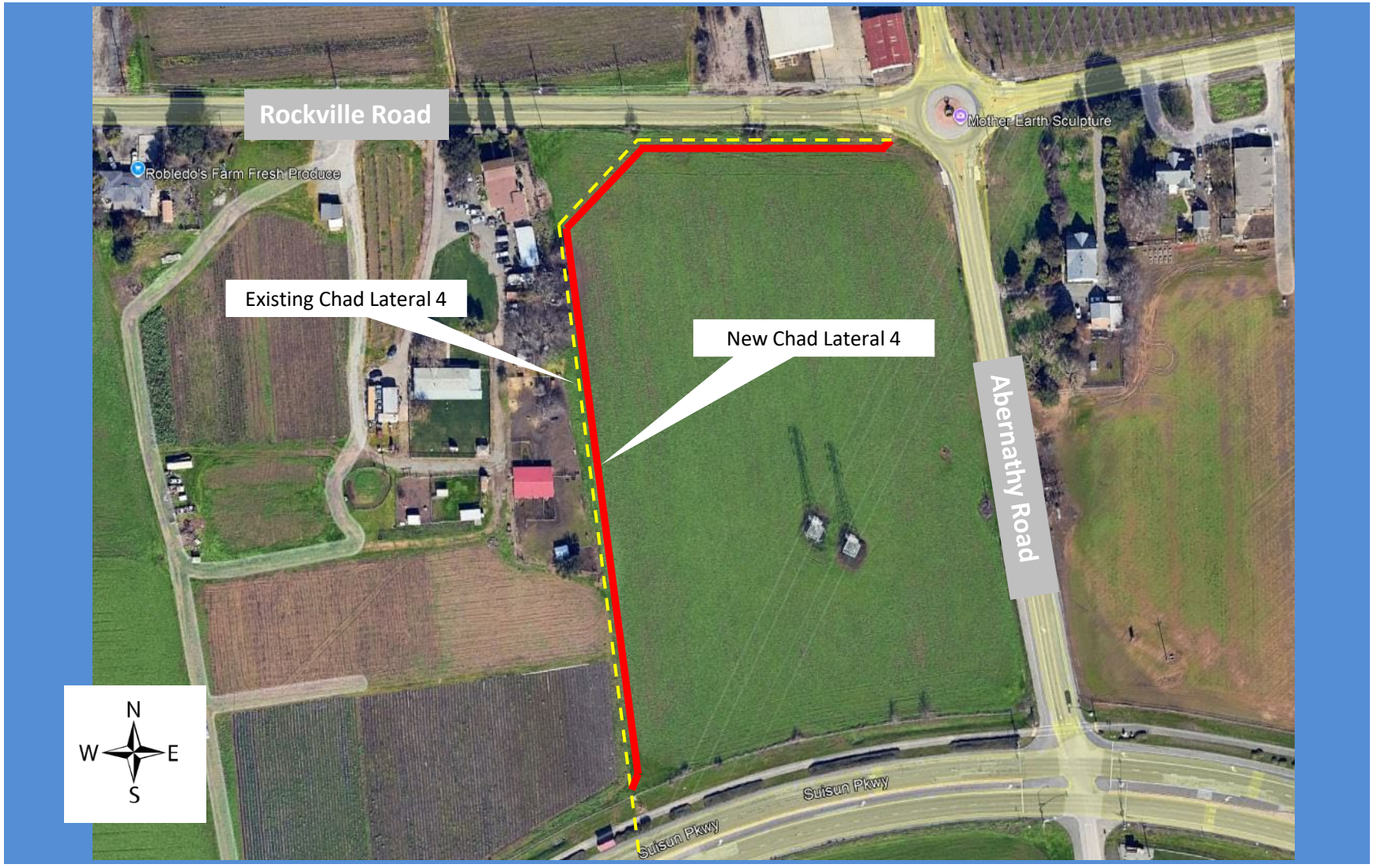

We are Here!
Suisun Valley Rd
PSC
Abernathy Rd
Hwy 12
I-80
See M-3, Supp. A
See M-3, Supp. G
See M-3, Supp. F
SUISUN CHECK
MANKAS CHECK
SERPAS CHECK
VAN EVERY CHECK
ROCKVILLE CHECK
ROCKVILLE SPHON
FAIRFIEL


Mankas Corner Rd
PSC
We are Here!
SSV Road
MANKAS CORNER RD
LEDGERWOOD RD
SUGAR VALLEY RD
ABERNATHY ROAD
149-060-22
149-060-10
149-060-11
149-060-12
149-060-13
149-170-03
149-180-09
149-180-03
153-100-02
153-100-04
153-110-08
26-210-24
26-210-26
26-210-36
26-210-28
26-210-21
26-210-14
26-230-13
26-230-27
26-230-15
151-140-11
151-140-04
151-140-03
151-150-01
151-150-02
151-150-03
151-150-04
151-150-21
151-150-22
26-240-15
26-200-13
26-200-14
26-240-45
26-240-46
26-200-17

Pipeline & Electrical Rehabilitation -Last 5 Years

- Pipeline Replacements: Approx. 16,100 ft.
  - Pierce Lateral Turnout 4 to Turnout 10: 3,700 ft 30” & 18”
  - Pierce Lateral B Headworks to Turnout 4: 2,370 30” & 24”
  - Pierce Lateral B Raines Drain to Turnout 15: 200’ 12”
  - Chadbourne Turnout 0.5 to Turnout 2: 1,230 36”
  - Chadbourne Lateral A to Lateral C: 3,800 ft 36” & 30”
  - Chadbourne Lateral B: 1,400 16”
  - Chadbourne Lateral 4: 1,200 18” & 16”
  - Lambert Lateral E : 1,200 8”
  - Lateral 49-A: 1,000 12”
- Electrical Upgrades: 6 Facilities
  - Lambert (service only)
  - Lambert A (service only)
  - Jones
  - PFL-02
  - PFL-09
  - PFL-12

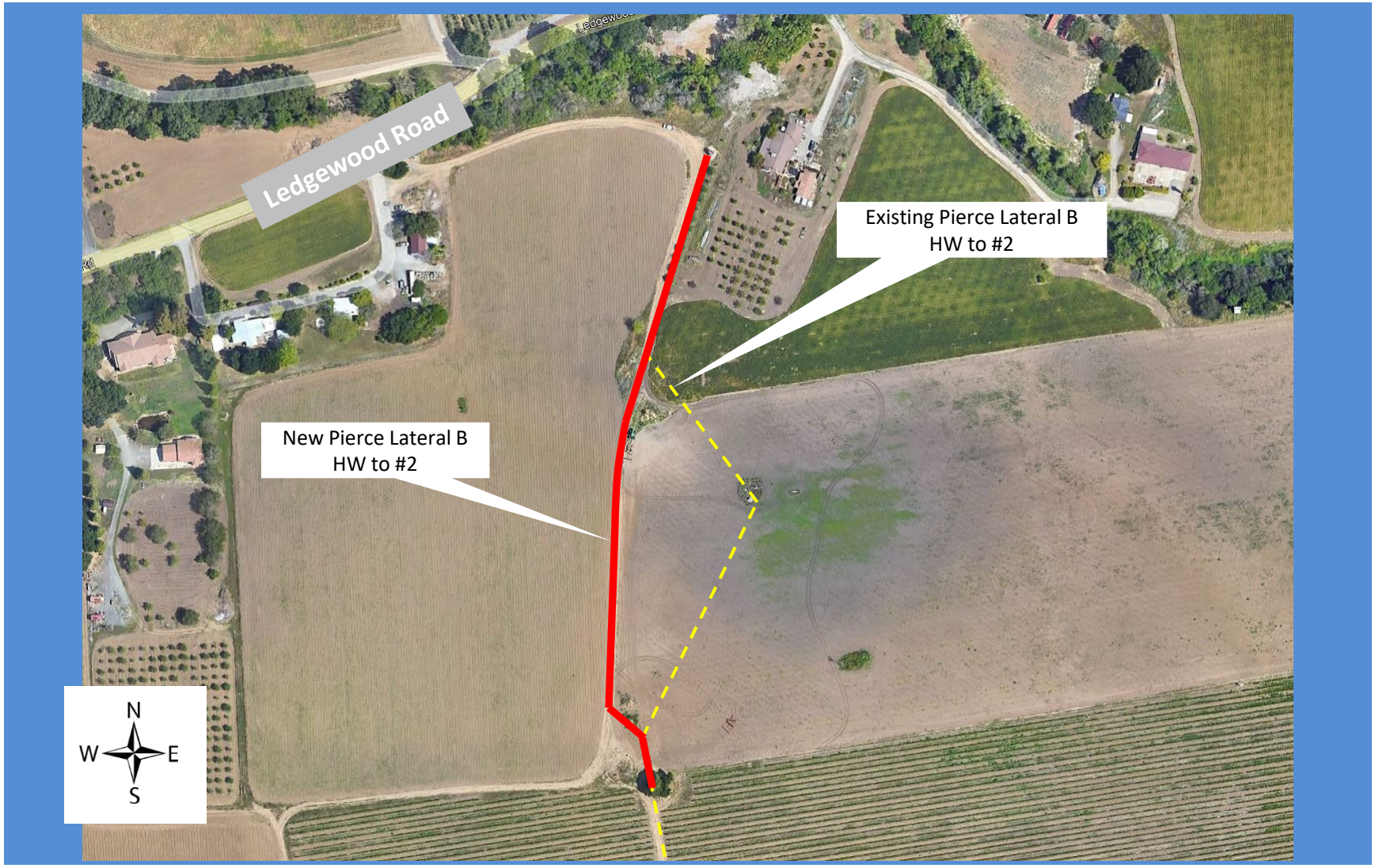
Chadbourne Lateral 4



Chadbourne Lateral 4 Pipeline

Chadbourne Lateral 4 Pipeline

Pierce Lateral B - HW to #2

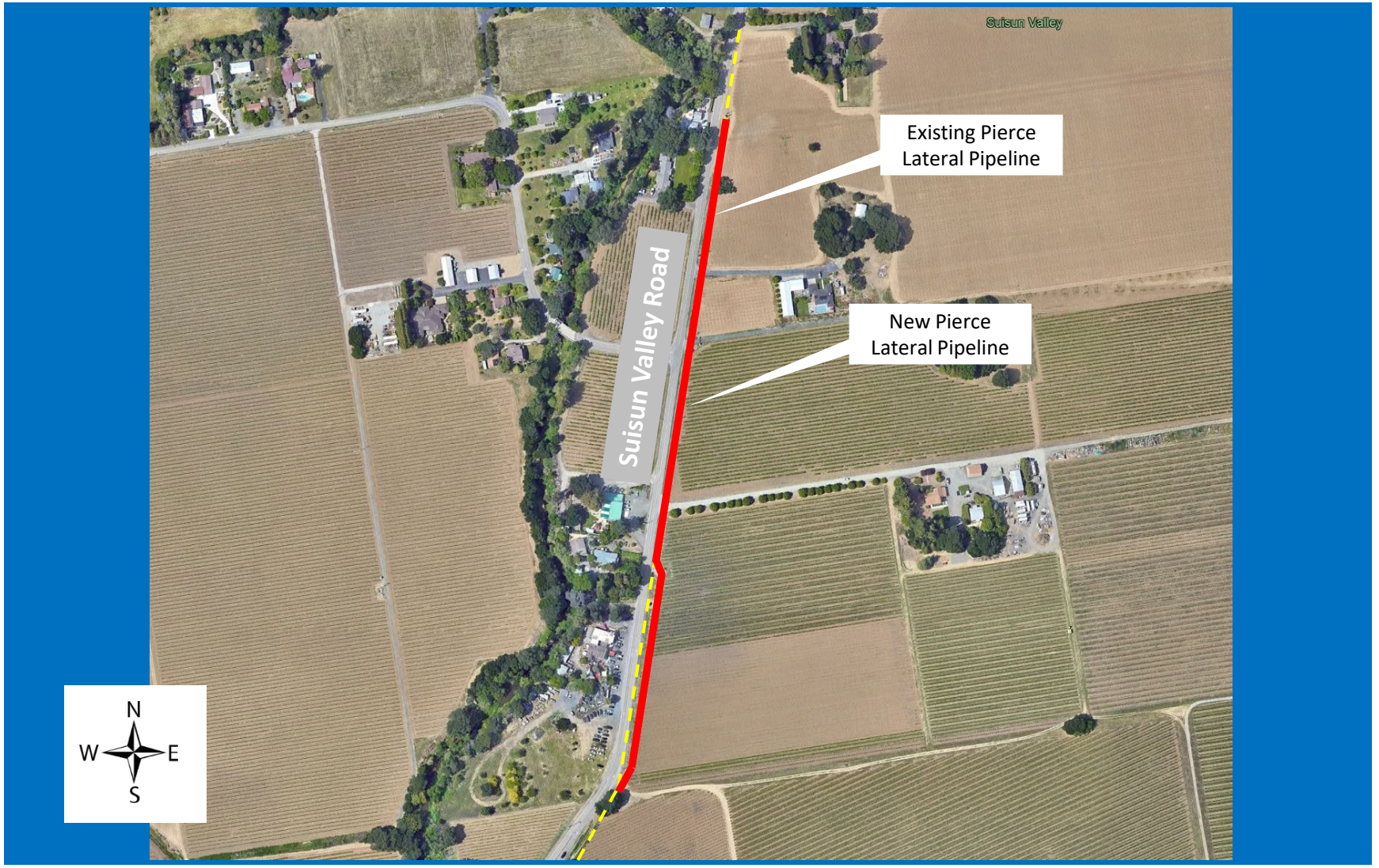


Pierce Lateral B - HW to #2

Pierce Lateral B - HW to #2

Pierce Lateral B - HW to #2

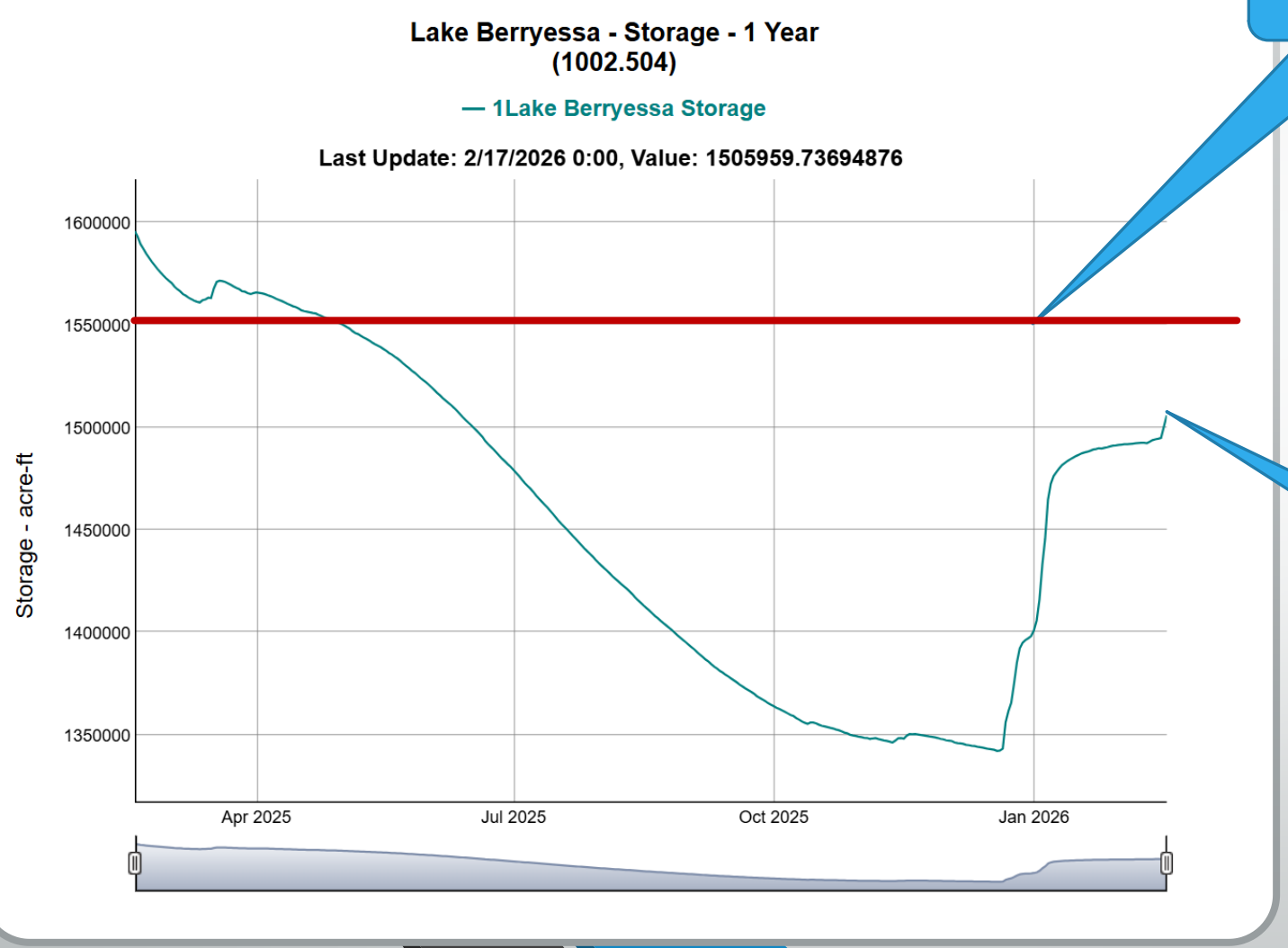
Pierce Lateral - #6 to #10



Electrical Upgrades

That's the Delivery Side; What About Supply and Regulatory Impacts?

Lake Berryessa Today

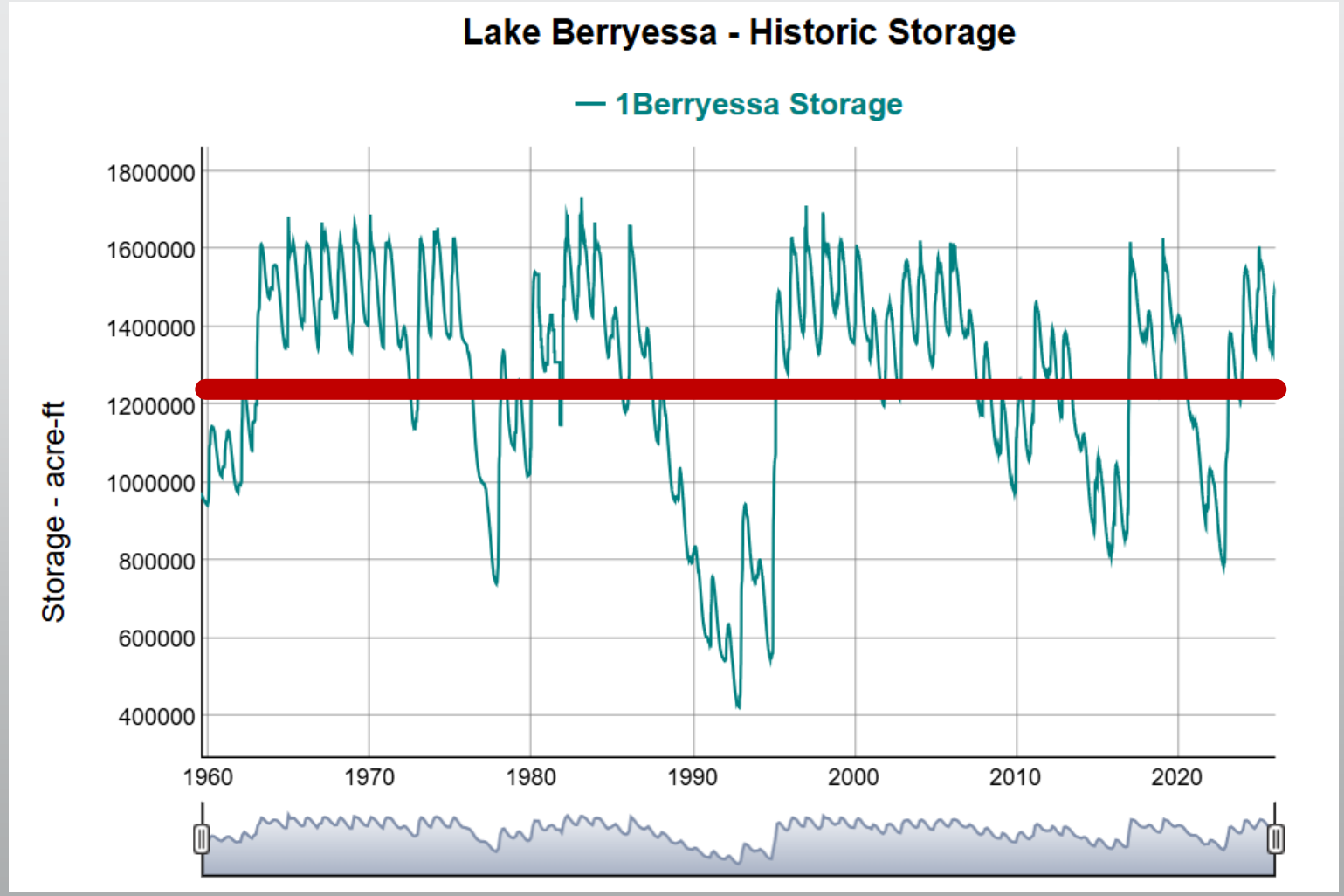


1.55 MAF Max

Tues 8pm -437.7’ or 1.505MAF

2.3’ from Spilling

Reliability of Lake Berryessa



This Reliability Will Change Under the Draft Bay-Delta Plan

Who is the SWRCB?

State Water Resources Control Board (SWRCB)

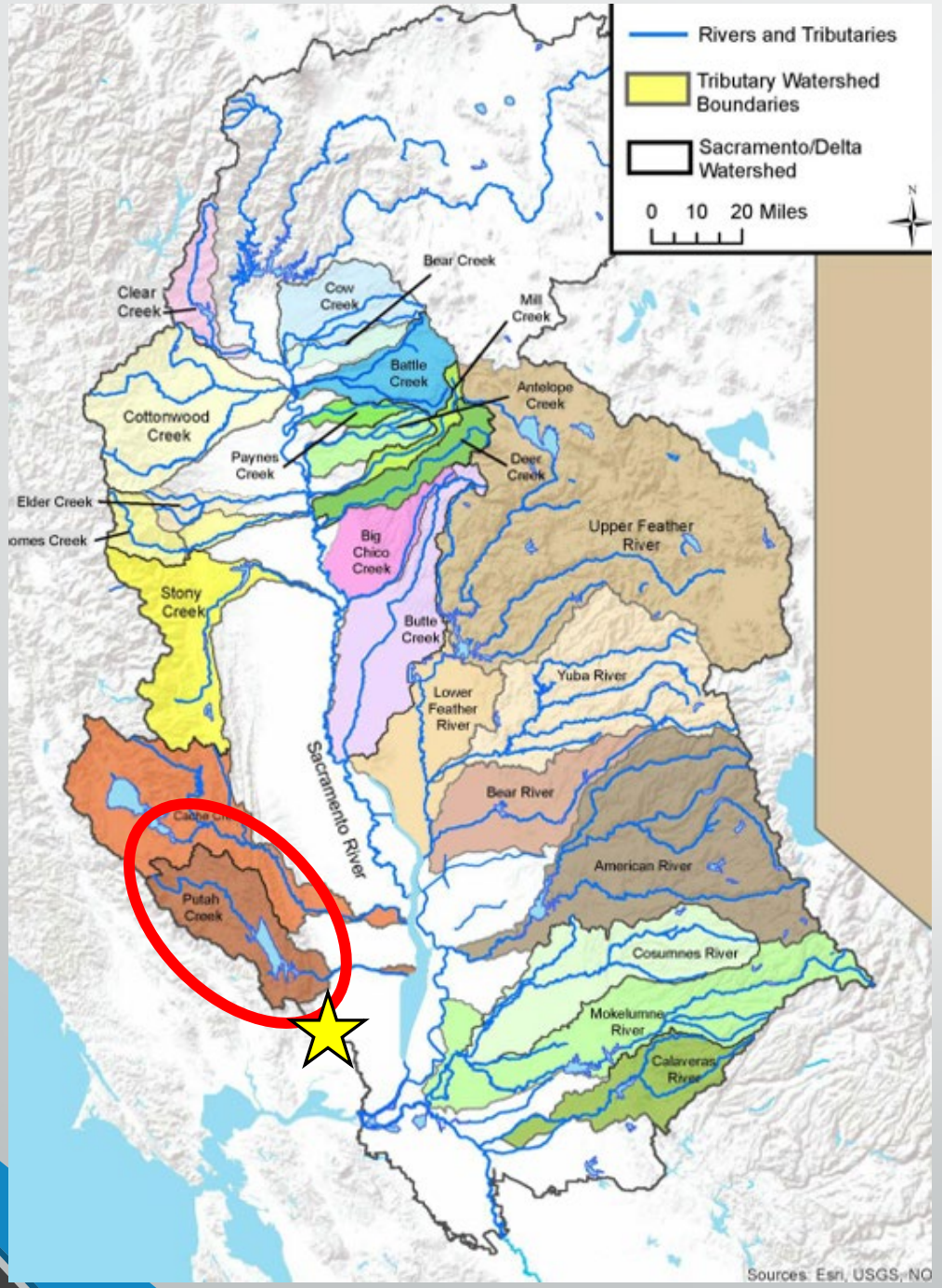
Protect Water Quality & Allocate Water Rights

Mission

The State Water Resources Control Board's mission is to **preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses**, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.

Bay Delta Plan

Protecting the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta) watershed and its many beneficial uses is one of the State Water Board's primary responsibilities and top priorities. **The State Water Board is responsible for adopting and updating the Bay-Delta Water Quality Control Plan (Bay-Delta Plan), which establishes water quality control measures and flow requirements needed to provide reasonable protection of beneficial uses in the watershed.**



Sac River Watersheds

- 24 Major Watersheds
- Putah Creek = 1%

Key Concerns w/ Bay-Delta Plan

1. Significant Reductions in Local Water Supply
2. Increased Groundwater Overdraft
3. Putah Creek Operations are Already Delivering Results
4. Loss of Local Control and Increased Uncertainty

Changes from Last Bay-Delta Update

Two Paths:

1. HRL's (VA's)
2. Regulatory Pathway
    a) 55% w/WSA Unpaired Flow Criteria (January 1 through June 31)
    b) Carryover Storage Requirement in Lake Berryessa to ensure water delivered downstream is as cold as possible. (Trout & Salmon)
        1. Ranges from 500-700TAF to 700TAF - 1 MAF.

Significant Reductions in Local Water Supply

Summary of Tables A and B for Years 2005-2024						
		% of Years Occurs			Reduction in Entitlement	
Table	Description	Zero Water Available	Less than 100%	Less than 50%	Total For 20 Year Period (TAF)	Average Annual (TAF)
55% WSA UIF (Table 5)						
A	Carryover per lower limit Table 8	10%	65%	25%	1,216	60.8
B	Carryover per upper limit Table 8	20%	70%	40%	1,819	91.0

Increased Groundwater Overdraft

1. Assumes no additional pumping (not going to happen)
2. Reduced recharge
3. Risk recreating overdraft conditions the SP was originally built to resolve

Groundwater Impacts - Storage

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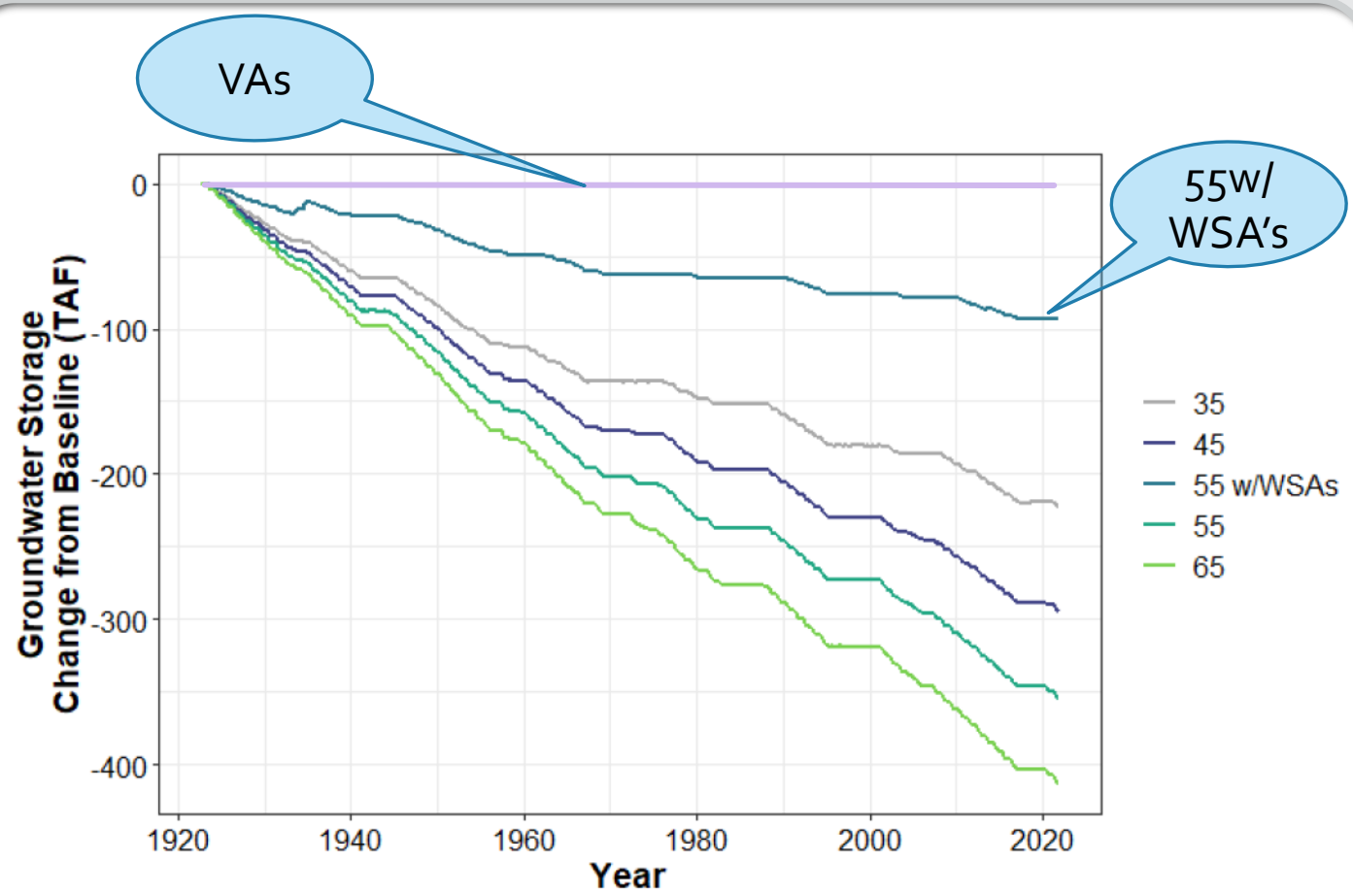

Figure H1a3-247. Suisun Groundwater Basin End of Year Storage—Change from Baseline (TAF)

Putah Creek Operations are Already Delivering Results (HRL Path)

1. Fish populations continue to increase (record Salmon this yr)
2. Significant in-stream flows are already provided
3. Ave 51% UIF over 20 yrs
4. Driven by 80%-245% UIF; mostly in BN to C years

Table F- Actual Inflow / Outflow Volumes in AF & % UIF* and % UIF under Addititional FLow Volumes Provided under HRL Pathway

		Actual Operational Conditions		Actual Operational Conditions with Inclusion of HRL Additional Flow Commitemetns			
Year	Calculated Inflow Volume (AF)	Total Lower Putah Creek Volume (AF)	% UIF of Lower Putah Ck Flow	Additional Volumes per HRL	Total LPC Flow Volume Including Additional HRL Commitments	% of UIF Lower Putah Ck Flow w/ HRL Commitments	State Water Type Class
2004							BN
2005	295,599	114,423	39%	6,000	120,423	41%	AN
2006	364,306	709,156	195%	6,000	715,156	196%	BN
2007	74,507	22,523	30%	6,000	28,523	38%	D
2008	193,240	32,519	17%	7,000	39,519	20%	C
2009	150,520	32,968	22%	6,000	38,968	26%	D
2010	289,928	34,319	12%	6,000	40,319	14%	BN
2011	408,694	37,089	9%	6,000	43,089	11%	W
2012	142,877	33,648	24%	6,000	39,648	28%	BN
2013	217,396	33,483	15%	6,000	39,483	18%	D
2014	46,841	38,210	82%	7,000	45,210	97%	C
2015	192,157	39,178	20%	7,000	46,178	24%	C
2016	245,341	40,131	16%	6,000	46,131	19%	BN
2017	789,178	340,699	43%	6,000	346,699	44%	W
2018	89,731	32,261	36%	6,000	38,261	43%	BN
2019	422,584	342,639	81%	6,000	348,639	83%	W
2020	54,009	31,507	58%	6,000	37,507	69%	D
2021	14,490	35,549	245%	7,000	42,549	294%	C
2022	147,029	33,566	23%	7,000	40,566	28%	C
2023	599,311	53,574	9%	6,000	59,574	10%	W
		Average	**51%**		**Average**	**58%**	

Notes:

* Outflow volumes are measured at the Putah Diversion Dam into Lower Putah Creek

Loss of Local Control and Increased Uncertainty

1. Draft Plan gives State Board broad authority over annual operations, temp management, & storage decisions

2. Creates year to year uncertainty that undermines ability to plan for:

   - Households
   - Farms
   - Businesses
   - Public Agencies

Some Planning Thoughts

- What is your definition of success in years?
  - <8 years? HRL 8 yr term
  - >8 years? More uncertainty
- M&I potable surface water connections vs. groundwater
  - Even with curtailments, probably will provide basic water for life safety

Some Good News

- Draft Bay-Delta Plan is not yet adopted
- NCWA Stewardship Colloquium: Legislative Meetings
- State Board
  - Anticipate adopting HRLs as a pathway
  - Board interested in feedback on the updates provided, opportunity?
  - Will be scheduling a meeting
- Regardless – SID deeply committed to fighting for reliability
- Support the HRL Pathway

Thank You

TABLE A - Cumulative volumes -- Bay-Delta Plan December 2025 WQCP: Variable 0% - 55% UIF +Variable Carryover Limits - Accounting for Cumulative Storage - Lower Table 8 Range (500-700TAF)

Water Year Data in Lake Berryessa Last 20 Years														Lower Table 8 Range								
Year	State Water Type Class. [1]	End of September Volume (from record)	CUMULATIVE end of September Volume	April 1 Volume - Estimated from total inflow no reduction for evap or accord flows as is already accounted for	volume over 1.55 million	Adjusted Tributary-Specific WSAs for Putah Creek. This is based on April 1 Volume. [3]	Percent UIF	UIF Volume	Volume after June subtracting UIF	Volume Fraction at June	Calculated Inflow [2]	Estimated Unimpared Flow for the Year [4]	Is this a Drought Year (D and C Years)	Minimum Storage in Lake Berryessa	Volume SP Customers can Divert in the Identified Water Year based on June Volume	Maximum Customer Diversion	Absolute Maximum Customer Diversion	Years w/Zero Water Allocation	Years w/Less Than 100% Water Allocation	% of Allocation	Years w less than 50% Water Allocation	Entitlement Deficit (AF)
2004	BN	1,324,066				0.00	35%															
2005	AN	1,404,828	1,404,828	1,700,427	150,427	1.10	55%	162,579	1,537,848	0.99	295,599	162,579	No	700,000	837,848	200,000	200,000	0	0	**100%**	**0**	0
2006	BN	1,397,605	1,261,848	1,626,154	76,154	1.05	55%	200,368	1,425,785	0.92	364,306	200,368	No	700,000	725,785	200,000	200,000	0	0	**100%**	**0**	0
2007	D	1,200,365	1,149,785	1,224,292	0	0.79	35%	26,077	1,198,215	0.77	74,507	26,077	Yes	500,000	698,215	200,000	200,000	0	0	**100%**	**0**	0
2008	C	1,110,470	922,215	1,115,455	0	0.72	35%	67,634	1,047,821	0.68	193,240	67,634	Yes	500,000	547,821	200,000	200,000	0	0	**100%**	**0**	0
2009	D	1,001,530	771,821	922,341	0	0.60	35%	52,682	869,659	0.56	150,520	52,682	Yes	500,000	369,659	200,000	200,000	0	0	**100%**	**0**	0
2010	BN	1,083,443	593,659	883,587	0	0.57	35%	101,475	782,112	0.50	289,928	101,475	No	700,000	82,112	82,112	82,112	0	1	**41%**	**1**	-117,888
2011	W	1,302,315	624,000	1,032,694	0	0.67	35%	143,043	889,651	0.57	408,694	143,043	No	700,000	189,651	189,651	189,651	0	1	**95%**	**0**	-10,349
2012	BN	1,194,273	624,000	766,877	0	0.49	0%	0	766,877	0.49	142,877	0	No	700,000	66,877	66,877	66,877	0	1	**33%**	**1**	-133,123
2013	D	1,137,274	624,000	841,396	0	0.54	0%	0	841,396	0.54	217,396	0	Yes	500,000	341,396	200,000	200,000	0	0	**100%**	**0**	0
2014	C	910,138	565,396	612,238	0	0.39	0%	0	612,238	0.39	46,841	0	Yes	500,000	112,238	112,238	112,238	0	1	**56%**	**0**	-87,762
2015	C	838,709	424,000	616,157	0	0.40	0%	0	616,157	0.40	192,157	0	Yes	500,000	116,157	116,157	116,157	0	1	**58%**	**0**	-83,843
2016	BN	864,518	424,000	669,341	0	0.43	0%	0	669,341	0.43	245,341	0	No	700,000	-30,659	-30,659	0	1	1	**0%**	**1**	-200,000
2017	W	1,394,898	593,341	1,382,519	0	0.89	35%	276,212	1,106,307	0.71	789,178	276,212	No	700,000	406,307	200,000	200,000	0	0	**100%**	**0**	0
2018	BN	1,262,964	830,307	920,037	0	0.59	35%	31,406	888,632	0.57	89,731	31,406	No	700,000	188,632	188,632	188,632	0	1	**94%**	**0**	-11,368
2019	W	1,408,445	624,000	1,046,584	0	0.68	35%	147,904	898,680	0.58	422,584	147,904	No	700,000	198,680	198,680	198,680	0	1	**99%**	**0**	-1,320
2020	D	1,200,535	624,000	678,009	0	0.44	0%	0	678,009	0.44	54,009	0	Yes	500,000	178,009	178,009	178,009	0	1	**89%**	**0**	-21,991
2021	C	909,924	424,000	438,490	0	0.28	0%	0	438,490	0.28	14,490	0	Yes	500,000	-61,510	-61,510	0	1	1	**0%**	**1**	-200,000
2022	C	818,704	362,490	509,519	0	0.33	0%	0	509,519	0.33	147,029	0	Yes	500,000	9,519	9,519	9,519	0	1	**5%**	**1**	-190,481
2023	W	1,242,909	424,000	1,023,311	0	0.66	35%	209,759	813,552	0.52	599,311	209,759	No	700,000	113,552	113,552	113,552	0	1	**57%**	**0**	-86,448
2024	W	1,363,094	624,000	938,000	0	0.61	35%	109,900	828,100	0.53	314,000	109,900	No	700,000	128,100	128,100	128,100	0	1	**64%**	**0**	-71,900
											252,587	76,452					Percent of Years	10%	65%		25%	
[1]	The five standard water year types are: Wet, Above Normal, Below Normal, Dry, and Critical (or Critically Dry).										Total UIF	1,529,040							**Average**	**70%**	**Total Deficit**	**-1,216,474**
[2]	This is the calculated inflow using daly storage volumes calc'd by ChatGPT (estimated for year 2024) and random checks on results																					
[3]	Tributary-specific WSAs: apply for specified rainfall dominated and municipal supply dominated tributaries based on local storage conditions as defined in Table 5 which reduce or remove the flow requirements during low storage. This is a conservative approach and under reports UIF for the year in some cases as noted by cumulative end of September Volumes dropping below the WSA																					
[4]	Although the WQCP stated this is a monthly, this model converted it to annual for calculation purposes.																					
[5]	This is the max diversions																					

TABLE B - Cumulative volumes -- Bay-Delta Plan December 2025 WQCP: Variable 0% - 55% UIF +Variable Carryover Limits - Accounting for Cumulative Storage - Upper Table 8 Range (700-1,000TAF)

Water Year Data in Lake Berryessa Last 20 Years														Upper Table 8 Range								
Year	State Water Type Class. [1]	End of September Volume (from record)	CUMULATIVE end of September Volume (uses 2/3 of evap and accord flow)	April 1 Volume - Estimated from total inflow no reduction for evap or accord flows as is already accounted for	volume over 1.55 million	Adjusted Tributary-Specific WSAs for Putah Creek. This is based on April 1 Volume. [3]	Percent UIF	UIF Volume	Volume after June subtracting UIF	Volume Fraction at June	Calculated Inflow [2]	Estimated Unimpared Flow for the Year [4]	Is this a Drought Year (D and C Years)	Minimum Storage in Lake Berryessa	Volume SP Customers can Divert in the Identified Water Year based on June Volume	Maximum Customer Diversion	Absolute Maximum Customer Diversion	Years w/Zero Water Allocation	Years w/Less Than 100% Water Allocation	% of Allocation	Years w less than 50% Water Allocation	Entitlement Deficit (AF)
2004	BN	1,324,066				0.00	35%															
2005	AN	1,404,828	1,404,828	1,700,427	150,427	1.10	55%	162,579	1,537,848	0.99	295,599	162,579	No	1,000,000	537,848	200,000	200,000	0	0	**100%**	**0**	0
2006	BN	1,397,605	1,261,848	1,626,154	76,154	1.05	55%	200,368	1,425,785	0.92	364,306	200,368	No	1,000,000	425,785	200,000	200,000	0	0	**100%**	**0**	0
2007	D	1,200,365	1,149,785	1,224,292	0	0.79	35%	26,077	1,198,215	0.77	74,507	26,077	Yes	700,000	498,215	200,000	200,000	0	0	**100%**	**0**	0
2008	C	1,110,470	922,215	1,115,455	0	0.72	35%	67,634	1,047,821	0.68	193,240	67,634	Yes	700,000	347,821	200,000	200,000	0	0	**100%**	**0**	0
2009	D	1,001,530	771,821	922,341	0	0.60	35%	52,682	869,659	0.56	150,520	52,682	Yes	700,000	169,659	169,659	169,659	0	1	**85%**	**0**	-30,341
2010	BN	1,083,443	624,000	913,928	0	0.59	35%	101,475	812,453	0.52	289,928	101,475	No	1,000,000	-187,547	-187,547	0	1	1	**0%**	**1**	-200,000
2011	W	1,302,315	736,453	1,145,147	0	0.74	35%	143,043	1,002,104	0.65	408,694	143,043	No	1,000,000	2,104	2,104	2,104	0	1	**1%**	**1**	-197,896
2012	BN	1,194,273	924,000	1,066,877	0	0.69	35%	50,007	1,016,870	0.66	142,877	50,007	No	1,000,000	16,870	16,870	16,870	0	1	**8%**	**1**	-183,130
2013	D	1,137,274	924,000	1,141,396	0	0.74	35%	76,089	1,065,308	0.69	217,396	76,089	Yes	700,000	365,308	200,000	200,000	0	0	**100%**	**0**	0
2014	C	910,138	789,308	836,149	0	0.54	0%	0	836,149	0.54	46,841	0	Yes	700,000	136,149	136,149	136,149	0	1	**68%**	**0**	-63,851
2015	C	838,709	624,000	816,157	0	0.53	0%	0	816,157	0.53	192,157	0	Yes	700,000	116,157	116,157	116,157	0	1	**58%**	**0**	-83,843
2016	BN	864,518	624,000	869,341	0	0.56	0%	0	869,341	0.56	245,341	0	No	1,000,000	-130,659	-130,659	0	1	1	**0%**	**1**	-200,000
2017	W	1,394,898	793,341	1,582,519	32,519	1.02	55%	434,048	1,148,471	0.74	789,178	434,048	No	1,000,000	148,471	148,471	148,471	0	1	**74%**	**0**	-51,529
2018	BN	1,262,964	924,000	1,013,731	0	0.65	35%	31,406	982,325	0.63	89,731	31,406	No	1,000,000	-17,675	-17,675	0	1	1	**0%**	**1**	-200,000
2019	W	1,408,445	906,325	1,328,909	0	0.86	35%	147,904	1,181,005	0.76	422,584	147,904	No	1,000,000	181,005	181,005	181,005	0	1	**91%**	**0**	-18,995
2020	D	1,200,535	924,000	978,009	0	0.63	35%	18,903	959,106	0.62	54,009	18,903	Yes	700,000	259,106	200,000	200,000	0	0	**100%**	**0**	0
2021	C	909,924	683,106	697,596	0	0.45	0%	0	697,596	0.45	14,490	0	Yes	700,000	-2,404	-2,404	0	1	1	**0%**	**1**	-200,000
2022	C	818,704	621,596	768,625	0	0.50	0%	0	768,625	0.50	147,029	0	Yes	700,000	68,625	68,625	68,625	0	1	**34%**	**1**	-131,375
2023	W	1,242,909	624,000	1,223,311	0	0.79	35%	209,759	1,013,552	0.65	599,311	209,759	No	1,000,000	13,552	13,552	13,552	0	1	**7%**	**1**	-186,448
2024	W	1,363,094	924,000	1,238,000	0	0.80	35%	109,900	1,128,100	0.73	314,000	109,900	No	1,000,000	128,100	128,100	128,100	0	1	**64%**	**0**	-71,900
											252,587	91,594					Percent of Years	20%	70%		40%	
[1]	The five standard water year types are: Wet, Above Normal, Below Normal, Dry, and Critical (or Critically Dry).										Total UIF	1,831,874							**Average**	**55%**	**Total Deficit**	**-1,819,308**
[2]	This is the calculated inflow using daly storage volumes calc'd by ChatGPT (estimated for year 2024) and random checks on results																					
[3]	Tributary-specific WSAs: apply for specified rainfall dominated and municipal supply dominated tributaries based on local storage conditions as defined in Table 5 which reduce or remove the flow requirements during low storage. This is a conservative approach and under reports UIF for the year in some cases as noted by cumulative end of September Volumes dropping below the WSA																					
[4]	Although the WQCP stated this is a monthly, this model converted it to annual for calculation purposes.																					
[5]	This is the max diversions																					

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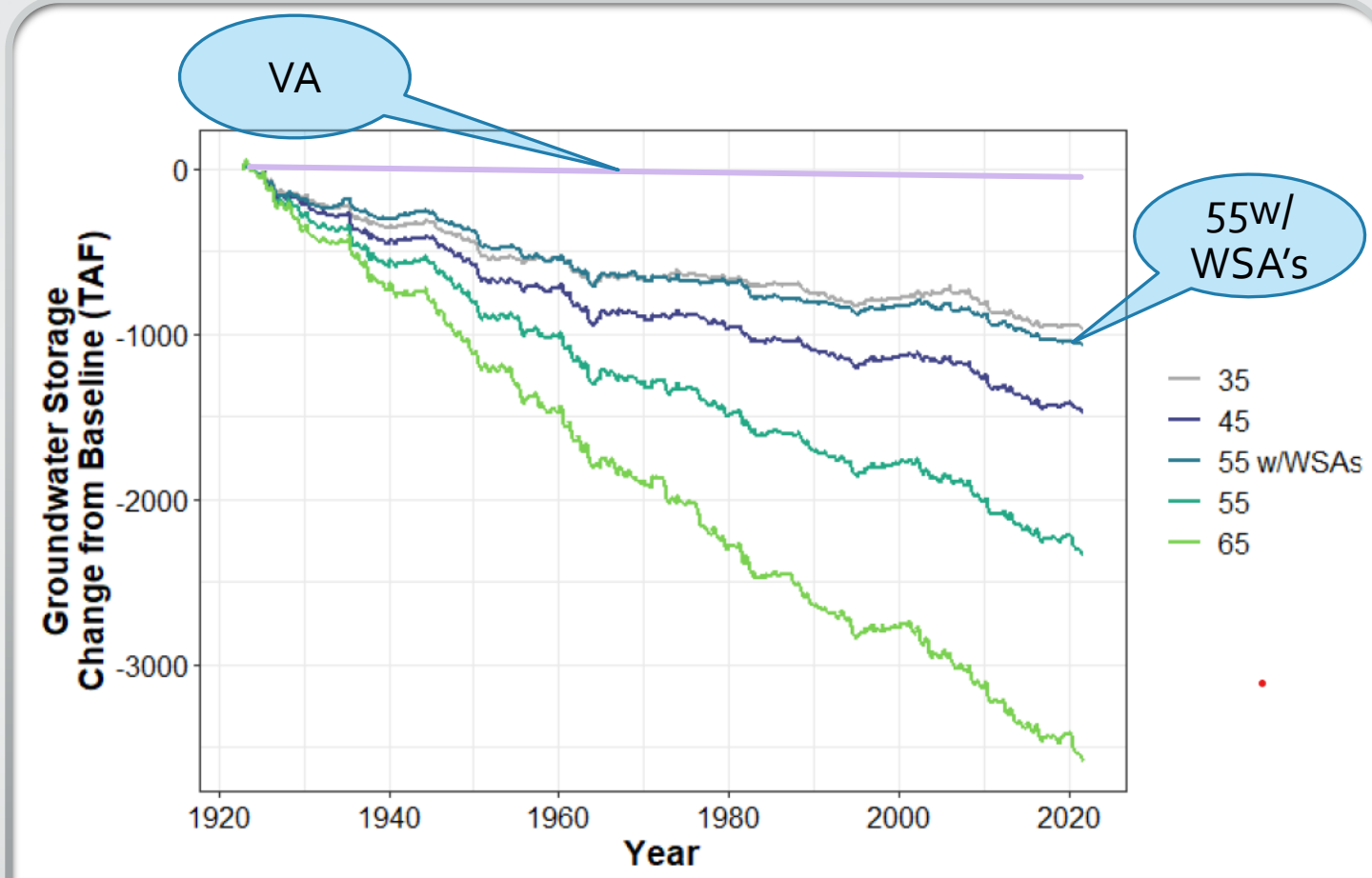

Figure H1a3-251. Yolo-Solano Groundwater Basin End of Year Storage—Change from Baseline