

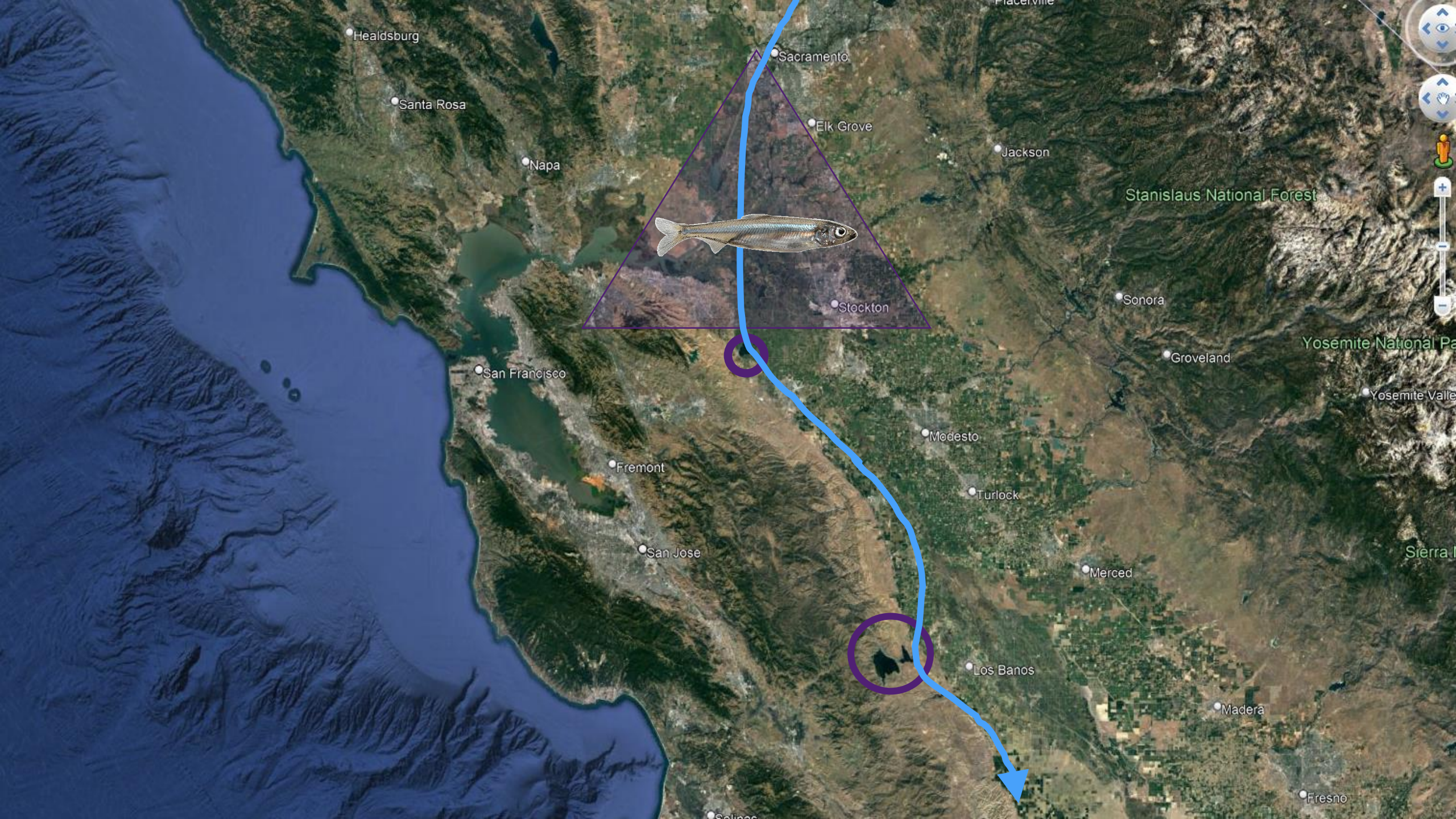


CARRYOVER PRIMER

ARTICLE 56 & SAN LUIS RESERVOIR



BOARD OF DIRECTORS. AUGUST 23, 2021



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Fremont

Modesto

Turlock

Sierra Nevada

San Jose

Merced

Los Banos

Madera

Fresno

Colusa

Upper Cottonwood Creek Wildlife Area

Pacheco State Park

San Luis Reservoir

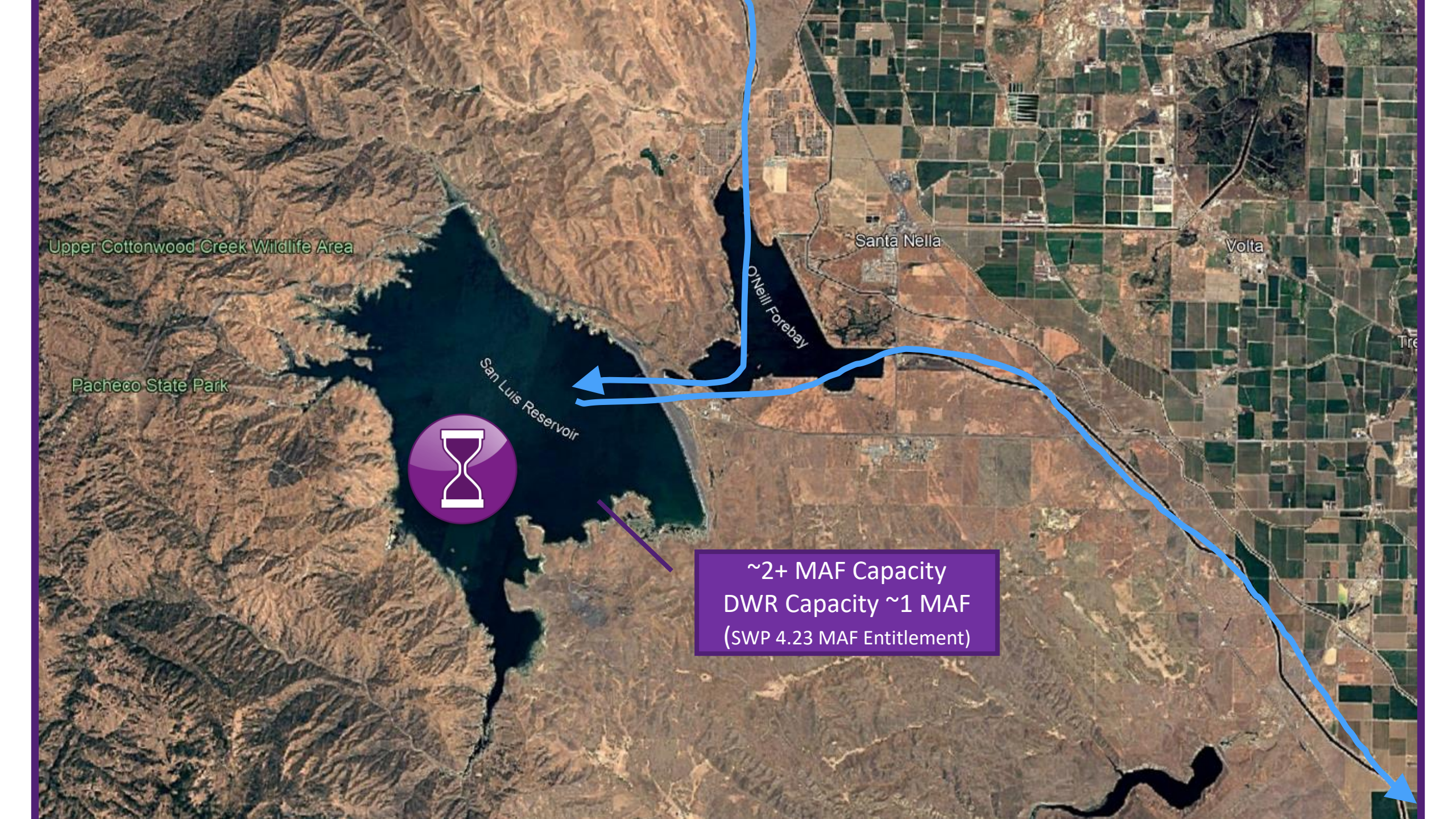
O'Neill Forebay

Santa Nella

Volta



~2+ MAF Capacity
DWR Capacity ~1 MAF
(SWP 4.23 MAF Entitlement)





San Luis Reservoir

Gianelli Pumping/
Generation Plant

O'Neil Forebay

ARTICLE 56 CARRYOVER PROVISION OF THE SWP CONTRACT

San Luis Reservoir (SLR)
is potentially an
underappreciated asset
for the Agency



Low-cost option to store (short term bank) supply

- Art. 56 gives Contractors rights to store water in SLR
- Has some restrictions
- No variable cost to store water in SLR
- Some storage is paid for
- Some storage for larger volumes is not
- Water subject to “spill” (reclassified) during wet years
- Can be a very dynamic facility to utilize



BALANCING ACT

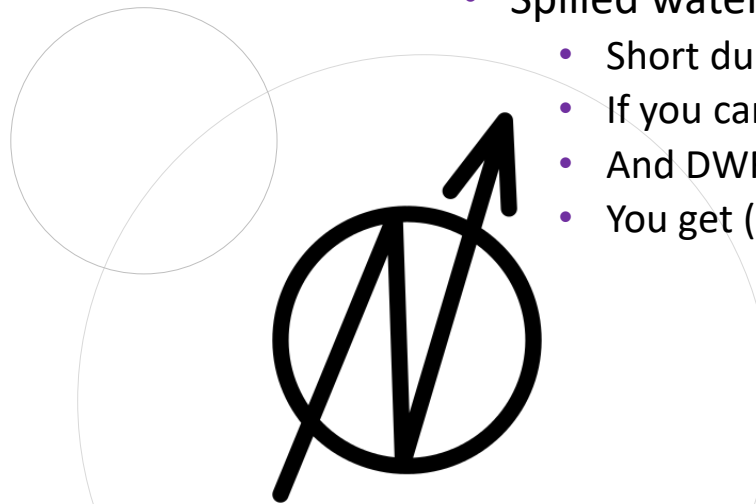
Change is Constant

- Available storage changes continuously
- DWR will use SLR to meet Table A allocations FIRST
- Unused SLR capacity is available to store water
- Storage hierarchy, but not an issue if space is available



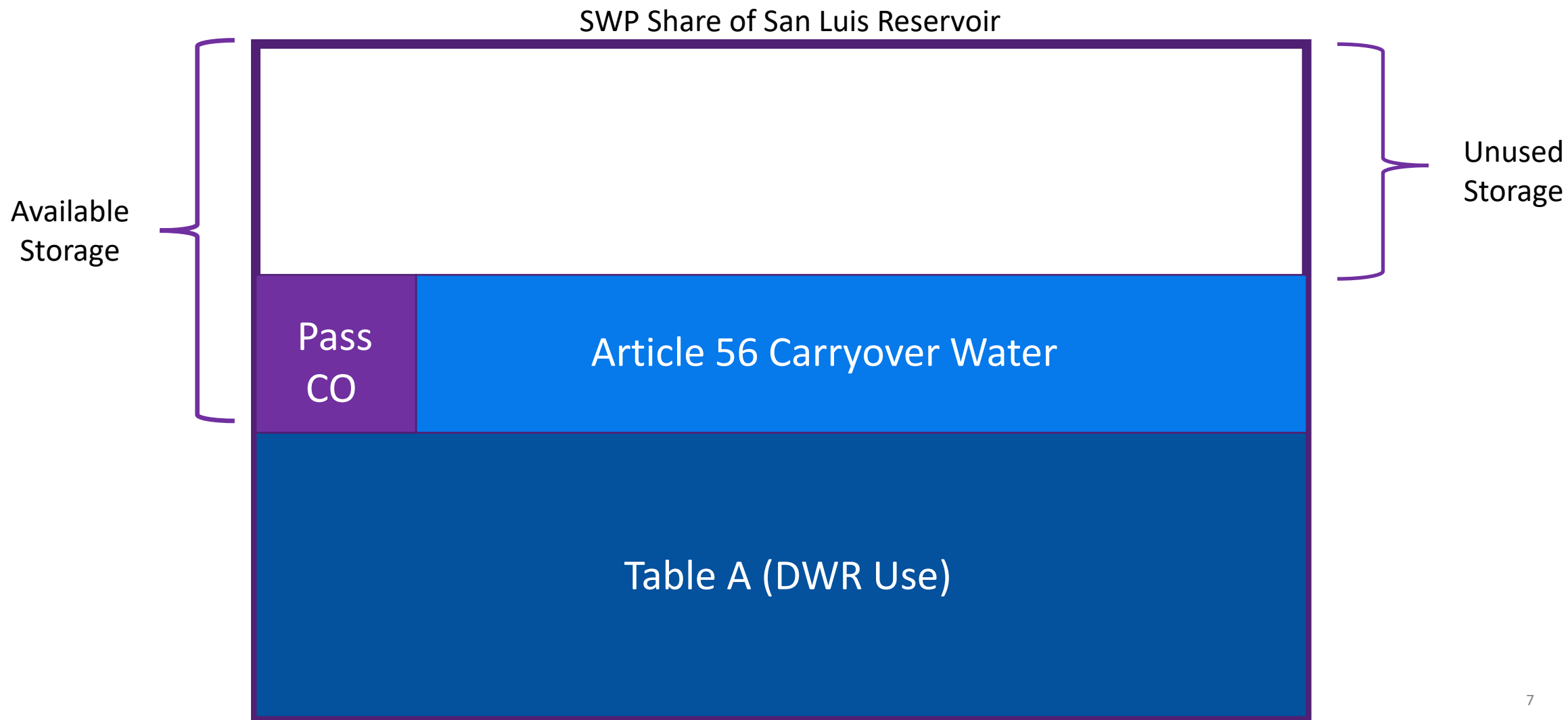
Too Much of a Good Thing

- If DWR needs space in SLR to store Table A, carryover can “spill”
- Water will spill in a prescribed order
 - Non-SWP Contractors
 - Contractor water in excess of their SLR storage allocation (2,763 AF of space in SLR for Pass)
 - Contractor water that was within their SLR storage allocation
- Spilled water is Article 21 Water
 - Short duration
 - If you can pay for it...
 - And DWR can wheel it...
 - You get (some of) it...





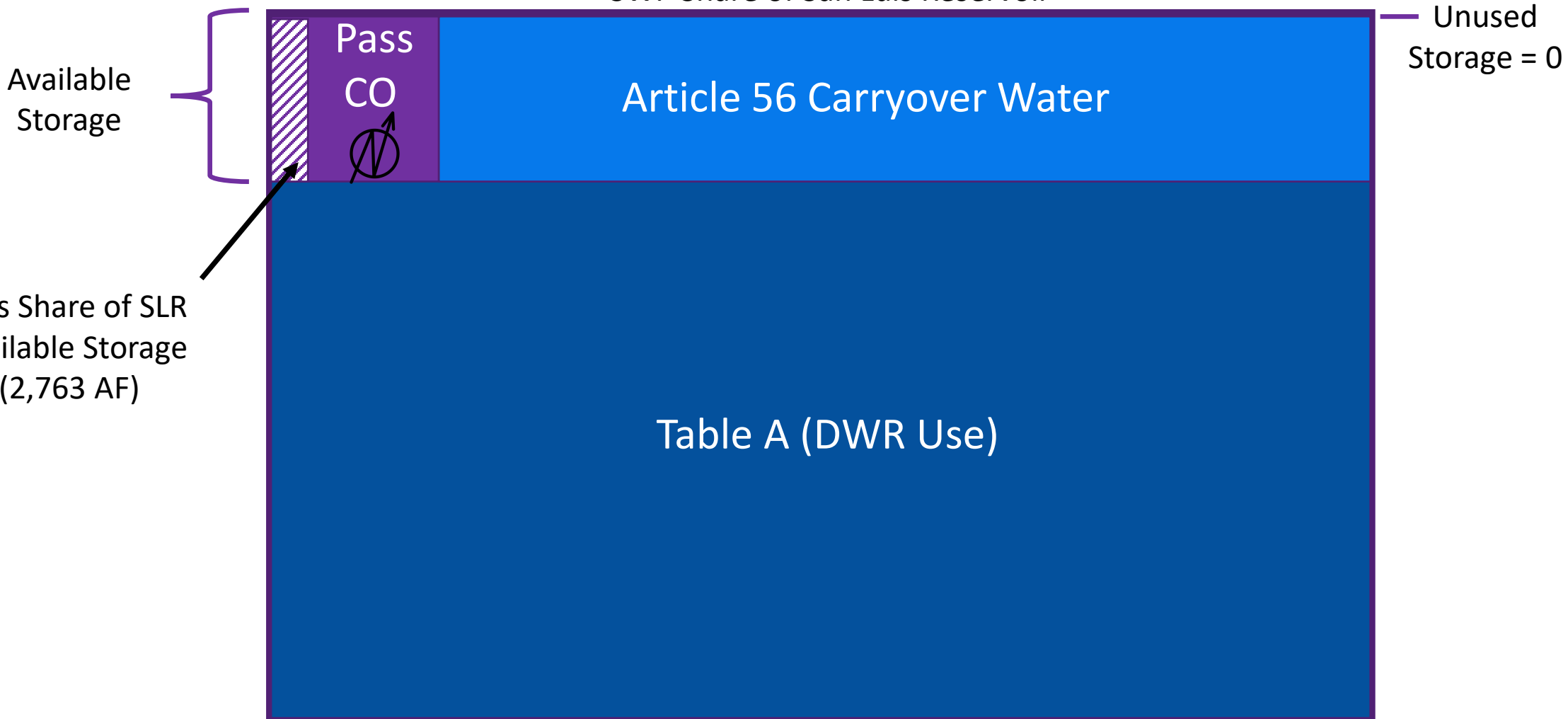
SAN LUIS RESERVOIR STORAGE





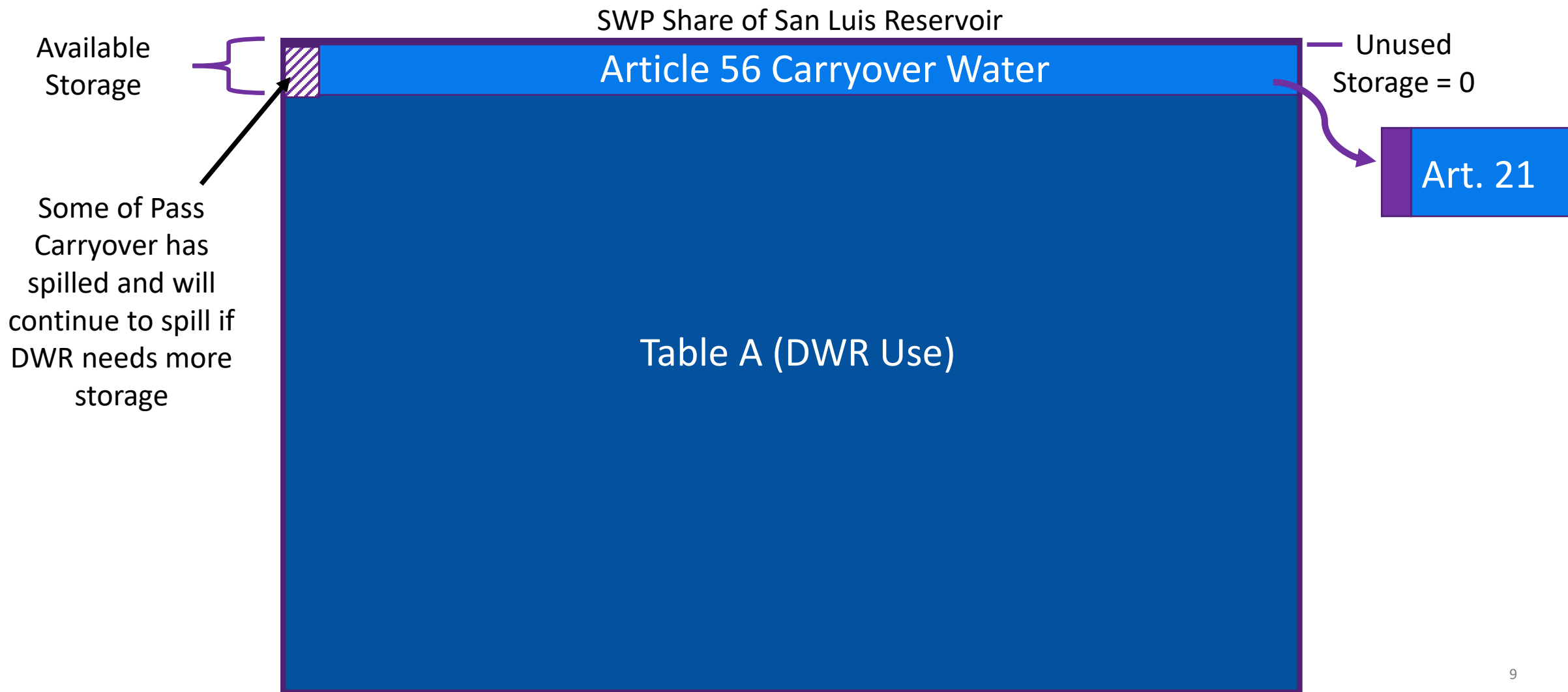
SAN LUIS RESERVOIR STORAGE

SWP Share of San Luis Reservoir





SAN LUIS RESERVOIR STORAGE



2019 CARRYOVER & SPILL

- 75% Table A allocation in 2019
 - 2017 – 85% allocation
 - 2018 – 35% allocation
- Many So. CA Contractors spilled CO
- Spills are somewhat mitigated by HIGH Table A availability in the same year
- Because storing in SLR is essentially “free”, financial losses due to spilling are opportunity costs
 - e.g. Not delivering take-or-pay Nickel Water is an immediate realized loss
- Occasional spill potential should be measured against banking costs

SWP CONTRACTORS	Cumulative Carryover to 2019	DELIVERED	SPILL
FEATHER RIVER			
COUNTY OF BUTTE			
PLUMAS COUNTY FC&WCD			
CITY OF YUBA CITY	5,485	-	5,485
SUB TOTAL	5,485	-	5,485
NORTH BAY			
NAPA COUNTY FC&WCD	9,270	201	9,069
SOLANO COUNTY WATER AGENCY	16,209	237	15,972
SUB TOTAL	25,479	438	25,041
SOUTH BAY			
ALAMEDA COUNTY FC&WCD-ZONE 7	7,047	2,644	4,403
ALAMEDA COUNTY WD	9,979	2,577	7,402
SANTA CLARA VALLEY WD	8,703	8,703	-
SUB TOTAL	25,729	13,924	11,805
SAN JOAQUIN VALLEY			
OAK FLAT WATER DISTRICT	1,425	9	1,416
COUNTY OF KINGS	2,370	167	2,203
DUDLEY RIDGE WATER DISTRICT	5,468	3,883	1,585
EMPIRE WEST SIDE ID	311	311	-
KERN COUNTY WA	100,000	99,683	317
TULARE LAKE BASIN WSD	21,973	15,352	6,621
SUB TOTAL	131,547	119,405	12,142
CENTRAL COASTAL			
SAN LUIS OBISPO COUNTY FC&WCD	18,750	111	18,639
SANTA BARBARA COUNTY FC&WCD	6,625	3,044	2,607
SUB TOTAL	25,375	3,155	21,246
SOUTHERN CALIFORNIA			
ANTELOPE VALLEY-EAST KERN WA	23,933	2,637	21,296
SANTA CLARITA VALLEY WATER AGENCY	39,211	3,608	35,603
COACHELLA VALLEY WD			
CRESTLINE-LAKE ARROWHEAD WA	2,748	-	2,748
DESERT WATER AGENCY			
LITTLEROCK CREEK ID	1,150	35	1,115
THE METROPOLITAN WATER DISTRICT OF	256,177	92,763	163,414
MOJAVE WATER AGENCY	53,246	872	52,374
PALMDALE WATER DISTRICT	5,844	1,896	3,948
SAN BERNARDINO VALLEY MWD	12,080	12,065	15
SAN GABRIEL VALLEY MWD			
SAN GORGONIO PASS WA	5,666	1,964	3,702
VENTURA COUNTY WPD			
SUB TOTAL	400,055	115,840	284,215
SWP TOTAL	613,670	252,762	359,934



CONSIDERATIONS



- SLR presents a valuable (although sometimes volatile) tool in the Pass portfolio
- Careful storage and prudent risk-taking may result in high value along with some risk
 - Store unused Table A at no cost
 - Maintain a buffer high in the system that can be used for direct delivery, emergency, water debt, transfers or other
 - Balance recharge limitations and supply availability
 - Minimize risk of spill by transfer/exchange if the carryover storage balance is high