State Water Resources Control Board Bay-Delta Water Quality Control Plan Public Hearing – December 16, 2016

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SED Public Hearing
Stockton Memorial Civic Auditorium - Main Hall 525 N. Center Street, Stockton, CA 95202
December 16, 2016

SOUTH SAN JOAQUIN IRRIGATION DISTRICT

STANISLAUS RIVER BASIC FACTS

- 1,068,000 af annual run-off
- 439,000 af annually released to the river
- 505,000 af annually diverted by OID/SSJID
- 107,000 AF annually are diverted by CVP Contractors, SEWD and CSJWCD

If you subtract the current basin's annual runoff from its current annual water demand, you get 17,000+ acre-feet of available water!

Where does the water come from to meet unimpaired flow?

Intent of UIF Project = To Put More Water Down River

Three uses of water in basin…

1. Instream flow requirements
2. Meeting ag/municipal demands
3. Storage in New Melones

There is no "magic water" in real life

- More water down the river is less water to ag, to municipal users and/or to storage.

Presentation Outline

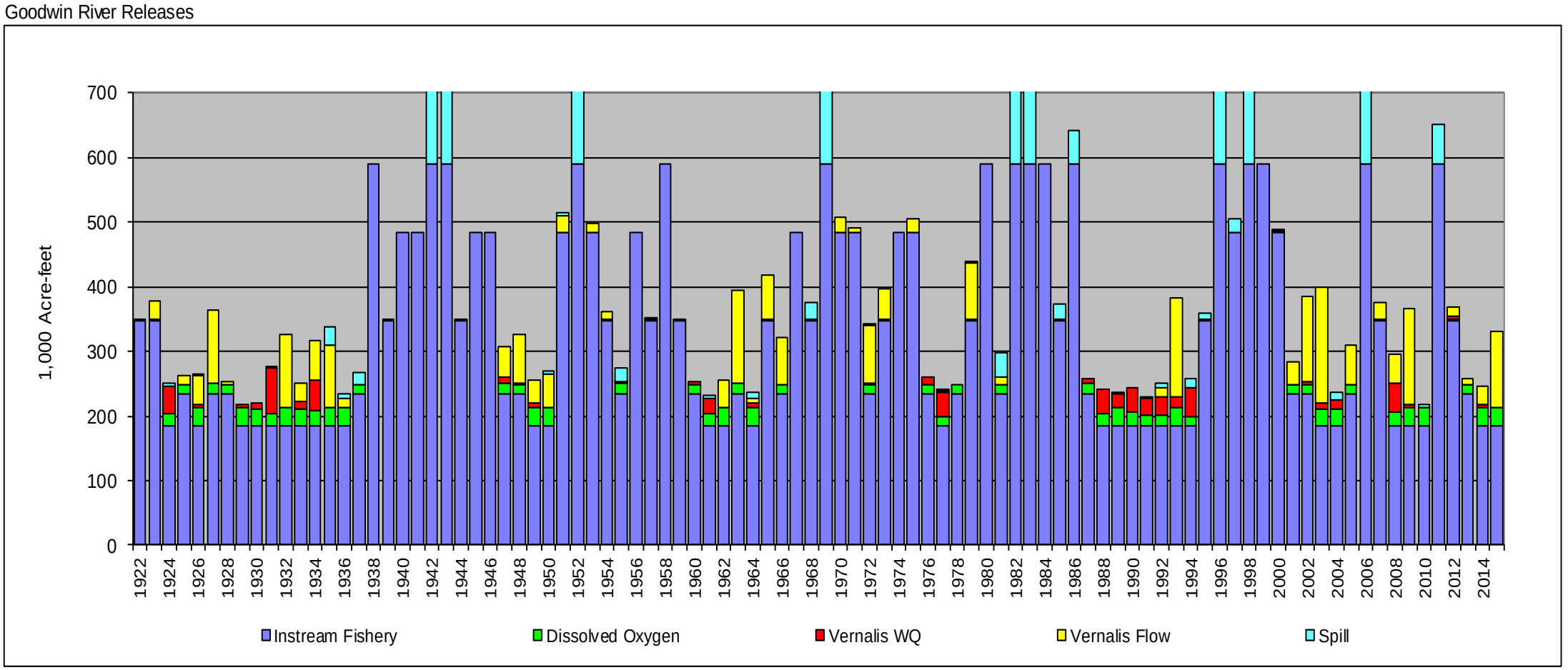
- Instream flow requirements
- Water Use Impacts
- Storage Impacts on New Melones
- Drought Impacts

Instream Flow Impacts

Fact vs. Fiction

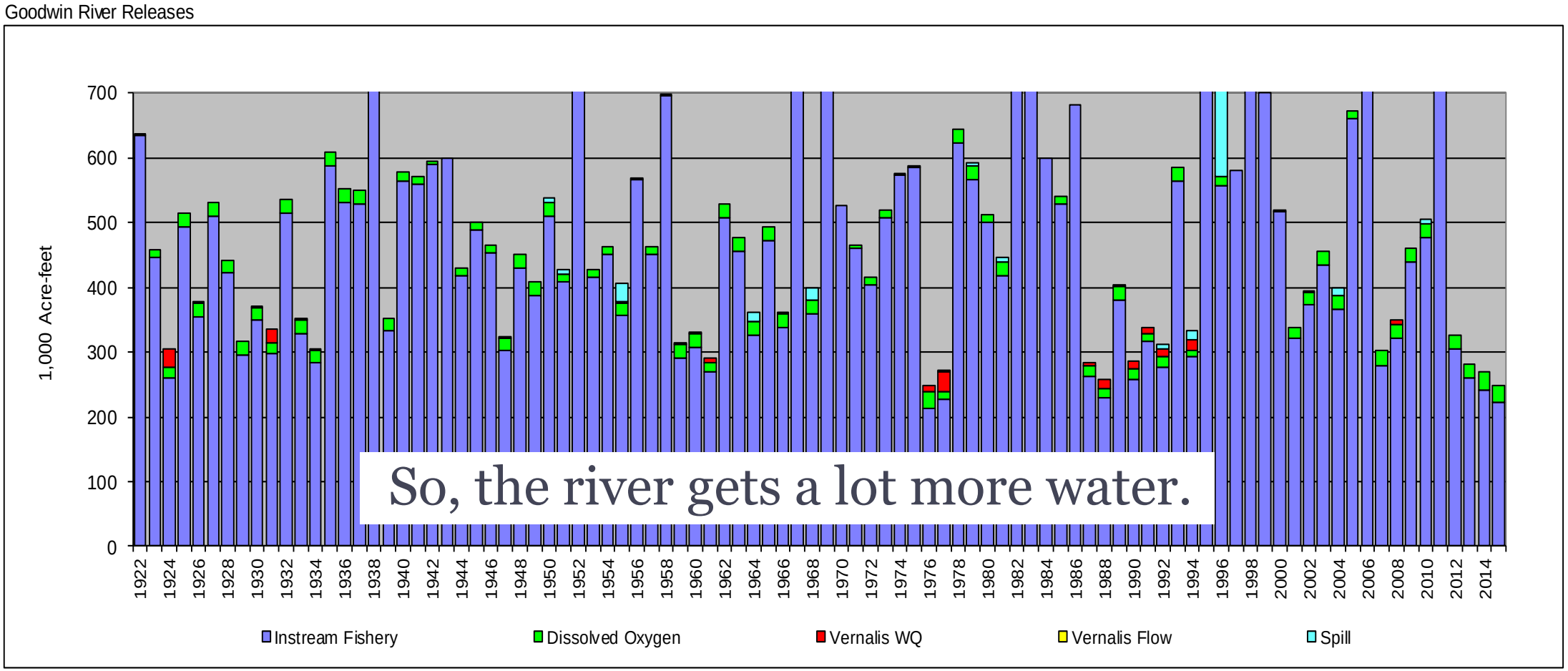
Fact: More Water Down the River Looks Like:

CURRENT RELEASES



Fact: More Water Down the River Looks Like:

PROJECTED 40% UIF



DOWN THE RIVER FLOWS

CURRENT

439,000

40% UIF

511,000 (at Goodwin)

Actual Modeled

622,000 (at Ripon; SED, Appx. F.1-127)

FICTION

The San Joaquin River (and its tributaries) minimally contribute flow for instream flow requirements (fishery needs)

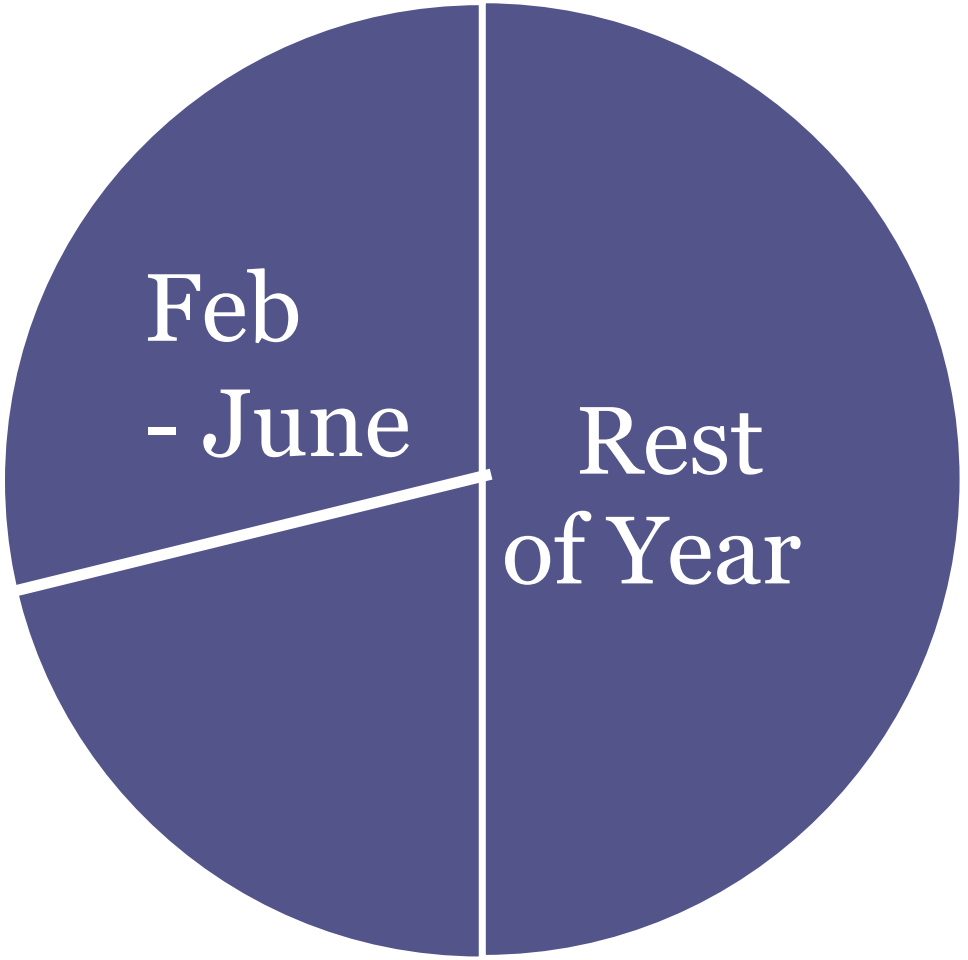
FACT:
Vernalis is already getting 40% of the UIF!

	Number of Occurrences	Unimpaired Flow	Actual	Reduction	Actual Flow Volume as a Percent of Unimpaired Flow
	# Years (year)	(taf)	(taf)	(taf)	(%)
Average of All Years	79	6,300	3,280	2,980[1]	48%
Median of All Years	79	5,890	1,850	2,630[3]	44%[3]
Wettest of Years	(1983)	18,940	15,410	3,530	81%
Average of Wet Years	25	10,590	6,210	4,380[1]	57%
Average of AN Years	14	6,840	3,840	2,990[1]	56%
Average of BN Years	11	4,610	1,620	2,990[1]	35%
Average of Dry Years	13	3,460	1,440	2,020[1]	42%
Average of Critical Years	16	2,570	1,010	1,560[1]	41%
Driest of Years	(1977)	1060	420	640	40%
Greatest % Difference	(1960)	3,050	550	2,500	18%
Greatest Volumetric Difference	(1995)	13,680	6,300	7,380	18%

October 29, 2010 DRAFT SJR Flow and Southern Delta Salinity Technical Report

Table 2-3. Actual and unimpaired annual flow statistics and percent of unimpaired flow (1930 to 2008) in the San Joaquin River at Vernalis

SED UNIMPAIRED FLOW ANALYSIS

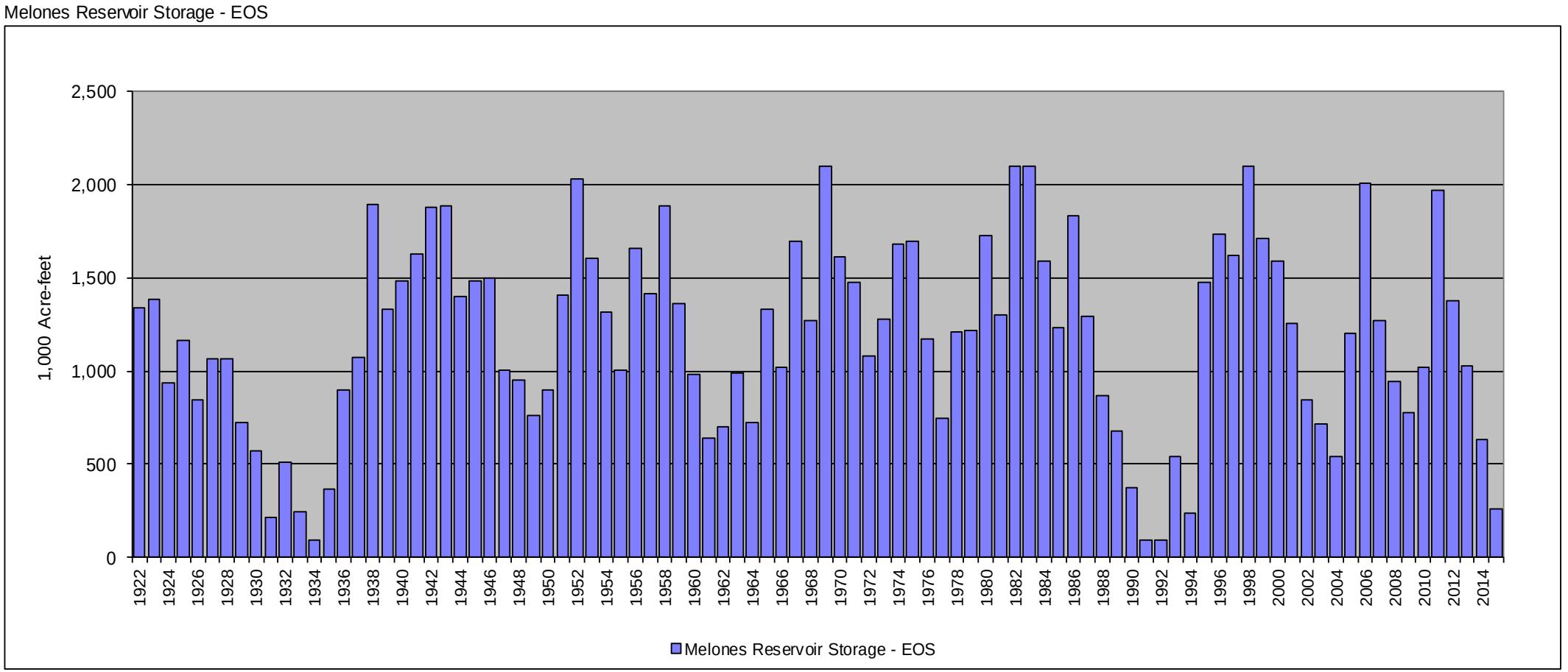


Storage Impacts

Fact vs. Fiction

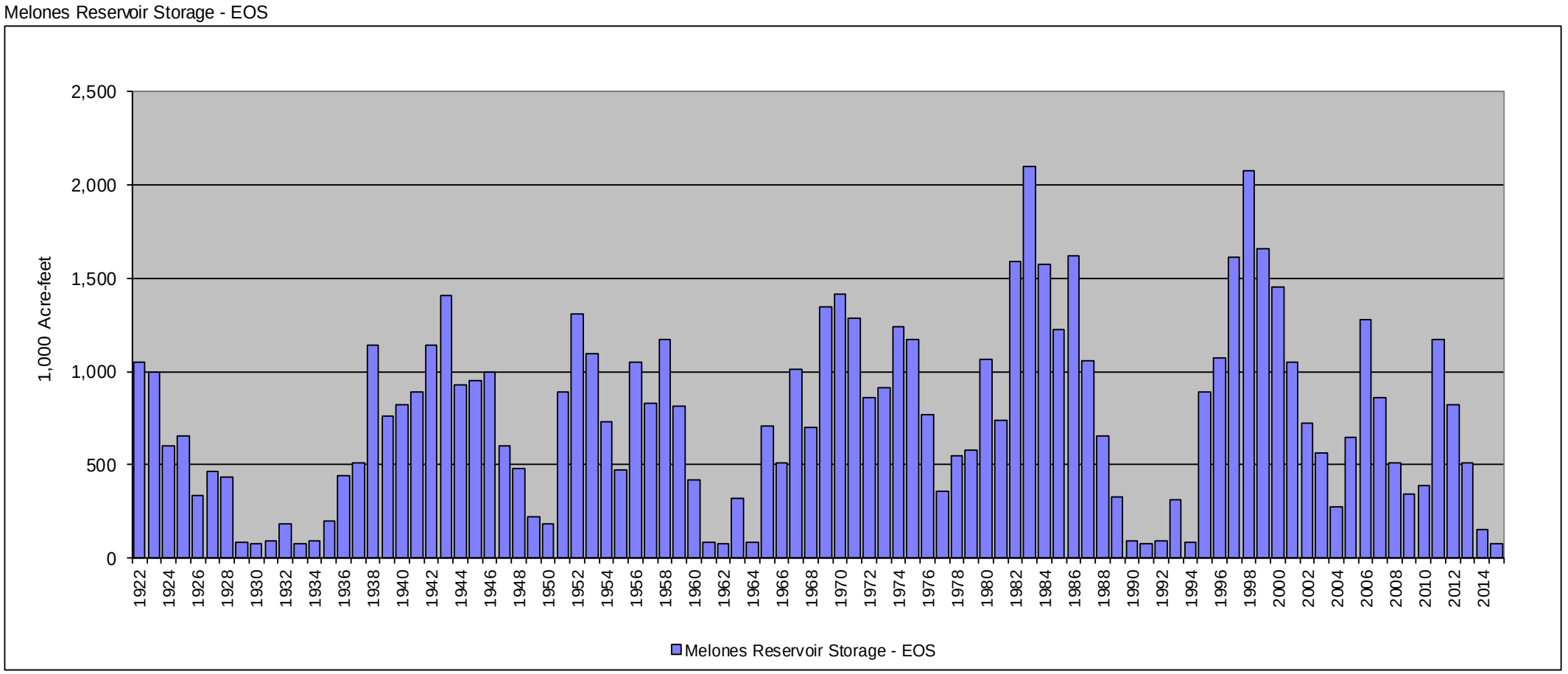
FACT: NEW MELONES STORAGE:

Current Storage



FACT: NEW MELONES STORAGE:

Storage at 40% UIF



Storage goes to zero in approximately 13 years under the 40% UIF

STORAGE CHANGES

CURRENT

1,182,000

40% UIF

748,000

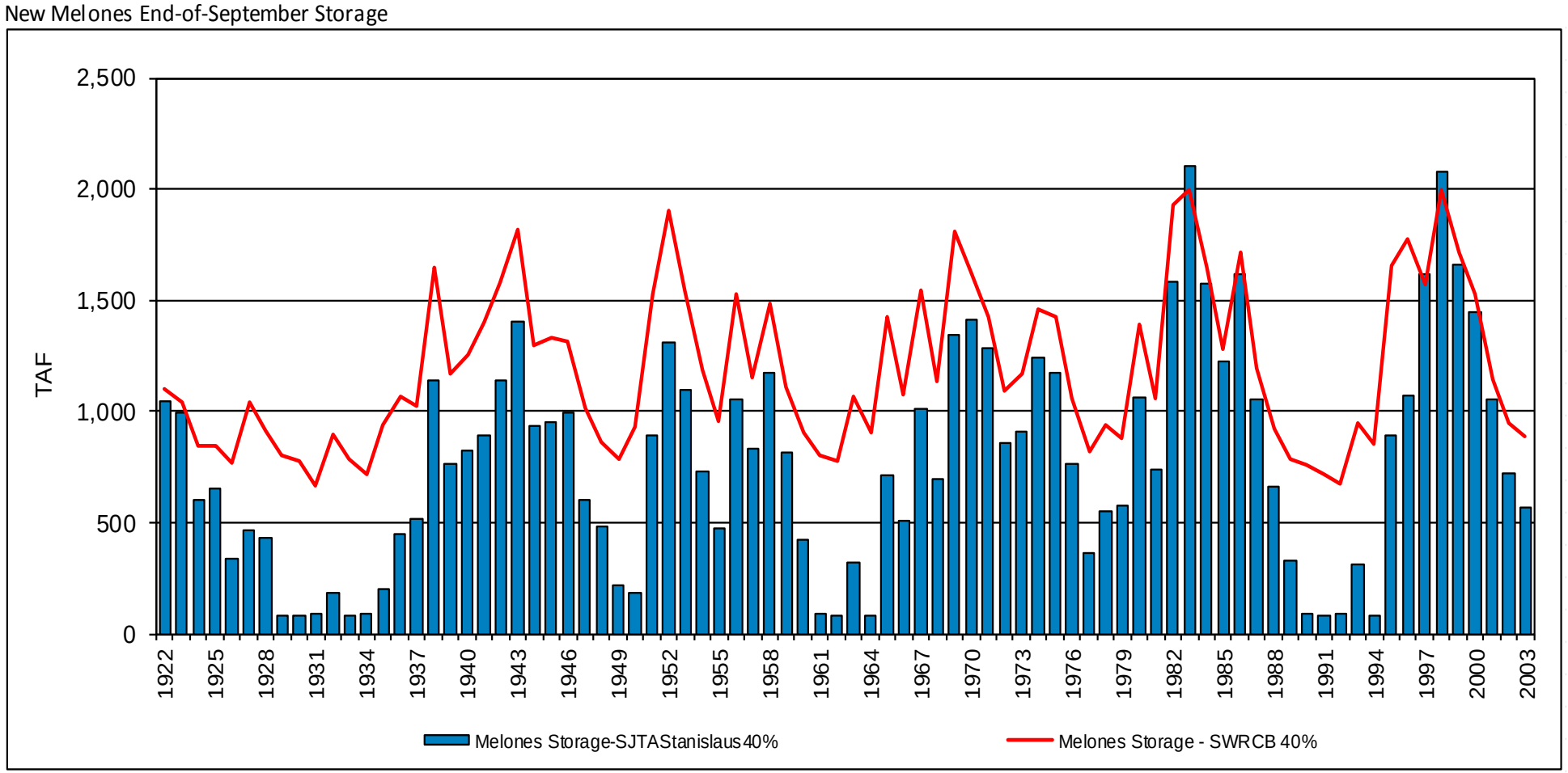
THE FICTION

The State Water Board analysis has a carryover storage and refill requirement that do not exists in the proposed rule, regulation or law. As the State Water Board stated:

> "Under additional streamflow requirement of the LSJR alternatives, changes in water availability **require adjustment of parameters to ensure feasibility for the 82-year simulation so that the reservoirs are not drained** entirely in the worst droughts of record. In addition, **carryover storage guidelines have been increased for New Melones Reservoir** and New Exchequer Reservoir **to minimize impacts on instream temperature that would be caused by lower reservoir levels and a limited coldwater pool….An implementation plan developed in a future proceeding would need to identify and evaluate supply, storage, and temperature conditions and appropriate operational objectives, to best protect beneficial uses and avoid adverse effects where feasible**." Appendix F-1-31. *Emphasis added.*

FICTION: SED Storage in New Melones

40% UIF vs. SWRCB's Adaptive Adjustment 40% UIF



FICTION: SED Storage in New Melones

- Reservoir Storage was held at 1,186,000 under adaptive adjustment and is nearly identical to baseline conditions.
- This masks the true impacts to storage and masking the impacts to :
  - recreation
  - hydro-power
  - greenhouse gas emissions
  - groundwater
  - instream water temperatures
- These impacts have not been evaluated or quantified.

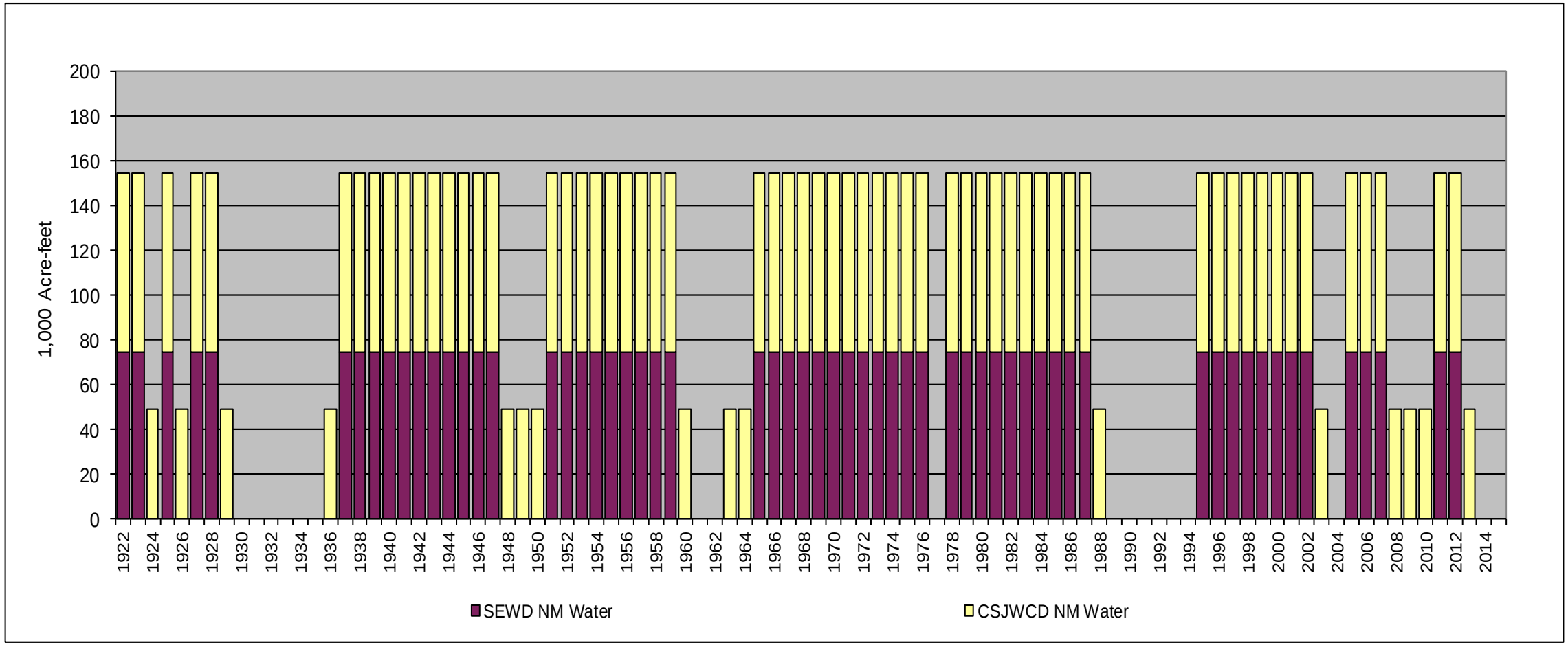
Water Delivery Impacts

Fact vs. Fiction

CVP CONTRACTORS CHANGES IN WATER DELIVERIES

Current Deliveries

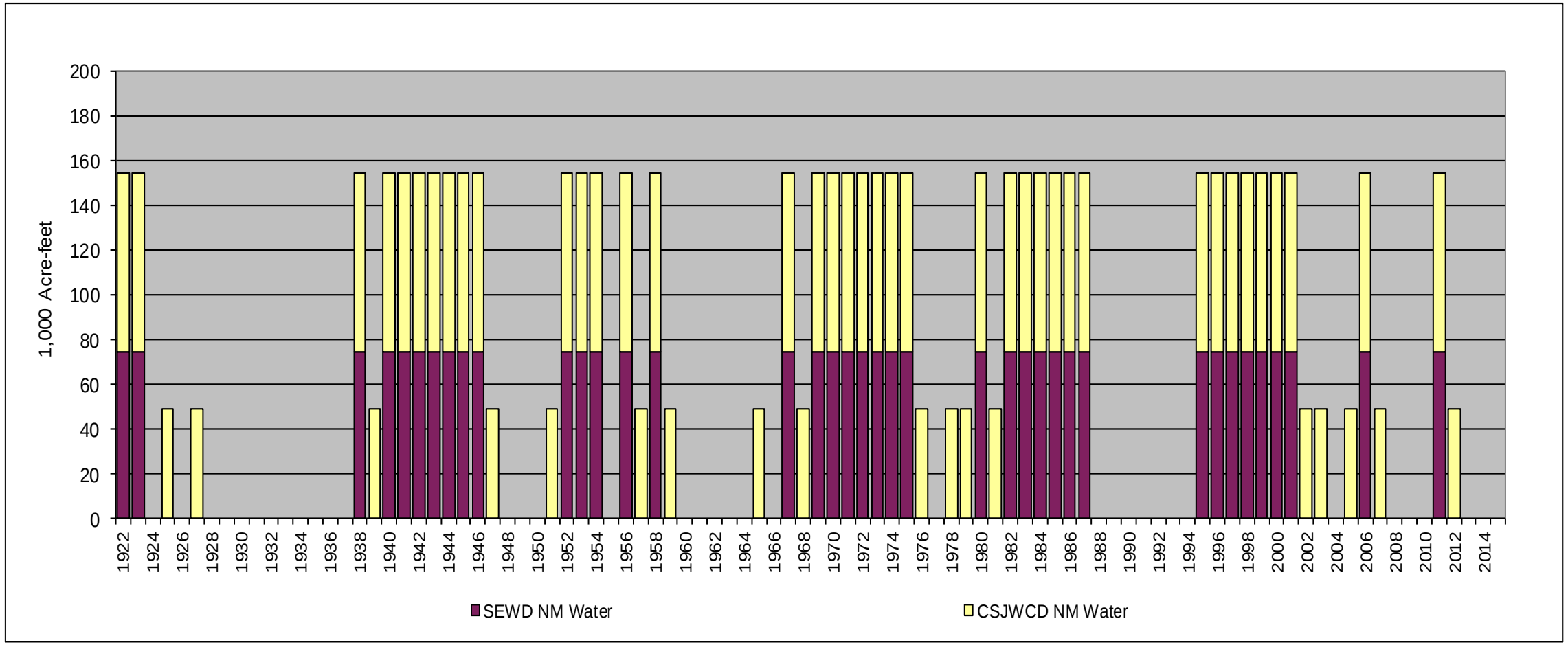
SEWD & CSJWCD



CVP CONTRACTORS CHANGES IN WATER DELIVERIES

40% UIF

SEWD & CSJWCD



CVP CONTRACTORS

CURRENT

107,000

40% UIF

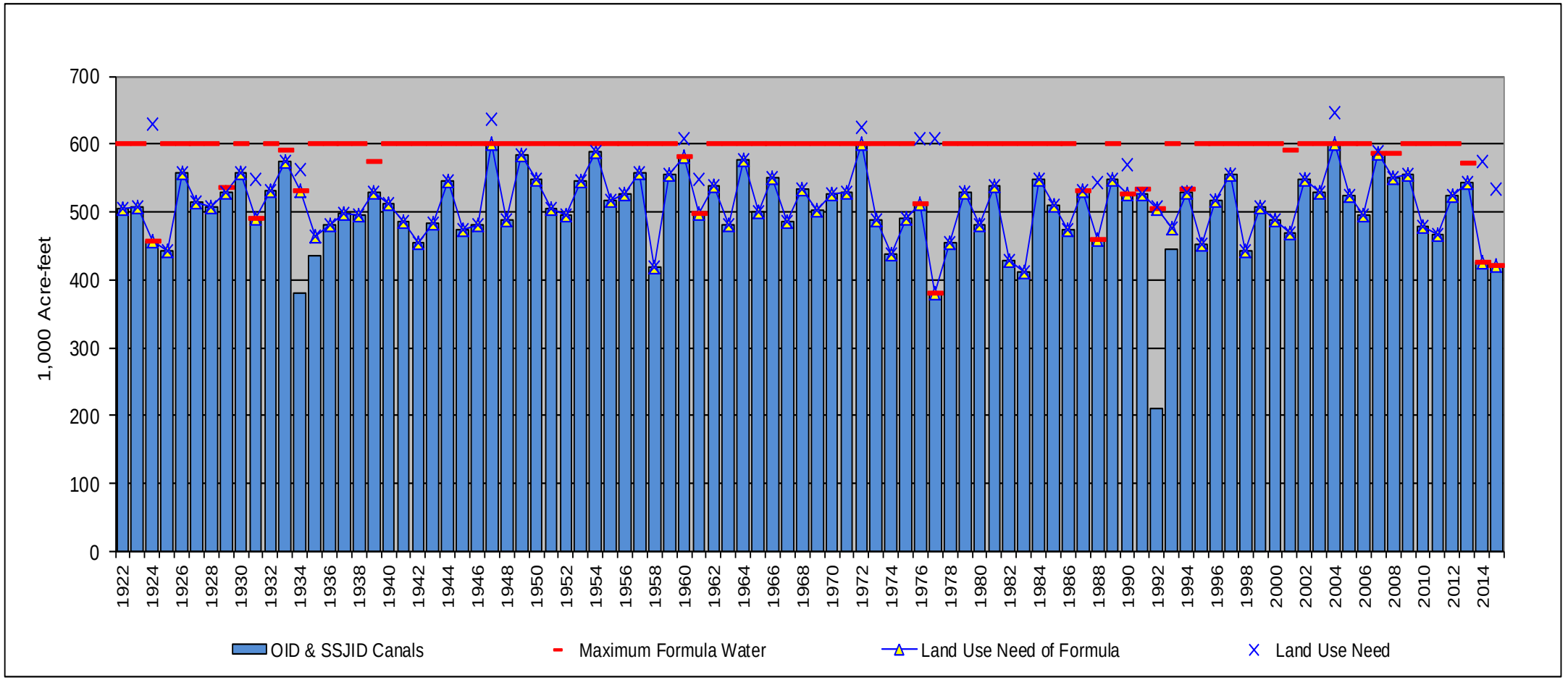
74,000

SEWD water reliability over past 10 years goes from 50% to 20%

OID/SSJID WATER USE

Current

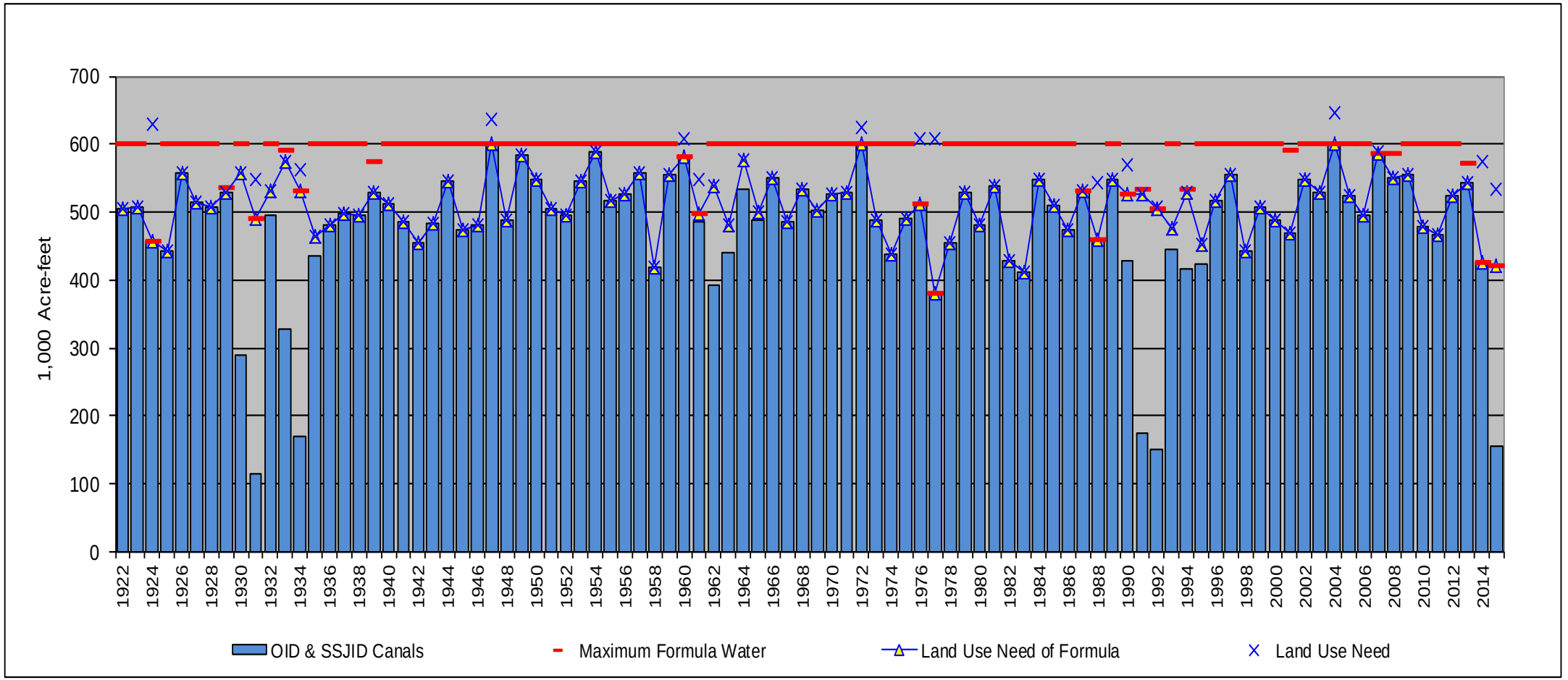
OID / SSJID Water Use & Commitments



OID/SSJID WATER USE

40% UIF

OID / SSJID Water Use & Commitments



OAKDALE IRRIGATION DISTRICT/SOUTH SAN JOAQUIN IRRIGATION DISTRICT

CURRENT

505,000

40% UIF

480,000

System Investments = Conserved Water = Transfers to Areas of Need = Revenue for Capital Projects

OID/SSJID AVERAGE IMPACTS OF SED

- Is the end game of water conservation to allow the State to take our water?
  - Investments in modernization have allowed saved water to be provided to areas of need, generate revenue for local capital projects
  - $110 million in capital investments from SSJID/OID lost to the State.

- SSJID Nick DeGroot Water Treatment Plant
  - Booked Capital $127,000,000
  - Stranded Assets under 40% $63,000,000
  - Cities residents stuck with permanent drought conservation and increased bills to cover debt service

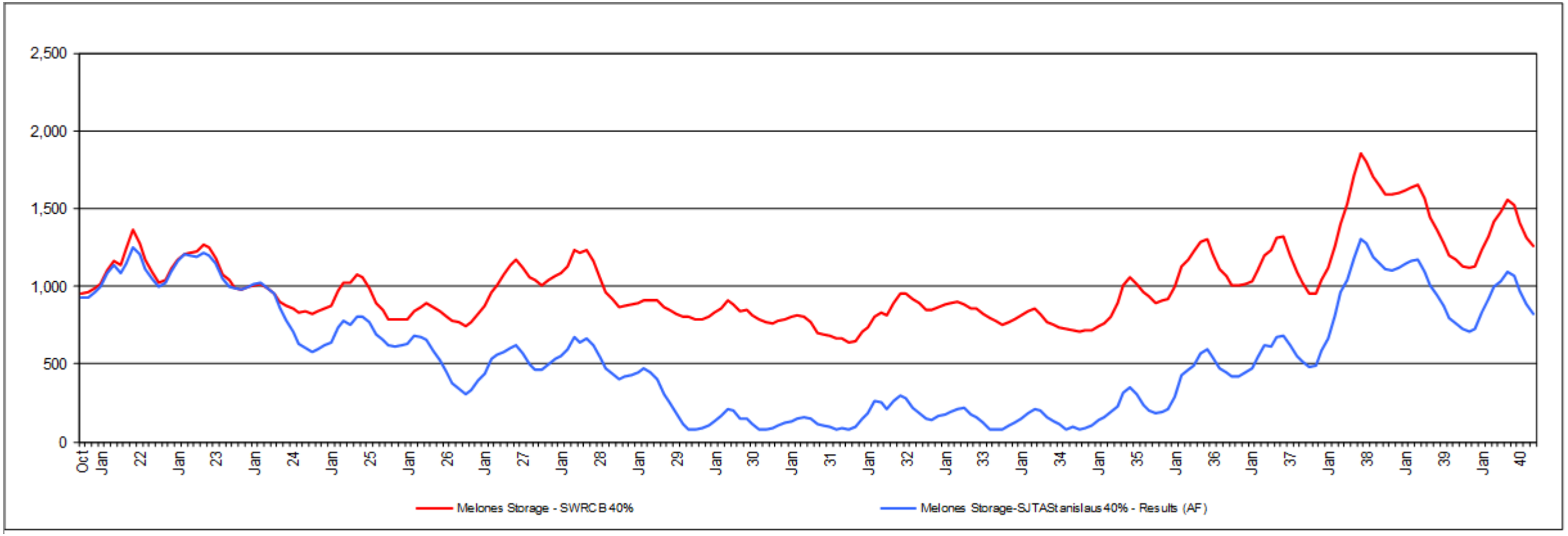
Averages Hide the True Drought Impacts Proposed in SED

To maintain reservoir storage and instream flow during droughts, the State Water Board **devastates** the OID and SSJID and CVP Contractor water supplies but avoids modeling it.

1924 - 1935

WATER RIGHT	**600,000+ acre-feet annually**
Modeled Use (1924-35)	**535,000 acre-feet annually**
40% UIF (1924-35)	**325,000 acre-feet annually**

1922-1940


2,500
2,000
1,500
1,000
500
0
Oct
Jan 22
Jan 23
Jan 24
Jan 25
Jan 26
Jan 27
Jan 28
Jan 29
Jan 30
Jan 31
Jan 32
Jan 33
Jan 34
Jan 35
Jan 36
Jan 37
Jan 38
Jan 39
Jan 40
Melones Storage - SWRCB 40%
Melones Storage-SJTAStanislaus 40% - Results (AF)

DROUGHT IMPACT SUMMARY

- During 10 Year Drought Period, SSJID/OID would only deliver 60% of historical as a result of 40% UIF

- During single driest years, only 36% would be available to District water users:
  - 12-inch allocations
  - 64% reduction in water supplies for SSJID Partner Cities and 193,000 residents in San Joaquin County

Either way you look at it in a deep drought:

162,500 acre-feet annually per district

This occurs again in 1960-1964, 1976-1977, 1987-1994, 2002-2005, 2012-2016

CONCLUDING REMARKS

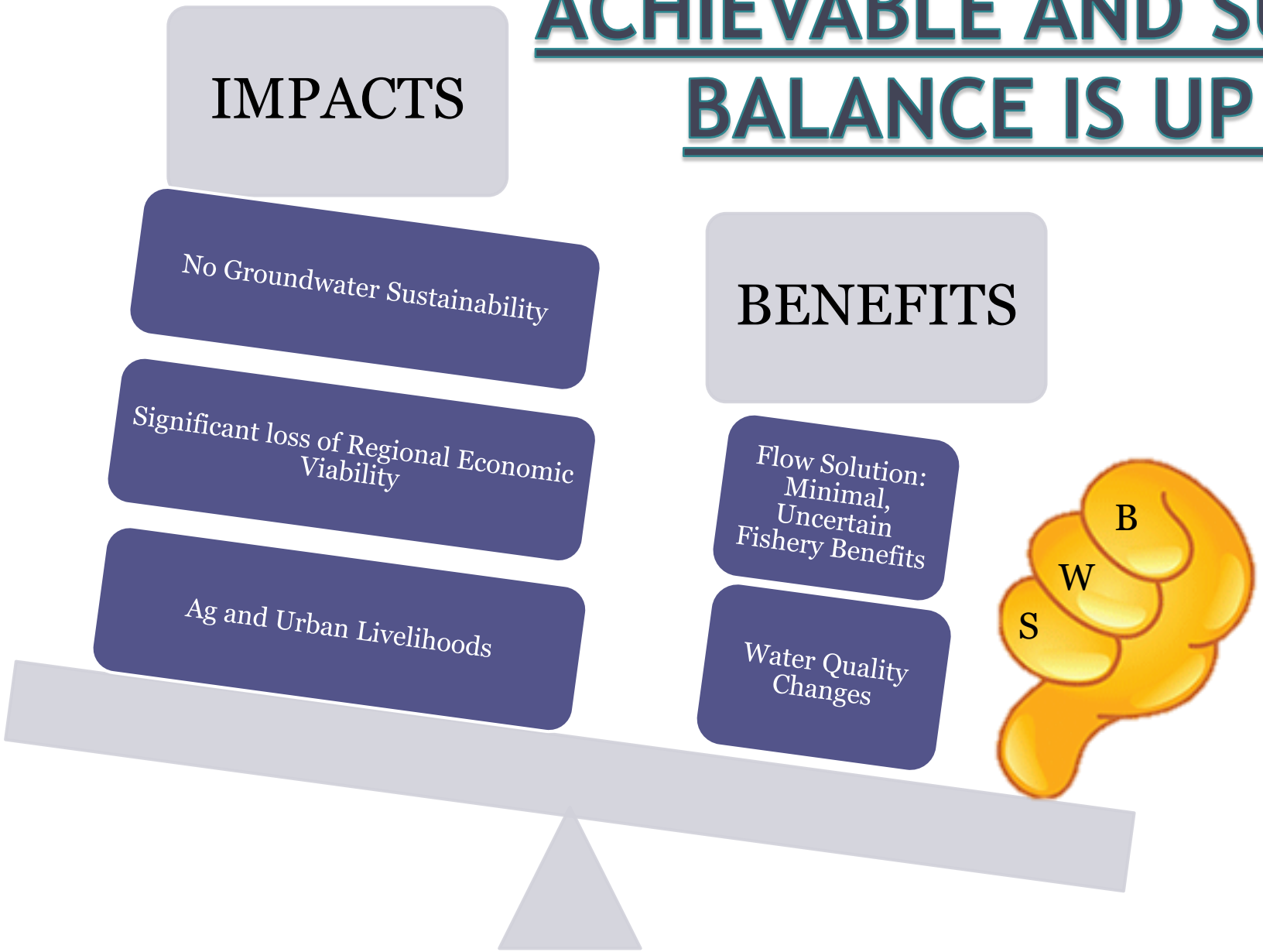
The entire SED is based on fictional analysis of unfounded modeling assumptions. SED methodology appears to mask and avoid disclosure of the true impacts of the project.

Averages and percentages do not make for the true story.

The true impact is:

When the first drought hits after this regulation has been adopted, agriculture in SEWD, CSJWCD, OID, and SSJID will be devastated – and will not recover, except through groundwater pumping…until that collapses too.

ACHIEVABLE AND SUSTAINABLE BALANCE IS UP TO YOU



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