DAVID E. CAMERON
PARTNER
DIRECT DIAL (916) 491-3008
DIRECT FAX (916) 442-2348
E-MAIL dcameron@hansonbridgett.com

HansonBridgett

June 28, 2024

VIA E-MAIL strgba@mid.org

Stanislaus and Tuolumne Rivers Groundwater
Basin Association Groundwater Sustainability
Agency
1231 11th Street
Modesto, CA 95354

Re: Comments on the Draft Revised Groundwater Sustainability Plan

To the Board of the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency:

Hanson Bridgett provides these comments on the Revised Draft Groundwater Sustainability Plan ("Revised GSP") released to the public on June 18, 2024. Hanson Bridgett requests that these comments be considered in advance of the GSA's planned adoption of the Revised GSP on July 10, 2024.

I. THE GSP MUST RELY ON THE BEST AVAILABLE INFORMATION

A GSP will be evaluated on "[w]hether the assumptions, criteria, findings, and objectives, including the sustainability goal, undesirable results, minimum thresholds, measurable objectives, and interim milestones are reasonable and supported by the best available information and best available science." (California Code of Regulations, tit. 23 § 355.4(b)(1).)

GSP development thus must be supported by the best available information and best available science, including as relevant to this comment letter information related to subbasin inputs and exports, overdraft throughout the subbasin, and the development of projects.

A. All Subbasin Inputs and Outputs Should be Recognized

The GSP appears to exclude surface water diversions into the NDE management area.

Table 5-6 [Average Annual Water Budget – Land Surface System, Non-District East] for example omits recognition of *any* surface water deliveries. It appears that this omission is further reflected in Figure 5-15 [Groundwater Recharge and Extraction – Non-District East Zone]; Figure 5-16 [Net Recharge – Non-District East Zone]; Figure 5-35 [Groundwater Recharge and Extraction – Non-District East Area] and Figure 5-36 [Net Recharge – Non-District East Area].

The revised GSP should also reflect the ongoing surface water projects that allow for water supply to be imported to the NDE. For example, the 10 Year Oakdale Irrigation District Out of District Transfer Program and the Modesto Irrigation District Long Tern Groundwater Replenishment Program make available approximately 20,000 acre feet nine out of ten years, and up to 60,000 acre feet in above normal and wet years, respectively.

Similarly, in the underlying data we understand was utilized to form the GSP's water budgets by management area (C2VSim May 15, 2024 sheet, Obtained from Todd Groundwater, WaterUseBudgets Tab, "Exhibit A"), there are no surface water deliveries recognized for the NDE management area in the 33 year data set.

Qualitatively, the GSP similarly states that "surface water is generally not available" in the NDE area. (Section 6.4.1.1 [Cause of Undesirable Results].)

These data and narratives of the GSP are not in accordance with the best available data on this issue. According to the State Water Resource Control Water Board's Electronic Water Rights Information Management System, the following surface water diversions into the NDE management area, totaling over 40,000 acre-feet since 2009, have occurred:

Non-District East Ag SW Deliveries

Year	Irrigation District Deliveries, Ac-ft	Land Owner Diversions, Ac-ft	Total Ag SW Deliveries, Ac-ft
2009	-	2,971.60	2,971.60
2010	-	3,000.00	3,000.00
2011	-	3,766.00	3,766.00
2012	-	3,228.00	3,228.00
2013	-	2,082.00	2,082.00
2014	-	1,416.00	1,416.00
2015	-	394.00	394.00
2016	-	1,864.00	1,864.00
2017	75.00	3,766.00	3,841.00
2018	425.00	1,626.00	2,051.00
2019	350.00	3,870.31	4,220.31
2020	-	1,187.80	1,187.80
2021	-	2,518.85	2,518.85
2022	-	4,487.14	4,487.14
2023	-	4,333.19	4,333.19
Total	**850.00**	**40,510.89**	**41,360.89**

We request that these diversion quantities be recognized in the figures and tables referenced above regarding historical and projected groundwater recharge and extraction, as well as in the figures and tables regarding projected groundwater recharge and extraction.

Similarly, we request that exports of groundwater from the subbasin into neighboring subbasins (e.g. the Delta Mendota Subbasin) also be recognized in the historical and projected groundwater extraction data.

B. Overdraft Across the Subbasin Should be Treated Equally

Without best evidence, the GSP asserts that pumping in the NDE management area is the primary cause of overdraft across the subbasin. For example, the GSP states:

- "Over-pumping, primarily in the Non-District East Management Area (NDE MA) (Figure 6-1), has contributed to a historical Subbasin overdraft of about 43,000 AFY (Section 5.1.4 and Table 5-6)." (Section 6.3.1.)
- "In the Modesto Subbasin, the reduction of groundwater in storage is caused by overpumping primarily in the NDE MA in the eastern Subbasin (Figure 6-1)." (Section 6.4.1.1.)
- "estimated over-pumping of about 47,000 AFY, primarily in the NDE MA" (Section 6.4.2..1)
- "groundwater extractions – primarily in the NDE MA – have lowered groundwater levels." (Section 6.8.1.1.)

The figures and tables cited, however, do not appear to support the these assertions, particularly as other areas of the subbasin have experienced overdraft similar to that in the NDE management area.

For example, in the datasets used to form the GSP (Exhibit A, Operational Budget Tab), average overdraft for each management area is reported for the period from 1991 through 2023. NDE Management Area's average overdraft from 1991 to 2023 is reported to be 32,000 acre-feet. The Modesto Management Area's average overdraft over same period is a similar 25,300 acre-feet. Curiously however, the Modesto Management Area is not called out regarding its contributions to overdraft in the same matter as is the NDE management area.

We request that each referenced section above, and other similar references, be amended to refer to pumping and overdraft conditions in the subbasin as a whole. Alternatively, we request that each management area's historical average overdraft be specifically referenced, included in the analysis, and discussed on equal terms.

In short, we do not believe the NDE management area's overdraft should be uniquely treated in the GSP, particularly when that overdraft is substantially similar to overdraft in other management areas in the subbasin.

II. POLICY & LEGAL COMMENTS

A. Projects Should be Included Alongside Management Actions

At its June 5, 2024 meeting, the GSA introduced a resolution *Adopting A Revised Groundwater Sustainability Plan And Documenting The Commitment To Develop And Implement A Well Mitigation Program And Demand Management Actions In The Modesto Groundwater Subbasin*. The resolution included consideration of certain actions including: (a) a commitment to develop management actions by January 31, 2027, and (b) to implement and fund a well mitigation program in the amount of $300,000 by January 31, 2026.

We are supportive of a well mitigation program, well mitigation funding, and consideration of certain management actions.

However, we request that the GSA not focus only on management actions but instead work to develop projects that augment supplies to the subbasin, including with subbasin landowners. We also request that the GSA and subbasin as a whole remain supportive of seeking and obtaining basin-wide grant funding when available throughout the subbasin. Grant applications should focus on the management areas that have shown historical overdraft, i.e. the Modesto Management and Non-District East Management Areas. Management actions are one important set of tools, but should not be the exclusive tools relied upon particularly at the earliest stages of SGMA implementation. The Modesto Subbasin would be better served if the implementation of the GSP focused on more projects and project successes, as well as a increased beneficial use of in-basin Districts' conserved surface water.

B. The GSP Should Refrain from Establishing an Allocation Methodology

In its Management Act 1, the GSP establishes a groundwater allocation methodology. (Section 8.1.1.1.) The methodology in its current form is incomplete and legally deficient, and as a result should be removed from the GSP. We recommend that the GSP avoid establishing a basis for pumping allocations at this time, particularly as that framework is simply not necessary for this Revised GSP.

The GSA should focus on developing a defensible plan, encouraging projects, and developing management actions that to do purport to determine water rights. Should an allocation program be developed, we request that it be in the form of a separate policy carefully formed by the best available information.

III. STAKEHOLDER INVOLVEMENT

Additionally, stakeholder involvement could be improved in the future through a stakeholder and a technical advisory committee. Multiple subbasins have employed these groups to guide policy. It appears that historically, policy decisions are not well vetted and decisions are made without involving landowners and interest groups, who will ultimately be subject to these decisions. Stakeholder engagement would also be improved if there was a longer time period for public review of documents. The decisions made for the management of the Modesto Subbasin are complicated and multi-pronged, and deserve additional input from those being regulated by the GSA.

IV. CONCLUSION

We thank the GSA for the opportunity to provide comment on the Revised Draft GSP, and request that the comments in this letter are considered when developing and taking action on the final Revised GSP.

We look forward to ongoing, productive engagement with the GSA in effort to achieve long-term sustainability throughout the subbasin.

Sincerely,

David E. Cameron
Partner

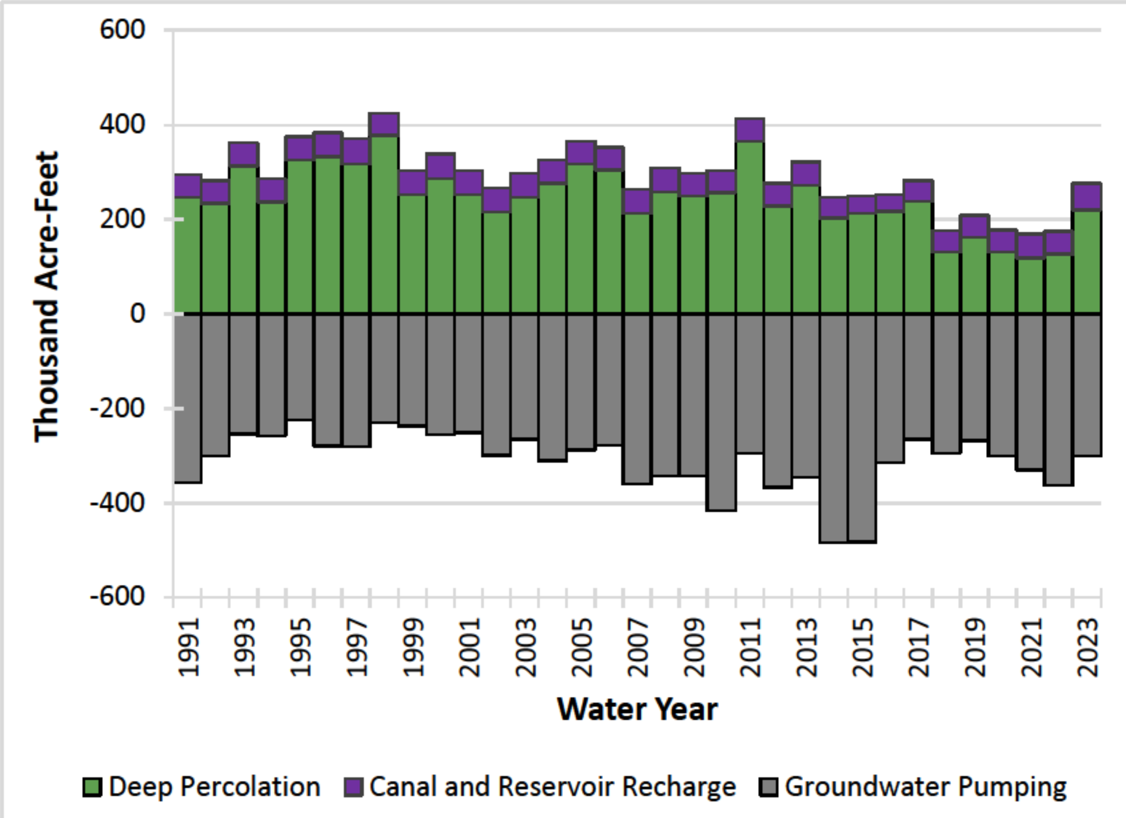
DEC

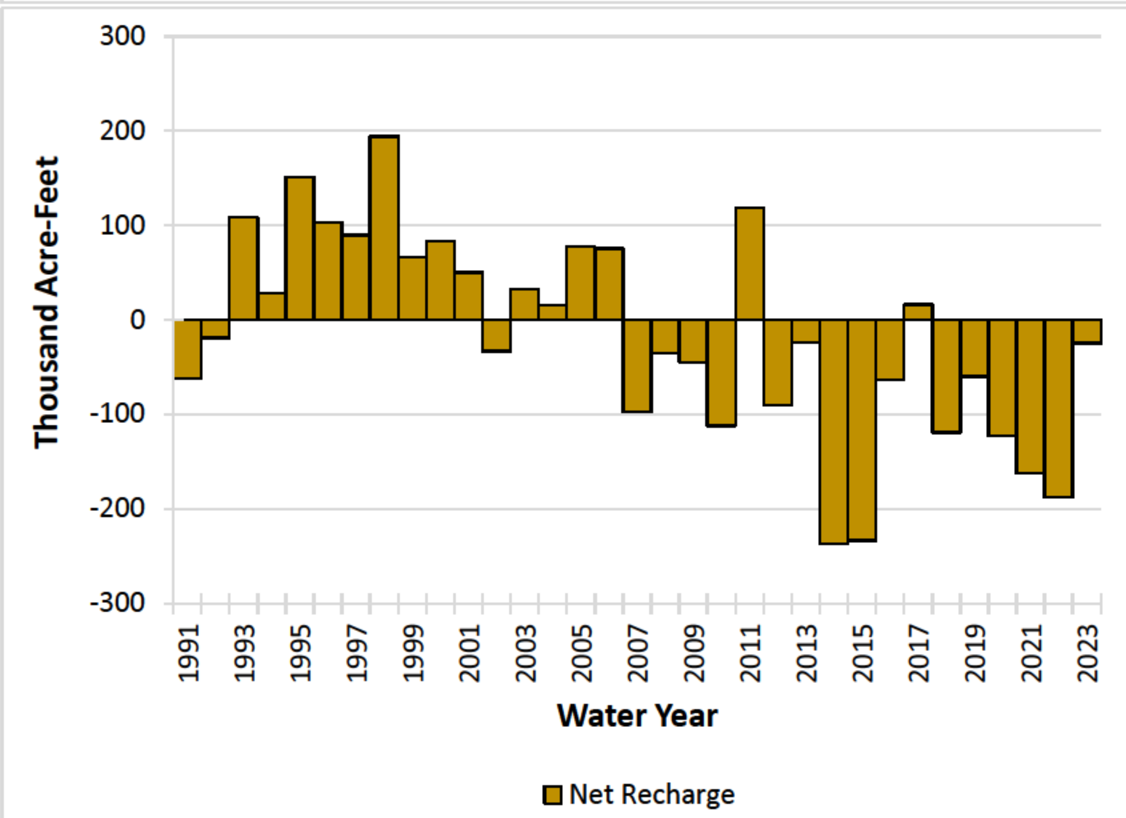
Attachments: Exhibit A C2VSim May 15, 2024 sheet

Exhibit A

Modesto Subbasin					
Water Year	Hydrologic Index	Deep Percolation	Canal and Reservoir Recharge	Groundwater Pumping	Net Recharge
1991	C	246,083	47,979	-356,479	-62,417
1992	C	234,040	47,850	-300,731	-18,840
1993	W	313,151	48,390	-253,192	108,350
1994	C	236,586	48,855	-257,233	28,208
1995	W	325,383	49,132	-223,601	150,914
1996	W	332,531	50,900	-280,085	103,346
1997	W	316,767	52,977	-280,161	89,583
1998	W	377,349	47,368	-230,613	194,104
1999	AN	252,575	50,020	-236,181	66,413
2000	AN	286,401	52,005	-255,375	83,031
2001	D	251,626	50,372	-251,692	50,307
2002	D	215,538	50,758	-299,317	-33,022
2003	BN	246,675	50,251	-264,659	32,268
2004	D	275,576	50,654	-310,382	15,848
2005	W	316,793	48,051	-287,430	77,415
2006	W	304,163	48,077	-276,816	75,424
2007	C	212,641	50,485	-360,492	-97,366
2008	C	257,948	50,097	-343,039	-34,995
2009	BN	249,480	48,940	-343,057	-44,638
2010	AN	256,745	47,127	-415,917	-112,045
2011	W	365,405	46,937	-293,996	118,346
2012	D	227,712	48,337	-366,543	-90,493
2013	C	272,408	49,280	-345,803	-24,115
2014	C	202,673	44,712	-484,377	-236,992
2015	C	213,464	36,289	-482,959	-233,206
2016	D	216,696	35,096	-314,768	-62,976
2017	W	237,675	44,358	-265,868	16,165
2018	BN	130,405	44,995	-294,236	-118,836
2019	W	162,928	45,198	-267,720	-59,594
2020	D	130,935	47,069	-300,095	-122,090
2021	C	119,010	49,630	-330,573	-161,933
2022	C	126,323	48,513	-362,292	-187,457
2023	W	220,577	55,055	-300,319	-24,686
Average		246,500	48,100	-310,200	-15,600

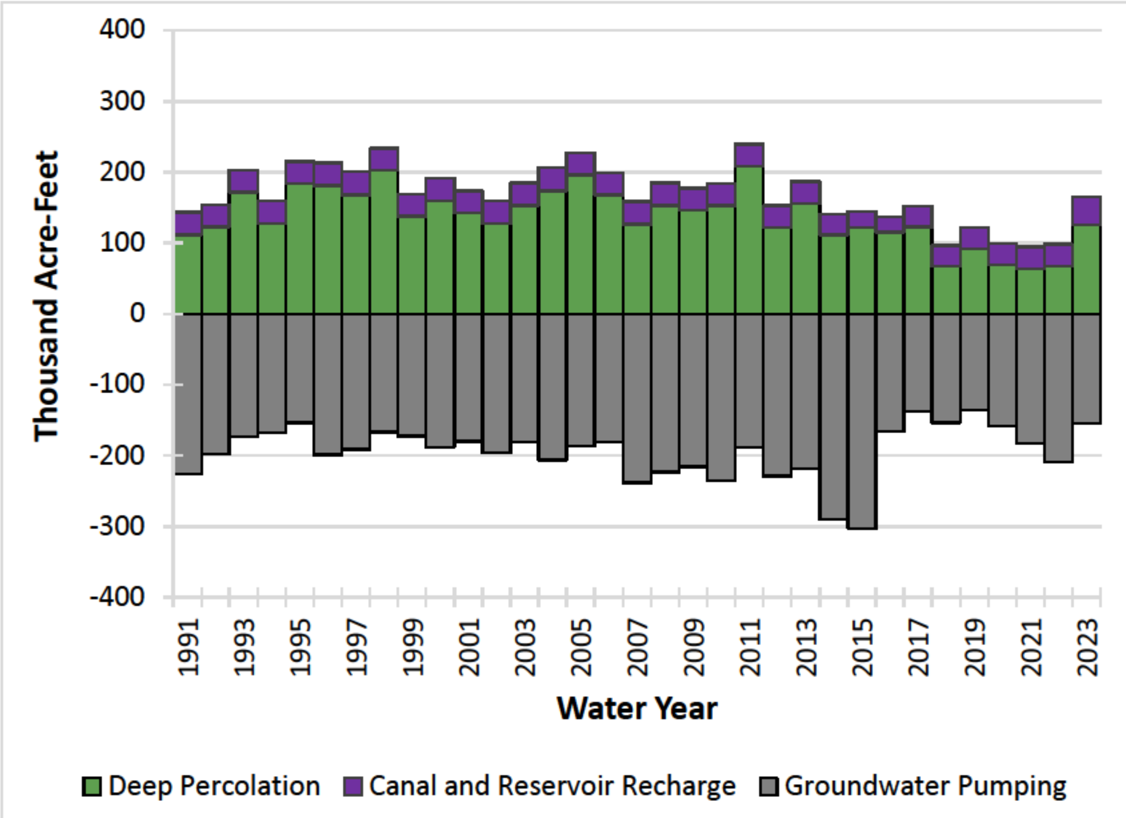
Modesto Subbasin

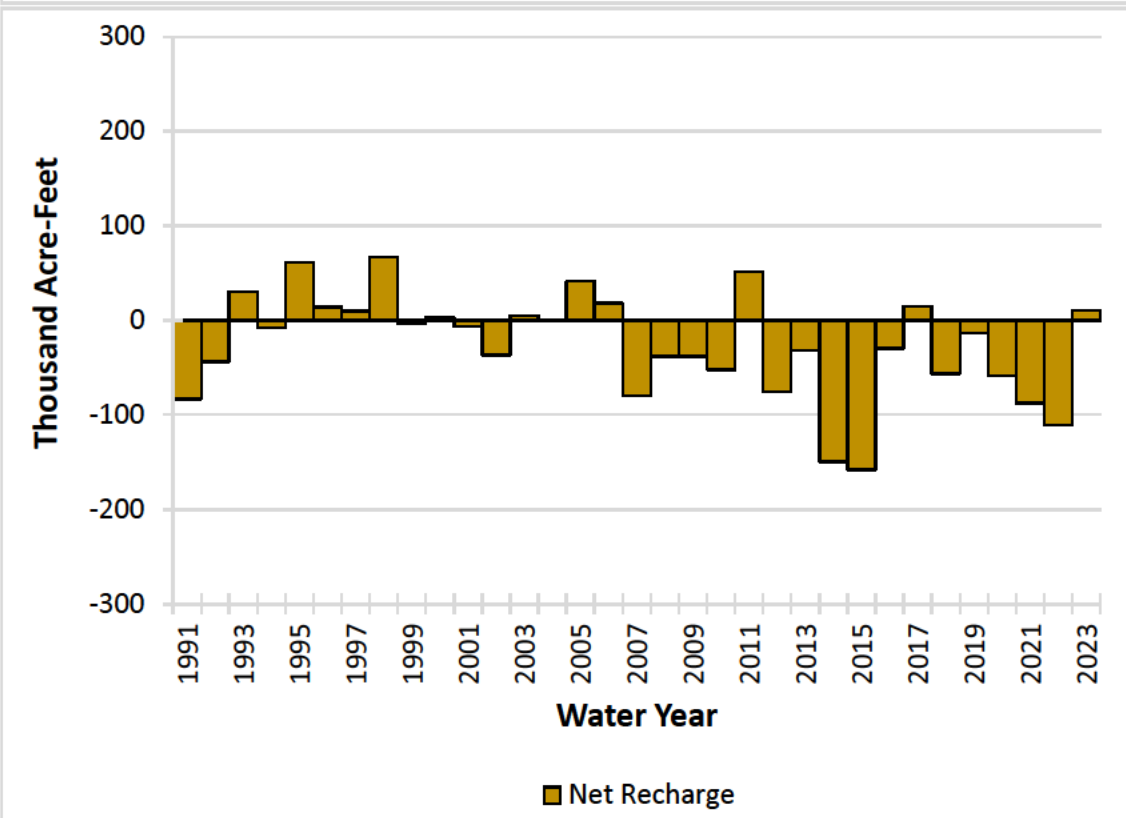




Modesto Area					
Water Year	Hydrologic Index	Deep Percolation	Canal and Reservoir Recharge	Groundwater Pumping	Net Recharge
1991	C	111,839	31,315	-226,342	-83,188
1992	C	122,636	31,455	-197,886	-43,795
1993	W	171,725	31,462	-172,855	30,332
1994	C	127,446	32,141	-167,270	-7,684
1995	W	184,055	31,176	-153,808	61,423
1996	W	181,188	31,709	-198,741	14,155
1997	W	168,026	32,848	-190,949	9,925
1998	W	203,070	30,377	-166,682	66,764
1999	AN	137,887	31,632	-172,243	-2,724
2000	AN	159,056	32,438	-188,039	3,455
2001	D	142,182	31,569	-179,828	-6,077
2002	D	126,930	32,232	-195,778	-36,616
2003	BN	152,749	32,268	-180,484	4,534
2004	D	173,548	33,181	-205,732	997
2005	W	196,040	31,538	-186,325	41,253
2006	W	167,488	31,773	-181,080	18,182
2007	C	126,635	32,090	-238,662	-79,937
2008	C	153,126	31,932	-223,239	-38,182
2009	BN	145,881	31,798	-215,496	-37,817
2010	AN	152,592	30,713	-235,604	-52,300
2011	W	208,448	30,800	-187,944	51,304
2012	D	121,586	31,284	-228,820	-75,950
2013	C	155,895	30,969	-218,655	-31,792
2014	C	111,276	29,319	-290,041	-149,445
2015	C	122,282	22,131	-302,352	-157,940
2016	D	115,162	21,315	-166,270	-29,793
2017	W	122,549	29,894	-137,795	14,647
2018	BN	67,274	29,721	-153,270	-56,274
2019	W	91,696	30,338	-135,660	-13,626
2020	D	69,131	29,945	-157,807	-58,730
2021	C	63,260	31,384	-182,495	-87,851
2022	C	67,860	30,175	-208,934	-110,900
2023	W	126,268	38,905	-155,071	10,102
Average		137,800	31,000	-194,000	-25,300

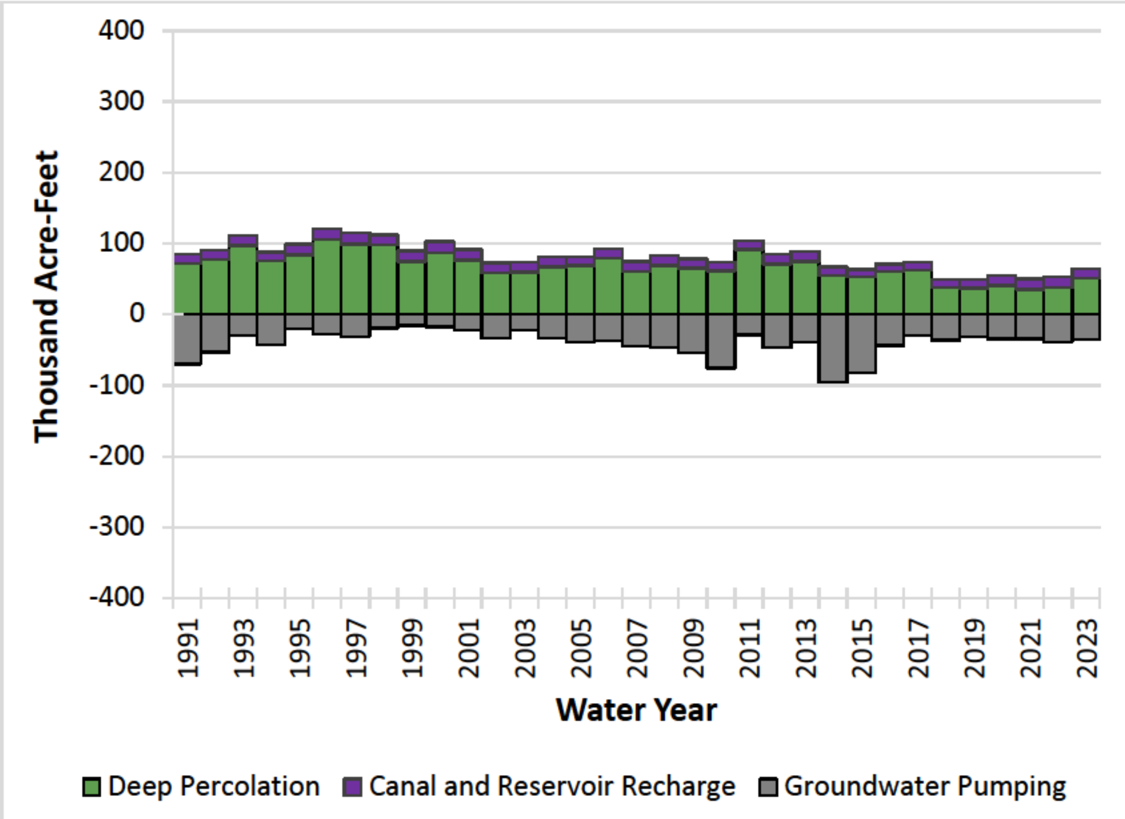
Modesto Area

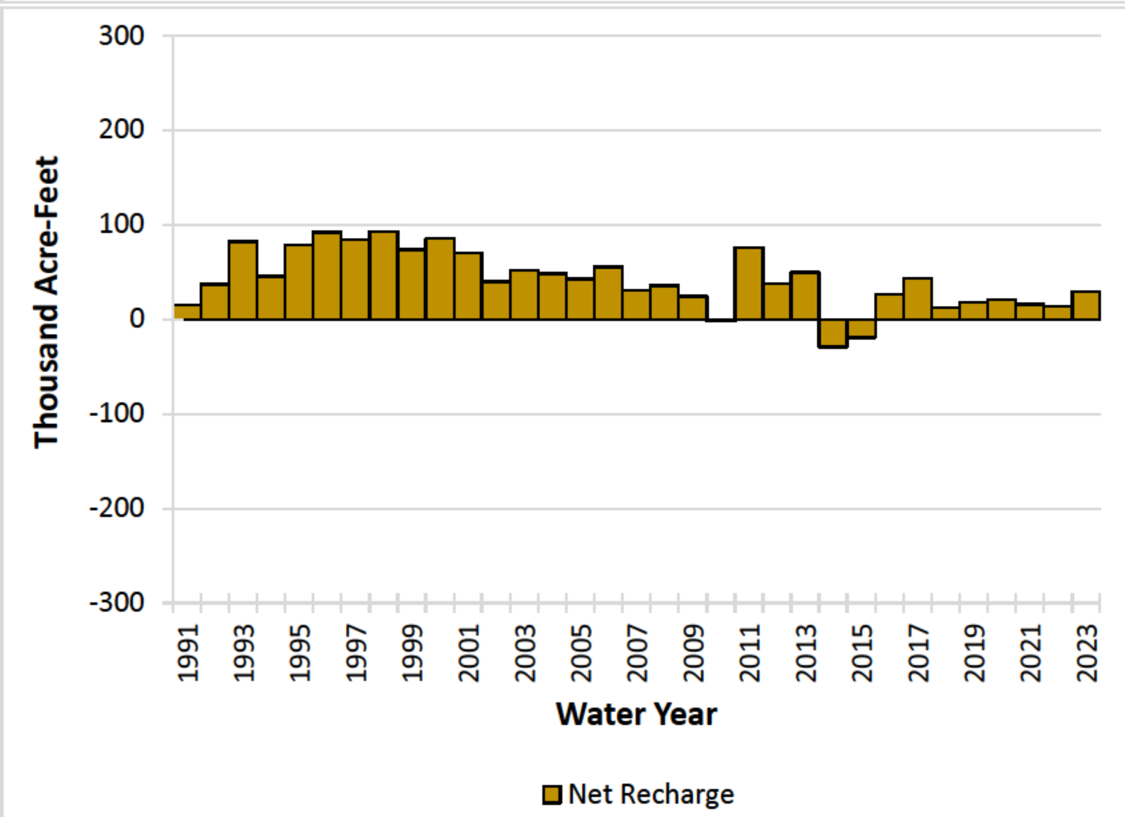




Oakdale Area					
Water Year	Hydrologic Index	Deep Percolation	Canal and Reservoir Recharge	Groundwater Pumping	Net Recharge
1991	C	72,384	12,696	-69,823	15,257
1992	C	77,577	12,696	-53,029	37,244
1993	W	97,180	14,130	-29,356	81,954
1994	C	75,415	12,696	-42,700	45,412
1995	W	83,877	15,109	-19,903	79,083
1996	W	105,075	15,565	-28,520	92,120
1997	W	98,763	16,325	-31,104	83,984
1998	W	98,310	13,588	-19,176	92,721
1999	AN	75,124	14,685	-15,747	74,061
2000	AN	86,694	15,941	-17,262	85,373
2001	D	76,631	15,258	-21,945	69,944
2002	D	58,098	14,656	-33,096	39,658
2003	BN	59,820	14,313	-22,564	51,568
2004	D	67,436	14,480	-33,263	48,653
2005	W	68,786	12,864	-39,094	42,555
2006	W	79,430	12,925	-36,870	55,485
2007	C	60,615	14,416	-44,489	30,542
2008	C	68,569	14,203	-46,991	35,781
2009	BN	65,238	13,316	-54,392	24,162
2010	AN	61,294	12,507	-75,599	-1,797
2011	W	91,833	12,536	-28,875	75,495
2012	D	70,996	13,483	-46,708	37,771
2013	C	74,500	14,434	-38,858	50,076
2014	C	54,900	11,795	-95,670	-28,974
2015	C	52,982	10,234	-82,152	-18,936
2016	D	60,414	10,721	-44,236	26,899
2017	W	61,845	11,565	-29,677	43,733
2018	BN	37,383	12,028	-36,560	12,852
2019	W	37,199	11,910	-31,229	17,880
2020	D	41,339	13,795	-34,237	20,897
2021	C	35,454	14,683	-34,446	15,691
2022	C	37,855	14,898	-38,538	14,216
2023	W	51,594	13,118	-35,066	29,646
Average		68,000	13,600	-39,700	41,800

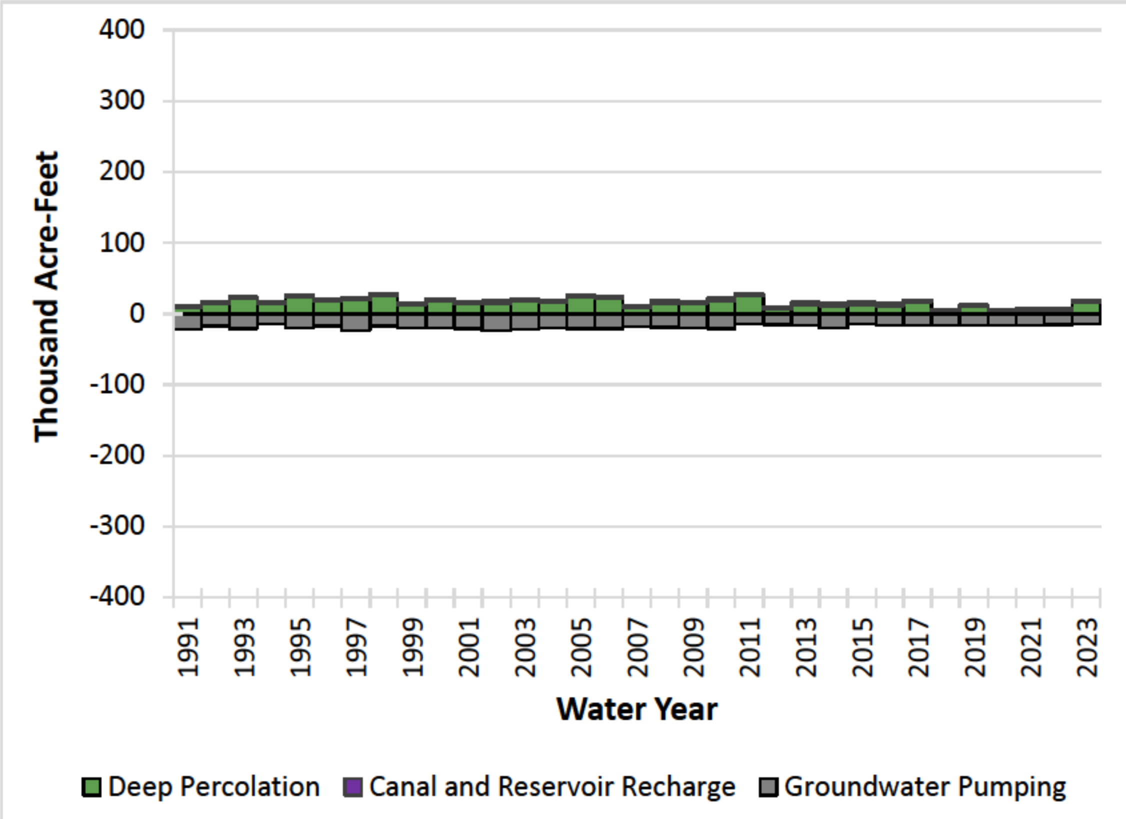
Oakdale Area

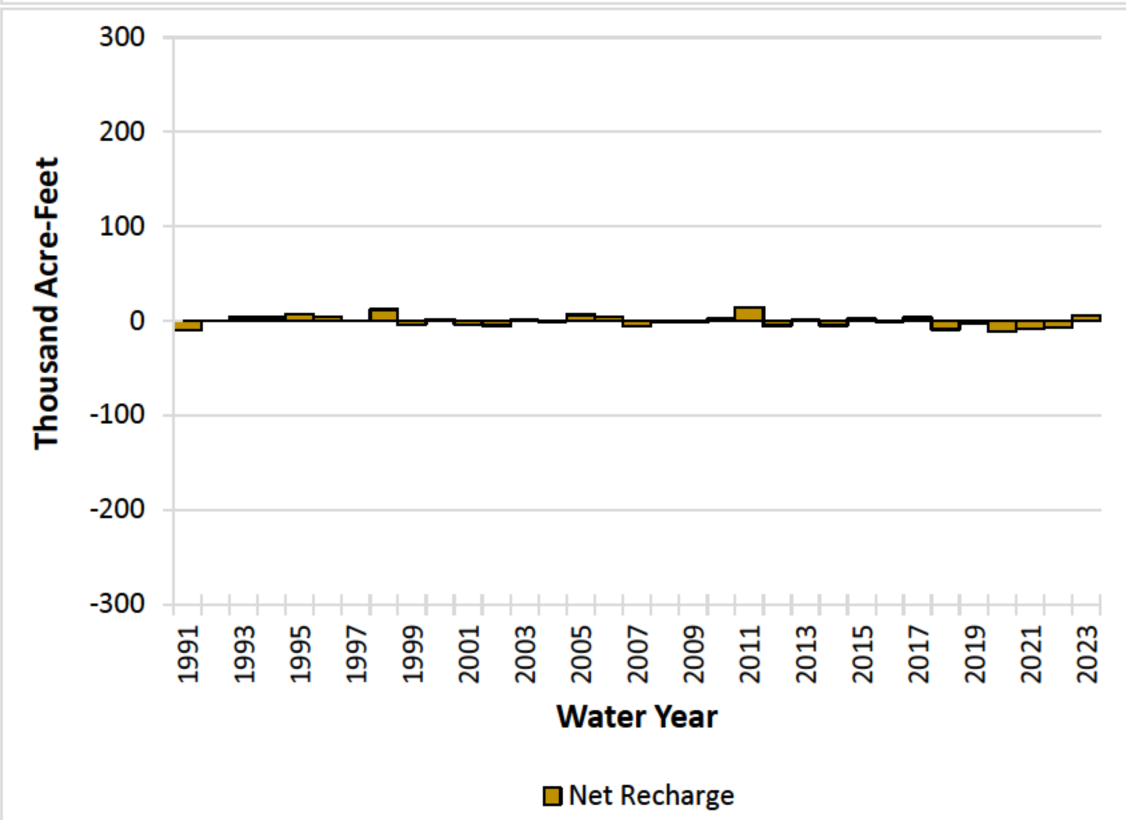




Non-District West Area					
Water Year	Hydrologic Index	Deep Percolation	Canal and Reservoir Recharge	Groundwater Pumping	Net Recharge
1991	C	8,243	3,968	-21,725	-9,515
1992	C	14,270	3,699	-17,539	430
1993	W	21,201	2,797	-20,300	3,698
1994	C	14,043	4,018	-14,791	3,269
1995	W	24,070	2,847	-20,015	6,902
1996	W	18,513	3,626	-17,459	4,680
1997	W	19,250	3,804	-23,027	27
1998	W	25,705	3,403	-17,457	11,651
1999	AN	12,470	3,703	-20,013	-3,841
2000	AN	17,950	3,625	-19,837	1,738
2001	D	13,990	3,545	-21,157	-3,622
2002	D	14,718	3,870	-23,647	-5,059
2003	BN	18,162	3,670	-21,317	516
2004	D	16,627	2,993	-20,223	-603
2005	W	23,440	3,650	-20,711	6,378
2006	W	21,343	3,379	-20,533	4,189
2007	C	7,886	3,979	-17,581	-5,716
2008	C	14,783	3,962	-18,906	-162
2009	BN	14,509	3,826	-19,859	-1,524
2010	AN	18,346	3,907	-20,324	1,929
2011	W	24,881	3,601	-14,092	14,390
2012	D	6,447	3,571	-15,219	-5,201
2013	C	12,792	3,877	-15,781	888
2014	C	11,495	3,598	-19,801	-4,708
2015	C	12,673	3,924	-14,482	2,114
2016	D	11,568	3,059	-15,417	-790
2017	W	16,345	2,899	-15,674	3,570
2018	BN	3,478	3,245	-15,941	-9,219
2019	W	9,724	2,949	-15,342	-2,669
2020	D	2,377	3,329	-16,625	-10,919
2021	C	3,921	3,563	-15,622	-8,138
2022	C	4,841	3,440	-15,278	-6,997
2023	W	16,608	3,032	-13,545	6,095
Average		14,400	3,500	-18,200	-200

Non-District West Area





Non-District East Area					
Water Year	Hydrologic Index	Deep Percolation	Canal and Reservoir Recharge	Groundwater Pumping	Net Recharge
1991	C	53,618	0	-38,590	15,028
1992	C	19,557	0	-32,277	-12,719
1993	W	23,046	0	-30,680	-7,635
1994	C	19,683	0	-32,472	-12,789
1995	W	33,380	0	-29,875	3,505
1996	W	27,755	0	-35,364	-7,609
1997	W	30,728	0	-35,080	-4,353
1998	W	50,265	0	-27,298	22,966
1999	AN	27,095	0	-28,177	-1,083
2000	AN	22,701	0	-30,236	-7,536
2001	D	18,823	0	-28,761	-9,938
2002	D	15,792	0	-46,797	-31,005
2003	BN	15,944	0	-40,294	-24,349
2004	D	17,965	0	-51,164	-33,199
2005	W	28,528	0	-41,299	-12,772
2006	W	35,902	0	-38,334	-2,432
2007	C	17,506	0	-59,760	-42,254
2008	C	21,470	0	-53,902	-32,432
2009	BN	23,852	0	-53,310	-29,458
2010	AN	24,514	0	-84,390	-59,876
2011	W	40,243	0	-63,085	-22,843
2012	D	28,683	0	-75,796	-47,113
2013	C	29,221	0	-72,509	-43,287
2014	C	25,001	0	-78,866	-53,865
2015	C	25,528	0	-83,973	-58,445
2016	D	29,553	0	-88,845	-59,292
2017	W	36,936	0	-82,722	-45,786
2018	BN	22,270	0	-88,465	-66,194
2019	W	24,310	0	-85,489	-61,179
2020	D	18,087	0	-91,425	-73,338
2021	C	16,376	0	-98,010	-81,634
2022	C	15,766	0	-99,542	-83,776
2023	W	26,106	0	-96,636	-70,530
Average		26,200	0	-58,300	-32,000

Non-District East Area