Table 7-1: Summary of Monitoring Network, Chronic Lowering of Groundwater Levels

						Management Area												
Program	Well ID	State Well Number	CASGEM Identification Number	Well Use / Status	Principal Aquifer	MID	OID	Non-District East	Non-District West	Latitude (NAD 83)	Longitude (NAD 83)	Ground Surface Elevation (feet msl)	Reference Point Elevation (feet msl)	Total Well Depth (feet bgs)	Screen Interval Depths (feet bgs)	Minimum Threshold (MT) (feet msl)	Measurable Objective (MO) (feet msl)	MT/MO Note	Interim Milestone (2027) (feet msl)
CASGEM	Albers 232	03S10E26D001M	3559	Active Irrigation	Eastern	x				37.651020	-120.847696	145.4	145.7	460	196-288	60	76	based on measured data at the well	--
CASGEM	Allen OID-01	02S10E16M001M	4430	Active Irrigation	Eastern		x			37.759897	-120.885401	145.6	145.7	415	0-120	72	81	based on measured data at the well	61
CASGEM	American 208	02S08E25P001M	3723	Active Irrigation	Eastern	x				37.728064	-121.041430	99.9	99.9	320	79-272	48	55	based on measured data at the well	--
CASGEM	Bangs Ave 243	03S08E01K001M	3152	Active Irrigation	Eastern	x				37.703436	-121.038476	90.0	90.0	346	141-251	32	46	based on measured data at the well	--
CASGEM	Bentley OID-02	02S10E33J001M	4590	Active Irrigation	Eastern		x			37.715973	-120.866949	171.9	172.1	500	120-175	71	85	based on measured data at the well	56
CASGEM	Birnbaum OID-03	02S10E15N001M	4429	Active Irrigation	Eastern		x			37.755921	-120.863872	149.4	149.8	293	55-293	72	86	based on measured data at the well	61
CASGEM	Blossom 230	03S11E30K001M	3903	Active Irrigation	Eastern	x				37.645614	-120.801537	154.8	155.0	412	179-283	61	78	based on measured data at the well	--
CASGEM	Canfield 90	04S08E06L001M	26633	Active Irrigation	Western Upper	x				37.613113	-121.130799	52.0	52.3	151	40-75	32	36	based on measured data at the well	--
CASGEM	Cavil 214	03S10E06G001M	27057	Active Irrigation	Eastern	x				37.705044	-120.911296	135.6	135.6	480	107-275	53	73	based on measured data at the well	--
CASGEM	Claribel 206	03S09E03D001M	2093	Active Irrigation	Eastern	x				37.708526	-120.974280	114.1	114.5	650	96-550	49	62	based on measured data at the well	--
CASGEM	Crane OID-06	02S10E29E001M	29444	Active Irrigation	Eastern		x			37.733378	-120.899126	160.1	160.4	505	155-198	66	77	based on measured data at the well	55
CASGEM	Curtis #2 100	03S08E09P001M	3303	Active Irrigation	Western Upper	x				37.685351	-121.097462	63.6	63.6	124	79-100	34	41	based on measured data at the well	--
CASGEM	Furtado OID-07	02S11E32L001M	2529	Active Irrigation	Eastern		x			37.718381	-120.786289	212.0	212.5	590	200-580	69	81	based on measured data at the well	51
CASGEM	Gates Road 101	03S07E24M001M	3146	Active Irrigation	Western Upper	x				37.659699	-121.155215	44.2	44.2	64	--	24	33	based on measured data at the well	--
CASGEM	Hart Road 88	03S08E08D001M	3301	Active Irrigation	Western Upper	x				37.694807	-121.122902	54.9	55.2	130	73-85	35	40	based on measured data at the well	--
CASGEM	Head Lateral 3 215	03S10E17K001M	3552	Active Irrigation	Eastern	x				37.674398	-120.891430	135.8	135.6	476	116-400	56	73	based on measured data at the well	--
CASGEM	Head Lateral 8 194	02S08E27N001M	38870	Active Irrigation	Eastern	x				37.727189	-121.087002	79.5	79.8	302	148-211	40	47	based on measured data at the well	--
CASGEM	Jones WID 228	03S11E29J001M	38872	Active Irrigation	Eastern	x				37.641798	-120.776177	166.4	166.4	324	188-280	55	75	based on measured data at the well	--
CASGEM	Katen 69	03S07E25P001M	3147	Active Irrigation	Western Upper	x				37.637929	-121.149890	45.1	45.1	160	13-148	27	33	based on measured data at the well	--
CASGEM	Langdon Merle 241	02S09E28H001M	3876	Active Irrigation	Eastern	x				37.734908	-120.977526	128.4	128.5	595	160-300	50	62	based on measured data at the well	--
CASGEM	Lateral one 195	03S10E32G001M	3877	Active Irrigation	Eastern	x				37.632523	-120.889283	126.0	126.0	260	141-210	42	52	based on measured data at the well	--
CASGEM	Machado 23	03S08E17R001M	3864	Active Irrigation	Western Upper	x				37.668045	-121.105038	59.1	59.3	80	--	31	40	based on measured data at the well	--
CASGEM	Marquis OID-10	02S10E20C001M	29436	Active Irrigation	Eastern		x			37.753232	-120.896930	138.4	138.8	125	27-125	85	91	based on measured data at the well	78
CASGEM	North Ave 103	03S08E14B001M	3854	Active Irrigation	Western Upper	x				37.678393	-121.054335	73.9	74.6	130	53-81	41	50	based on measured data at the well	--
CASGEM	Paradise 235	04S08E02L001M	2151	Active Irrigation	Western Upper	x				37.614186	-121.057863	73.7	73.9	258	96-132	34	41	based on measured data at the well	--
CASGEM	Paulsell 1 OID-11	02S12E31K001M	26187	Active Irrigation	Eastern			x		37.717864	-120.691876	195.9	197.5	815	195-410	88	117	based on measured data at the well	53
CASGEM	Paulsell 2 OID-12	02S12E32P001M	38865	Active Irrigation	Eastern			x		37.710953	-120.676939	193.9	195.6	815	132-815	94	123	based on measured data at the well	58
CASGEM	Perley 202	03S09E14P001M	2109	Active Irrigation	Eastern	x				37.667719	-120.951955	104.9	105.4	255	76-204	36	45	based on measured data at the well	--
CASGEM	Philbrick 201	04S08E02H001M	26591	Active Irrigation	Western Upper	x				37.619159	-121.050003	73.1	73.5	88	58-74	34	41	based on measured data at the well	--
CASGEM	Quesenberry 223	03S12E19G001M	27424	Active Irrigation	Eastern			x		37.659773	-120.689681	197.0	197.0	380	168-208	89	110	based on measured data at the well	72
CASGEM	Riverbank OID-13	02S09E27G001M	49463	Active Irrigation	Eastern	x				37.735134	-120.964821	132.3	134.2	560	200-550	42	54	based on measured data at the well	--
CASGEM	Schmidt 227	03S11E27G003M	3897	Active Irrigation	Eastern	x				37.648671	-120.736000	192.3	192.2	248	113-153	59	78	based on measured data at the well	--
CASGEM	Van Buren 43	03S08E21Q001M	3873	Active Irrigation	Western Upper	x				37.654644	-121.094887	63.3	63.5	196	76-116	38	45	based on measured data at the well	--
CASGEM	Warnock 46	03S08E29K001M	4015	Active Irrigation	Western Upper	x				37.642900	-121.108575	55.1	55.1	240	--	35	42	based on measured data at the well	--

Table 7-1: Summary of Monitoring Network, Chronic Lowering of Groundwater Levels

						Management Area													
Program	**Well ID**	**State Well Number**	**CASGEM Identification Number**	**Well Use / Status**	**Principal Aquifer**	**MID**	**OID**	**Non-District East**	**Non-District West**	**Latitude (NAD 83)**	**Longitude (NAD 83)**	**Ground Surface Elevation (feet msl)**	**Reference Point Elevation (feet msl)**	**Total Well Depth (feet bgs)**	**Screen Interval Depths (feet bgs)**	**Minimum Threshold (MT) (feet msl)**	**Measurable Objective (MO) (feet msl)**	**MT/MO Note**	**Interim Milestone (2027) (feet msl)**
CASGEM	Wellsford 233	03S10E16K001M	3551	Active Irrigation	Eastern	x				37.673607	-120.875297	141.9	142.0	468	158-358	62	77	based on measured data at the well	--
CASGEM	Wood 210	03S10E18P001M	3553	Active Irrigation	Eastern	x				37.667487	-120.912168	121.3	121.3	606	87-547	52	66	based on measured data at the well	--
CASGEM	Young 76	04S08E04G001M	38078	Active Irrigation	Western Upper	x				37.618051	-121.094288	61.5	62.1	175	12-152	36	42	based on measured data at the well	--
City of Modesto	MOD-MWA-2	--	not applicable	Monitoring Well	Eastern	x				37.642986	-120.931770	--	103.8	175	150-170	30	36	MT: based on Oct 2015 contour map; MO: based on historic high, spring 1998 contour map	--
City of Modesto	MOD-MWB-1	--	not applicable	Monitoring Well	Western Upper	x				37.690559	-121.044299	--	78.8	177	152-172	40	49	MT: estimated from fall 2015 contour map; MO: historic high estimated from spring 1998 contour map	--
City of Modesto	MOD-MWB-2	--	not applicable	Monitoring Well	Western Lower	x				37.690559	-121.044245	--	78.7	250	225-245	26	34	MT: estimated from fall 2015 contour map; MO: historic high estimated from spring 1998 contour map	--
City of Modesto	MOD-MWC-3	--	not applicable	Monitoring Well	Eastern	x				37.672249	-120.940908	--	105.6	285	260-280	40	50	MT: based on October 2015 contour map, MO: based on spring 1998 contour map	--
City of Modesto	MOD-MWD-1	--	not applicable	Monitoring Well	Western Upper	x				37.649959	-121.048685	--	73.3	129	104-124	30	40	MT: estimated from fall 2015 contour map and MT at nearby CASGEM well (McDonald); MO: based on historic high from spring 1998 contour map	--
City of Modesto	MOD-MWD-3	--	not applicable	Monitoring Well	Western Lower	x				37.649958	-121.048649	--	73.2	243	218-238	30	37	MT: estimated from fall 2015 measured contour map and model contours (Layer 2); MO: historic high estimated from spring 1998 contour map	--
USGS	FPA-2	003S009E08K004M	not applicable	Monitoring Well	Eastern	x				37.686194	-121.000917	--	91.0	122.2	115-120	38	48	MT: based on October 2015 contour map; MO: based on maximum of measured data (higher than estimate from spring 1998 contour map)	--
USGS	OFPB-2	003S009E11F002M	not applicable	Monitoring Well	Eastern	x				37.690194	-120.951417	--	104.0	174.5	166-171	35	53	MT: based on fall 2015 contour map; MO: historic high based on spring 1998 contour map	--
USGS	MRWA-2	003S008E33R002M	not applicable	Monitoring Well	Western Upper	x				37.624121	-121.086103	--	64.0	183	174-179	36	43	MT: estimated from fall 2015 contour map and based on nearby CASGEM well (Young); MO: historic high estimated from spring 1998 contour map and CASGEM well (Young)	--
USGS	MRWA-3	003S008E33R001M	not applicable	Monitoring Well	Western Lower	x				37.624121	-121.086103	--	64.0	280	269-274	28	36	MT: estimated from model contours September 2015 (Layer 2); MO: historic high based on measured data	--
Prop 68	MW-1S	--	not applicable	Monitoring Well	Western Upper	x				37.707630	-121.087167	68.4	68.0	125	100-120	33	43	MT: based on fall 2015 contour map; MO: historic high based on spring 1998 contour map	--
Prop 68	MW-1D	--	not applicable	Monitoring Well	Western Lower	x				37.707631	-121.087136	68.5	67.9	250	225-245	14	27	MT: based on measured data in April 2021 (lower than fall 2015 contour map); MO: historic high based on spring 1998 contour map	--

Table 7-1: Summary of Monitoring Network, Chronic Lowering of Groundwater Levels

						Management Area												
Program	**Well ID**	**State Well Number**	**CASGEM Identification Number**	**Well Use / Status**	**Principal Aquifer**	**MID**	**OID**	**Non-District East**	**Non-District West**	**Latitude (NAD 83)**	**Longitude (NAD 83)**	**Ground Surface Elevation (feet msl)**	**Reference Point Elevation (feet msl)**	**Total Well Depth (feet bgs)**	**Screen Interval Depths (feet bgs)**	**Minimum Threshold (MT) (feet msl)**	**Measurable Objective (MO) (feet msl)**	**MT/MO Note**	**Interim Milestone (2027) (feet msl)**
Prop 68	MW-2S	--	not applicable	Monitoring Well	Western Upper	x				37.613886	-121.023442	71.1	70.7	135	110-130	34	41	MT/MO: based on nearby CASGEM well (Philbrick)	--
Prop 68	MW-2D	--	not applicable	Monitoring Well	Western Lower	x				37.613886	-121.023475	71.2	71.0	281	256-276	35	40	MT: based on fall 2015 model contour map (Lay 2); MO: based on historic high of measured data	--
Prop 68	MW-3S	--	not applicable	Monitoring Well	Eastern	x				37.630743	-120.967621	95.8	95.6	161	136-156	25	31	MT: based on historic low at nearby MOD-225; MO: based on max of measured data (slightly higher than historic high based on spring 1998 contour map)	--
Prop 68	MW-3D	--	not applicable	Monitoring Well	Eastern	x				37.630711	-120.967621	95.7	95.3	283	258-278	25	31	MT/MO: same as MW-3S (so far, measured water level data are similar)	--
Prop 68	MW-4S	--	not applicable	Monitoring Well	Eastern				x	37.728565	-120.941555	136.6	136.3	165	140-160	56	67	MT: based on fall 2015 contour map; MO: historic high based on spring 1998 contour map	--
Prop 68	MW-5S	--	not applicable	Monitoring Well	Eastern		x			37.763120	-120.825360	191.9	191.6	175	150-170	69	89	MT: based on historic low at nearby Oak-008; MO: based on historic high at nearby Oak-008	68
Prop 68	MW-6S	--	not applicable	Monitoring Well	Eastern	x				37.646100	-120.752540	171.3	170.9	179	154-174	65	83	MT: based on fall 2015 contour map; MO: historic high based on spring 1998 contour map	--
Prop 68	MW-7	--	not applicable	Monitoring Well	Eastern			x		37.743410	-120.704350	242.6	242.3	300	275-295	75	110	MT: based on minimum of available measured data at this well. There is a lack of water level data in this area of the Subbasin. MO: based on historic high at CASGEM well Paulsell-1 (~2 miles south).	40
Prop 68	MW-8	--	not applicable	Monitoring Well	Eastern			x		37.732370	-120.632880	292.9	292.3	290	265-285	75	110	MT: based on minimum of available measured data at this well. Similar value to nearby well on fall 2015 contour map. MO: based on historic high at CASGEM well Paulsell-1	49
Prop 68	MW-9	--	not applicable	Monitoring Well	Eastern			x		37.649510	-120.535140	244.5	247.6	365	340-360	150	180	MT: based on minimum of available measured data at this well. There is a lack of water level data in this area of the Subbasin. MO: Based on similar operational range as other eastern Subbasin wells (~30 ft)	138
Prop 68	MW-10	--	not applicable	Monitoring Well	Eastern			x		37.739630	-120.756490	265.1	264.7	265	240-260	72	101	MT: based on historic low at a nearby DWR WDL well - Dec 2013 (data from 1990 to 2014); MO: based on historic high at nearby DWR WDL well - Nov 1997	63
Prop 68	MW-11	--	not applicable	Monitoring Well	Eastern	x				37.643970	-120.900997	116.3	116.1	175	150-170	35	48	MT: based on historic low at nearby MOD-247; based on historic high at nearby MOD-247	--

Notes: IMs were developed for wells in the Non-District East Management Area and the OID Management Area, where water levels may continue to decline while projects are being brought online.
IMs were not assigned to wells in the Non-District West Management Area and the MID Management Area, where water levels are relatively stable and consistent with established MTs and MOs.
IMs provided on this table represent 5-year IMs (2027), as described in Section 7.1. The 10-year IMs (2032) are the MTs and the 15-year IMs (2037) are the midpoint between the MT and the MO (see Section 7.1).

Table 7-2: Summary of Monitoring Network, Interconnected Surface Water

						Management Area												
Program	**Well ID**	**State Well Number**	**CASGEM Identification Number**	**Well Use / Status**	**Principal Aquifer**	**MID**	**OID**	**Non-District East**	**Non-District West**	**Latitude (NAD 83)**	**Longitude (NAD 83)**	**Ground Surface Elevation (feet msl)**	**Reference Point Elevation (feet msl)**	**Total Well Depth (feet bgs)**	**Screen Interval Depths (feet bgs)**	**Minimum Threshold (MT) (feet msl)**	**Measurable Objective (MO) (feet msl)**	**MT/MO Note**	**Interim Milestone (2027) (feet msl)**
San Joaquin River																			
CASGEM	Canfield 90	04S08E06L001M	26633	Active Irrigation	Western Upper	x				37.613113	-121.130799	52.0	52.3	151	40-75	33	37	based on measured data at the well	--
CASGEM	Katen 69	03S07E25P001M	3147	Active Irrigation	Western Upper	x				37.637929	-121.149890	45.1	45.1	160	13-148	27	33	based on measured data at the well	--
Stanislaus River																			
CASGEM	Allen OID-01	02S10E16M001M	4430	Active Irrigation	Eastern		x			37.759897	-120.885401	145.6	145.7	415	0-120	75	83	based on measured data at the well	61
CASGEM	American 208	02S08E25P001M	3723	Active Irrigation	Eastern	x				37.728064	-121.041430	99.9	99.9	320	79-272	48	55	based on measured data at the well	--
CASGEM	Birnbaum OID-03	02S10E15N001M	4429	Active Irrigation	Eastern		x			37.755921	-120.863872	149.4	149.8	293	55-293	74	87	based on measured data at the well	61
CASGEM	Head Lateral 8 194	02S08E27N001M	38870	Active Irrigation	Eastern	x				37.727189	-121.087002	79.5	79.8	302	148-211	40	47	based on measured data at the well	--
CASGEM	Langdon Merle 241	02S09E28H001M	3876	Active Irrigation	Eastern	x				37.734908	-120.977526	128.4	128.5	595	160-300	50	62	based on measured data at the well	--
CASGEM	Marquis OID-10	02S10E20C001M	29436	Active Irrigation	Eastern		x			37.753232	-120.896930	138.4	138.8	125	27-125	86	92	based on measured data at the well	78
CASGEM	Riverbank OID-13	02S09E27G001M	49463	Active Irrigation	Eastern	x				37.735134	-120.964821	132.3	134.2	560	200-550	42	54	based on measured data at the well	--
Prop 68	MW-4S	--	not applicable	Monitoring Well	Eastern				x	37.728639	-120.941518	136.6	136.3	165	140-160	56	67	MT: based on fall 2015 contour map; MO: historic high based on spring 1998 contour map	--
Tuolumne River																			
CASGEM	Jones WID 228	03S11E29J001M	38872	Active Irrigation	Eastern	x				37.641798	-120.776177	166.4	166.4	324	188-280	55	75	based on measured data at the well	--
CASGEM	Lateral one 195	03S10E32G001M	3877	Active Irrigation	Eastern	x				37.632523	-120.889283	126.0	126.0	260	141-210	42	52	based on measured data at the well	--
CASGEM	Paradise 235	04S08E02L001M	2151	Active Irrigation	Western Upper	x				37.614186	-121.057863	73.7	73.9	258	96-132	34	41	based on measured data at the well	--
CASGEM	Philbrick 201	04S08E02H001M	26591	Active Irrigation	Western Upper	x				37.619159	-121.050003	73.1	73.5	88	58-74	38	43	based on measured data at the well	--
CASGEM	Quesenberry 223	03S12E19G001M	27424	Active Irrigation	Eastern			x		37.659773	-120.689681	197.0	197.0	380	168-208	89	110	based on measured data at the well	72
CASGEM	Schmidt 227	03S11E27G003M	3897	Active Irrigation	Eastern	x				37.648671	-120.736000	192.3	192.2	248	113-153	59	78	based on measured data at the well	--
Prop 68	MW-2S	--	not applicable	Monitoring Well	Western Upper	x				37.613886	-121.023442	71.1	70.7	135	110-130	38	43	MT/MO: based on nearby CASGEM well (Philbrick)	--
Prop 68	MW-3S	--	not applicable	Monitoring Well	Eastern	x				37.630743	-120.967621	95.8	95.6	161	136-156	26	32	MT: based on fall 2015 level at nearby MOD-225; MO: historic high based on spring 1998 contour map	--
Prop 68	MW-6S	--	not applicable	Monitoring Well	Eastern	x				37.646100	-120.752540	171.3	170.9	179	154-174	65	83	MT: based on fall 2015 contour map; MO: historic high based on spring 1998 contour map	--
Prop 68	MW-9	--	not applicable	Monitoring Well	Eastern			x		37.649510	-120.535140	244.5	247.6	365	340-360	150	180	MT: based on minimum of available measured data at this well. There is a lack of water level data in this area of the Subbasin. MO: Based on similar operational range as other eastern Subbasin wells (~30 ft)	138

Notes: IMs were developed for wells in the Non-District East Management Area and the OID Management Area, where water levels may continue to decline while projects are being brought online.
IMs were not assigned to wells in the Non-District West Management Area and the MID Management Area, where water levels are relatively stable and consistent with established MTs and MOs.
IMs provided on this table represent 5-year IMs (2027), as described in Section 7.1. The 10-year IMs (2032) are the MTs and the 15-year IMs (2037) are the midpoint between the MT and the MO (see Section 7.1).

Hydrographs for each monitoring network well are provided in **Appendix G**. The hydrographs include well screen interval, ground surface elevation, the MT and MO for each well, and the 2027 IM, where applicable. Hydrograph presentation meets the data and reporting standards for hydrographs in Article 3 of the GSP regulations (§352.4(e)).

In addition to the representative wells in the monitoring networks, the GSAs will measure groundwater elevations in over 40 existing wells. These wells will be designated as SGMA monitoring wells and will not be used to monitor the sustainability indicators, and therefore do not have MTs and MOs. However, groundwater elevation data collected from the SGMA monitoring wells will be used for monitoring overall groundwater conditions and support analyses, such as the preparation of groundwater elevation contour maps. As part of the GSP five-year update, water level data from the SGMA monitoring wells will be compared to data from representative monitoring wells and these wells can be added to the monitoring network to reduce uncertainty or address data gaps, as needed. This task will be a part of the overall monitoring network assessment required by GSP regulations (§354.38(a)). The SGMA monitoring wells are summarized in **Table 7-3**.

A data gap analysis has been incorporated into the GSP Implementation Plan to address current data gaps and other improvements needed for the current GSP monitoring network (see **Section 9.5.1**).

The monitoring networks for each sustainability indicator are described in the following sections.

7.1.1. Chronic Lowering of Groundwater Levels

The monitoring network for chronic lowering of groundwater levels for each of the three principal aquifers is presented on **Figures 7-1, 7-2 and 7-3.** The wells in this monitoring network are summarized in **Table 7-1**.

Well density was an important consideration in identifying monitoring network wells for this sustainability indicator. DWR guidance (DWR, 2016b, see Table 1) generally recommends between one and ten monitoring wells per 100 square miles. This monitoring network is consistent with this guidance.

The following is a description of the monitoring network in each principal aquifer of the Subbasin.

7.1.1.1. Western Upper Principal Aquifer

The monitoring network for the Western Upper Principal Aquifer is illustrated on **Figure 7-1**. The monitoring network is composed of 17 wells, including 12 CASGEM wells, 2 City of Modesto monitoring wells, 2 Proposition 68 monitoring wells, and 1 USGS well. The STRGBA GSA is working with the USGS to obtain ownership and access to the USGS monitoring well. Well data are summarized in **Table 7-1**.

Table 7-3: Summary of SGMA Monitoring Wells

						Management Area									
Program	Well ID	State Well Number	CASGEM Identification Number	Well Use / Status	Principal Aquifer	MID	OID	Non-District East	Non-District West	Latitude (NAD 83)	Longitude (NAD 83)	Ground Surface Elevation (feet msl)	Reference Point Elevation (feet msl)	Total Well Depth (feet bgs)	Screen Interval Depths (feet bgs)
CASGEM	Basso 2	03S08E18C001M	3865	Active Irrigation	Western Upper	x				37.677888	-121.136328	49.0	49.0	200	1-119
CASGEM	Gove 18	03S08E19Q001M	3868	Active Irrigation	Western Upper	x				37.653607	-121.128597	54.7	54.7	136	36-96
City of Modesto	MOD-MWA-1	--	not applicable	Monitoring Well	Eastern	x				37.643037	-120.931769	--	103.9	109	84-104
City of Modesto	MOD-MWA-3	--	not applicable	Monitoring Well	Eastern	x				37.642945	-120.931770	--	103.7	285	260-280
City of Modesto	MOD-MWA-4	--	not applicable	Monitoring Well	Eastern	x				37.642905	-120.931769	--	103.6	356	331-351
City of Modesto	MOD-MWB-3	--	not applicable	Monitoring Well	Western Lower	x				37.690560	-121.044196	--	78.7	299	274-294
City of Modesto	MOD-MWB-4	--	not applicable	Monitoring Well	Western Lower	x				37.690561	-121.044144	--	78.7	385	360-380
City of Modesto	MOD-MWC-1	--	not applicable	Monitoring Well	Eastern	x				37.672249	-120.940957	--	105.5	135	110-130
City of Modesto	MOD-MWC-2	--	not applicable	Monitoring Well	Eastern	x				37.672250	-120.941012	--	105.3	191	166-186
City of Modesto	MOD-MWC-4	--	not applicable	Monitoring Well	Eastern	x				37.672250	-120.941058	--	105.3	445	420-440
City of Modesto	MOD-MWD-2	--	not applicable	Monitoring Well	Western Upper	x				37.649920	-121.048682	--	73.3	179	154-174
City of Modesto	MOD-MWD-4	--	not applicable	Monitoring Well	Western Lower	x				37.649919	-121.048652	--	73.0	325	300-320
City of Modesto	MOD-MWE-2	--	not applicable	Monitoring Well	Eastern	x				37.635224	-121.010426	--	83.9	200	175-195
City of Modesto	MOD-MWE-3	--	not applicable	Monitoring Well	Eastern	x				37.635184	-121.010427	--	83.8	265	240-260
City of Modesto	MOD-MWE-4	--	not applicable	Monitoring Well	Eastern	x				37.635272	-121.010426	--	83.8	430	405-425
USGS	FPA-1	003S009E08K005M	not applicable	Monitoring Well	Eastern	x				37.686194	-121.000917	--	91.0	37	30-35
USGS	FPA-3	003S009E08K003M	not applicable	Monitoring Well	Eastern	x				37.686194	-121.000917	--	91.0	222	215-220
USGS	FPA-4	003S009E08K002M	not applicable	Monitoring Well	Eastern	x				37.686194	-121.000917	--	91.0	350	343-348
USGS	FPB-1	003S009E08H003M	not applicable	Monitoring Well	Eastern	x				37.692611	-120.997333	--	95.0	39	30-35
USGS	FPB-2	003S009E08H002M	not applicable	Monitoring Well	Eastern	x				37.692611	-120.997333	--	95.0	194	187-192
USGS	FPB-3	003S009E08H001M	not applicable	Monitoring Well	Eastern	x				37.692611	-120.997333	--	95.0	335	328-333
USGS	FPD-1	003S009E04G003M	not applicable	Monitoring Well	Eastern	x				37.705972	-120.983250	--	104.0	35	28-33
USGS	FPD-2	003S009E04G002M	not applicable	Monitoring Well	Eastern	x				37.705972	-120.983250	--	104.0	174	167-172
USGS	FPD-3	003S009E04G001M	not applicable	Monitoring Well	Eastern	x				37.705972	-120.983250	--	104.0	359	334-339
USGS	FPE-1	003S009E09L003M	not applicable	Monitoring Well	Eastern	x				37.687722	-120.988056	--	96.0	39	30-35
USGS	FPE-2	003S009E09L002M	not applicable	Monitoring Well	Eastern	x				37.687722	-120.988056	--	96.0	106	98-103
USGS	FPE-3	003S009E09L001M	not applicable	Monitoring Well	Eastern	x				37.687722	-120.988056	--	96.0	211	203-208
USGS	OFPA-1	003S009E16C003M	not applicable	Monitoring Well	Eastern	x				37.680000	-120.986000	--	94.0	38	30-35
USGS	OFPA-2	003S009E16C002M	not applicable	Monitoring Well	Eastern	x				37.680000	-120.986000	--	94.0	105	95-100
USGS	OFPA-3	003S009E16C001M	not applicable	Monitoring Well	Eastern	x				37.680000	-120.986000	--	94.0	200	188-193
USGS	OFPB-1	003S009E11F003M	not applicable	Monitoring Well	Eastern	x				37.690194	-120.951417	--	104.0	36	28-33
USGS	SA	003S009E09F001M	not applicable	Monitoring Well	Eastern	x				37.692361	-120.987333	--	99.0	39	30-35

Table 7-3: Summary of SGMA Monitoring Wells

						Management Area									
Program	**Well ID**	**State Well Number**	**CASGEM Identification Number**	**Well Use / Status**	**Principal Aquifer**	**MID**	**OID**	**Non-District East**	**Non-District West**	**Latitude (NAD 83)**	**Longitude (NAD 83)**	**Ground Surface Elevation (feet msl)**	**Reference Point Elevation (feet msl)**	**Total Well Depth (feet bgs)**	**Screen Interval Depths (feet bgs)**
USGS	SB	003S009E10D001M	not applicable	Monitoring Well	Eastern	x				37.692944	-120.973389	--	104.0	36	30-35
USGS	SC	003S009E10L001M	not applicable	Monitoring Well	Eastern	x				37.685722	-120.971500	--	99.0	41	30-35
USGS	MRWA-1	003S008E33R003M	not applicable	Monitoring Well	Western Upper	x				37.624121	-121.086103	--	64.0	35	25-30
USGS	MREA-1	003S010E17K004M	not applicable	Monitoring Well	Eastern	x				37.674092	-120.891361	--	132.0	46	40-45
USGS	MREA-2	003S010E17K003M	not applicable	Monitoring Well	Eastern	x				37.674092	-120.891361	--	132.0	56	51-56
USGS	MREA-3	003S010E17K002M	not applicable	Monitoring Well	Eastern	x				37.674092	-120.891361	--	132.0	266	100-260
Prop 68	MW-4D	--	not applicable	Monitoring Well	Eastern				x	37.728568	-120.941473	136.7	136.4	255	230-250
Prop 68	MW-5D	--	not applicable	Monitoring Well	Eastern		x			37.763080	-120.825350	191.8	191.5	285	260-280
Prop 68	MW-6D	--	not applicable	Monitoring Well	Eastern	x				37.646090	-120.752510	171.3	170.8	261	236-256

The wells in this monitoring network were chosen based on the following scientific rationale:

- Known locations and construction, with screen intervals or total depth above the Corcoran Clay (in the Western Upper Principal Aquifer).
- Spatial distribution and density of wells throughout the Western Upper Principal Aquifer.
- Length, completeness, and reliability of historical groundwater level record.
- Accessibility for future water level measurement.

Hydrographs for the wells in this monitoring network are presented in **Appendix G**. The CASGEM wells have historical water level records, many with water level data since the start of the GSP study period (water year (WY) 1991). As described in **Chapter 6**, the MT for the chronic lowering of groundwater level sustainability indicator is the historical low groundwater elevation observed from WY 1991 to WY 2020 and the MO is the midpoint between the historical high groundwater elevation during this time period and the MT. The MTs and MOs for the CASGEM wells were based on direct measurements in each well.

The City of Modesto monitoring wells, USGS wells and Proposition 68 monitoring wells have limited water level data. The MTs and MOs at these wells are based on the groundwater elevation contour maps in fall 2015 and spring 1998 (see **Figures 3-26 and 3-27**) or nearby wells with historical data.

The USGS well (MRWA-2) and one of the City of Modesto monitoring wells (MOD-MWD-1) are part of well clusters. At each of these locations, there are two wells screened in the Western Upper Principal Aquifer (and wells screened in the Western Lower Principal Aquifer). One representative well was chosen for the monitoring network from each location based on a review of the water level data, lithologic logs, and geophysical logs. The wells chosen for the monitoring network are screened in conductive sand or gravel units and have similar water levels to the other well in the cluster. The remaining well at each location are SGMA monitoring wells and are summarized in **Table 7-3**.

Static groundwater elevations will be measured twice a year in these monitoring wells to represent seasonal high and seasonal low groundwater conditions. The wells in this monitoring network will be monitored by one of the STRGBA GSA member agencies.

The SGMA monitoring wells in the Western Upper Principal Aquifer will also be monitored twice a year. These wells can be added to the monitoring network if problems arise with current monitoring network wells.

7.1.1.2. Western Lower Principal Aquifer

The monitoring network for the Western Lower Principal Aquifer contains five wells, as illustrated on **Figure 7-2** and summarized in **Table 7-1**. The monitoring network includes two City of Modesto monitoring wells, two Proposition 68 monitoring wells, and one USGS monitoring well.

The wells in this monitoring network were chosen because they have known locations and construction, with discrete screen intervals in the Western Lower Principal Aquifer (below the Corcoran Clay), and because they will be accessible for water level measurement in the future. As described in **Section 3.1.4**, The Corcoran Clay is the primary aquitard in the Subbasin and separates the alluvial aquifers above and below the clay, creating confined conditions in the Western Lower Principal Aquifer. The STRGBA GSA is working with the USGS to obtain ownership and access to the USGS monitoring well.

The two City of Modesto wells in this monitoring network (MOD-MWB-2 and MOD-MWD-3) are part of well clusters with two or three wells screened in the Western Lower Principal Aquifer at each location. One representative well was chosen for the monitoring network from each location based on a review of the water level data, lithologic logs, and geophysical logs. The wells chosen for the monitoring network are screened in conductive sand or gravel units and have similar water levels to the other well at the same location. The remaining well(s) at each location are SGMA monitoring wells and are summarized in **Table 7-3**.

As shown on **Figure 7-2**, most of the wells in the monitoring network are in the eastern region of the Western Lower Principal Aquifer, with one City of Modesto monitoring well in the southwestern Western Lower Principal Aquifer. There is a lack of well coverage in the central and western regions of the aquifer. This data gap of groundwater elevations in the Western Lower Principal Aquifer is identified in **Section 3.2.9**. Further improvements to the monitoring network are described in the data gap analysis included in the GSP Implementation Plan in **Chapter 9** (**Section 9.5.1**).

Hydrographs for wells in this monitoring network are presented in **Appendix G**. There are no measured data from Fall 2015 at any of these monitoring network wells. Historic data from other wells in the western aquifers suggest the historic low water level occurred during the recent drought in 2015 and have recovered to some degree since then. As noted in **Table 7-1**, the MTs selected for the Western Lower Principal Aquifer wells are based on estimates from the Fall 2015 groundwater elevation contour map (see **Figure 3-27**) or Fall 2015 model groundwater elevation contours. The MOs are based on the Spring 1998 contour map (see **Figure 3-26**) or available measured data at the well.

Static groundwater elevations will be measured in these monitoring wells twice a year, once in the spring and once in the fall, to represent seasonal high and seasonal low groundwater conditions. The wells will be monitored by one of the STRGBA GSA member agencies.

7.1.1.3. Eastern Principal Aquifer

The monitoring network for the Eastern Principal Aquifer consists of 39 wells, as shown on **Figure 7-3**. The monitoring network includes CASGEM wells, City of Modesto monitoring wells, Proposition 68 monitoring wells and USGS monitoring wells. Well data are summarized in **Table 7-1**.

The wells were chosen for this monitoring network because they have known locations and construction, are accessible for future water level measurement, and have good spatial

distribution throughout the Eastern Principal Aquifer. The STRGBA GSA is working with the USGS to obtain ownership and access to the USGS monitoring wells.

The monitoring network wells are distributed throughout most of the Eastern Principal Aquifer but are sparse in the eastern Subbasin. This data gap of groundwater elevations in the Eastern Principal Aquifer is identified in **Section 3.2.9**. The four Proposition 68 monitoring wells constructed in the eastern Subbasin in 2021 (MW-7, MW-8, MW-9, and MW-10) help to fill this data gap. However, additional monitoring wells are necessary to fully characterize groundwater levels and flow in the eastern Subbasin. Further improvements to the monitoring network are described in the data gap analysis incorporated into the GSP implementation Plan in **Chapter 9** (**Section 9.5.1**).

Hydrographs for wells in this monitoring network are presented in **Appendix G**. Several methods were used to develop MTs and MOs, based on available data. Most of the wells in the monitoring network are CASGEM wells with sufficient historical water level records and therefore, MTs and MOs are based on measured data at the wells. The City of Modesto, Proposition 68 and USGS monitoring wells, however, do not have sufficient historical measured water levels so their MTs and MOs were developed with a variety of methods. For these wells, MTs were either based on the Fall 2015 groundwater elevation contour map (see **Figure 3-27**), groundwater elevations at nearby wells, or the limited measured water level data at the well. MOs were based on either measured historic high groundwater levels or estimates from the Spring 1998 contour map (see **Figure 3-26**). A summary of the MT/MO development method for each well in the monitoring network is provided in **Table 7-1**.

The City of Modesto wells (MOD-MWA-2 and MOD-MWC-3) and the USGS wells (FPA-2 and OFPB-2) are part of well clusters with two or four wells at each location. One representative well was chosen for the monitoring network from each location based on a review of the water level data, lithologic logs, and geophysical logs. The wells chosen for the monitoring network are screened in conductive sand or gravel units and have similar water levels to the other well at the same location. Similarly, the three Proposition 68 monitoring wells (MW-4S, MW-5S and MW-6S) have two wells at each location and the shallower of the two wells at each location were chosen for the monitoring network. The remaining well(s) at each location are SGMA monitoring wells and are summarized in **Table 7-3**.

Static depth to water will be measured twice a year in these monitoring network wells to represent seasonal high and seasonal low groundwater conditions. The wells will be monitored by one of the STRGBA GSA member agencies.

As summarized on **Table 7-3**, there are SGMA monitoring wells in the Eastern Principal Aquifer that will be monitored on a semi-annual basis. Future water level data from these wells will be evaluated, and some of these wells may be added to the monitoring network during the GSP five-year update.

7.1.2. Reduction of Groundwater in Storage

As described in **Section 6.4**, the sustainable management criteria for chronic lowering of groundwater levels will be used as a proxy for the reduction of groundwater in storage indicator. Accordingly, the monitoring network for the reduction of groundwater in storage is the same as the monitoring network for the chronic lowering of groundwater levels. This monitoring network is described above in **Section 7.1.1**, summarized in **Table 7-1**, and illustrated on **Figures 7-1, 7-2, and 7-3**.

Static groundwater elevations will be measured twice a year in these monitoring network wells to represent seasonal high and low groundwater conditions.

In addition to the required reporting of groundwater levels over time, regulations also require that the GSP annual reports provide an annual estimation of the change in groundwater in storage (§354.34(c)(2)). As described in **Chapters 5 and 6**, the historical reduction of groundwater in storage is estimated at about 43,000 AFY. As discussed in **Section 6.4**, both the change in groundwater in storage and corresponding water levels in the Subbasin will be documented annually in the GSP annual reports. Collectively, these data will allow the connection between the reduction of groundwater in storage to groundwater elevations to be documented on an annual basis, providing further justification for the use of a groundwater elevation proxy for this indicator.

7.1.3. Seawater Intrusion

As described in **Section 6.5**, the STRGBA GSA found that seawater intrusion is not an applicable sustainability indicator for the Modesto Subbasin. Specifically, the STRGBA GSA determined that seawater intrusion is not present in the Modesto Subbasin and is not likely to occur in the future. Therefore, neither sustainable management criteria nor a monitoring network has been established for this sustainability indicator (§354.34(j)).

7.1.4. Degraded Water Quality

As summarized in **Section 6.6.1.3**, undesirable results for degraded water quality are defined as significant and unreasonable adverse impacts to groundwater quality caused by GSA projects, management actions, or other management of groundwater such that beneficial uses are affected and well owners experience an increase in operational costs. The MTs are set as a new exceedance of the maximum contaminant level (MCL) at a potable supply well for any of the seven constituents of concern (COC): nitrate, uranium tetrachloroethene (PCE), 1,2,3-trichloropropane (TCP), Dibromochloropropane (DBCP), total dissolved solids (TDS), and arsenic.

The SWRCB and other agencies have the primary responsibility for water quality and the GSAs do not intend to duplicate this authority. Numerous regulated water quality monitoring programs exist in the Modesto Subbasin, providing data from hundreds of monitoring sites over time. Accordingly, the monitoring network for this sustainability indicator will incorporate existing monitoring data. The MTs will be quantitively monitored

by public agencies (and others) in representative monitoring wells for each Principal Aquifer in accordance with other water quality regulatory monitoring program requirements. The GSAs will download water quality data from the State GeoTracker website each year and analyze any new exceedances of the seven COCs in potable supply wells. New exceedances or further degradation of the wells with prior exceedances will be evaluated in relation to GSA management of water level and groundwater extractions, as well as GSA projects and management actions, to determine whether these exceedances were caused, or exacerbated, by the GSAs. This analysis will be included in the GSP annual reports.

The monitoring network consists of drinking water supply wells, monitoring wells at regulated facilities, and monitoring sites associated with other regulatory water quality programs such as GAMA. Data from two specific regulatory water quality programs, CV-SALTS and the Nitrate Control Program (implemented by the Valley Water Collaborative – see **Section 2.4.4**), will be compiled separately if not already included in the GeoTracker data. These two programs are regulated through the CVRWQCB and provide water quality data for nitrate and total dissolved solids in groundwater throughout the Subbasin. Collectively, this dataset represents a comprehensive network for ongoing tracking and evaluation with respect to the sustainable management criteria.

The monitoring network will vary from year-to-year based on regulatory requirements for each water quality program. Water quality data collected in Subbasin wells during water year 2020 (October 2019 to September 2020) for the COCs were downloaded from GeoTracker as an example dataset. The wells with this water quality data are represented on **Figure 7-4** and tabulated in **Appendix H**. During this time, water quality data for the COCs were collected from over 300 wells in the Subbasin. Most of the data are from municipal drinking water systems and are therefore clustered in and around the municipalities. As indicated by the numbers of wells sampled for each of the COCs on **Figure 7-4** and tabulated in **Appendix H**, there is sufficient data to track and characterize water quality COCs to meet beneficial uses across the Subbasin.

7.1.5. Land Subsidence

Although impacts from land subsidence have not been documented in the Modesto Subbasin, future land subsidence is most likely to occur as a result of the dewatering/depressurization of clays within and below the Corcoran Clay. As described in **Section 6.7**, the sustainable management criteria for chronic lowering of groundwater levels will be used as a proxy for land subsidence. Accordingly, the monitoring network for land subsidence is the same as the monitoring network for the chronic lowering of groundwater levels. This monitoring network is described above in **Section 7.1.1**, summarized in **Table 7-1**, and illustrated on **Figures 7-1, 7-2, and 7-3**.

Static depth to water will be measured twice a year in the monitoring network wells to represent seasonal high and seasonal low groundwater conditions. The wells in this monitoring network will be monitored by one of the STRGBA GSA member agencies.

Remote sensing data will be used as a screening tool to evaluate land subsidence in the Modesto Subbasin as a supplemental monitoring program, but MTs and MOs will not be assigned to these data. As summarized in **Section 3.2.6**, vertical displacement data has been collected using Interferometric Synthetic Aperture Radar (InSAR) since 2015 by TRE Altamira Inc., under contract with DWR. This data set is available on the SGMA Data Viewer (https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#landsub). Data collected from June 2015 to June 2018 in the Modesto Subbasin is illustrated on **Figure 3-59**. As shown on this figure, vertical displacement data covers the full extent of the Modesto Subbasin. Land subsidence will be monitored in the Subbasin by updating and evaluating this InSAR data on an annual basis. This evaluation will be included in the GSP annual reports.

7.1.6. Depletions of Interconnected Surface Water

The monitoring network for depletions of interconnected surface water, summarized in **Table 7-2** and presented on **Figure 7-5**, includes 20 wells along the San Joaquin River, Stanislaus River and Tuolumne River. The wells are screened in the Western Upper Principal Aquifer and the Eastern Principal Aquifer and include CASGEM wells and Proposition 68 monitoring wells.

Groundwater data will be supplemented with surface water data monitored by others. Data include releases and diversions on the Tuolumne and Stanislaus rivers (**Tables 3** and **4** in **Appendix D**), coupled with stream gauge data monitored by USGS (**Table 7** in **Appendix D**). These data have been used in model calibration to analyze streamflow depletions in this GSP as documented in **Appendix D** (see **Sections 2.1.2 and 3.4** in **Appendix D**).

The wells in this monitoring network were chosen because they are relatively close to the rivers and will be accessible for water level measurement in the future. The wells have known locations with depth-discrete screen intervals and will enable monitoring of the unconfined water level surface adjacent to the river boundaries.

The following summarizes the monitoring network wells along each of the rivers.

7.1.6.1. San Joaquin River

Two CASGEM wells are part of the monitoring network along the San Joaquin River. These wells are approximately 0.75 and 2.0 miles from the San Joaquin River and are the closest wells to the river screened in the Western Upper Principal Aquifer that are accessible for future monitoring. These wells have known construction, with discrete screened intervals from 13 to 148 ft bgs (**Table 7-2**). Each of these wells has historical water level data (hydrographs in **Appendix G**).

As shown on **Figure 7-5**, these two wells are along the Subbasin's central reach of the San Joaquin River and there is a gap in well coverage along the upstream and downstream reaches. This is consistent with the data gap in groundwater conditions along the river boundaries that was identified and described in **Section 3.2.9**.

As described in **Section 6.8.2**, the MT for the San Joaquin River is defined as the low groundwater elevation observed in Fall 2015. The MO is the midpoint between the historical high groundwater elevation and the MT (**Table 7-2**). As noted on **Table 7-2**, the MT and MO are close together (about 6 feet or less), providing relatively small amounts of operational flexibility; however, historical groundwater elevations have been relatively stable in this part of the Subbasin. The MTs and MOs at each of these wells is based on measured data, as shown on the hydrographs in **Appendix G**.

Static groundwater elevations will be measured twice a year, in spring and fall, to represent seasonal high and low groundwater conditions. The wells along the San Joaquin River will be monitored by one of the STRGBA GSA member agencies.

7.1.6.2. Stanislaus River

Eight wells are part of the monitoring network along the Stanislaus River. As shown on **Figure 7-5**, these include CASGEM wells and one Proposition 68 monitoring well. These wells were chosen for the monitoring network because they are close to the Stanislaus River (one mile or less from the river) and will be accessible for future water level monitoring.

The wells in this monitoring network are in the Eastern Principal Aquifer. The screen intervals of these wells range from ground surface to 550 ft bgs. The wells are along the central reach of the Stanislaus River, with gaps in well coverage along the upstream and downstream reaches. Data gaps in the monitoring network are being addressed with a data gap analysis incorporated into the GSP Implementation Plan to improve future GSP monitoring (see **Section 9.5.1**).

As described in **Section 6.8.2**, the MT for the Stanislaus River is defined as the low groundwater elevation observed in Fall 2015. The MTs at the CASGEM wells are observed water levels in Fall 2015. The Proposition 68 monitoring well (MW-4S) was constructed in 2021 and its MT is estimated from the October 2015 groundwater elevation contour map (see **Figure 3-27**).

Static groundwater elevations will be measured twice a year, in spring and fall, to represent seasonal high and low groundwater conditions. The wells will be monitored by one of the STRGBA GSA member agencies.

7.1.6.3. Tuolumne River

As shown on **Figure 7-5**, the monitoring network along the Tuolumne River includes 10 wells: 6 CASGEM wells and 4 Proposition 68 monitoring wells. These wells were chosen for the monitoring network because they are close to the Tuolumne River and will be accessible for future monitoring. Well data are summarized in **Table 7-2**.

Most of the wells in this monitoring network are within 1.0 mile of the Tuolumne River, with some between 1.0 and 1.5 miles from the river. Three of the wells (Paradise 235, Philbrick 201 and MW-2S) are within the Corcoran Clay extent and screened within the Western Upper Principal Aquifer. Screens in these three wells range from a depth of 58 ft bgs to 132 ft bgs. The remaining wells are in the Eastern Principal Aquifer, with screens ranging from

113 ft bgs to 360 ft bgs. Although MW-3S appears on **Figure 7-5** to be on the edge of the Corcoran Clay as mapped by the USGS (Burow et al., 2004), Corcoran Clay was not encountered during well drilling.

As shown on **Figure 7-5**, these wells are spaced apart along the full extent of the Tuolumne River. There is less well coverage, however, along the upstream reach of the river. The recently constructed MW-9 helps to fill a previous gap in the upstream reach. As stated previously, groundwater conditions along the river boundaries were identified as a data gap in **Section 3.2.9**.

As described in **Section 6.8.2**, the MT for the Tuolumne River is defined as the low groundwater elevation observed in Fall 2015. The MTs at the CASGEM wells are based on measured data in Fall 2015. The MTs at the Proposition 68 monitoring wells are based on either the Fall 2015 contour map (see **Figure 3-27**) or nearby wells with historical water level data. Due to a lack of data in the eastern Subbasin, the MT at MW-9 is based on the limited measured water levels at the well since it was constructed in March 2021. Hydrographs with MTs and MOs are in **Appendix G**.

Static groundwater elevations will be measured twice a year, in spring and fall, to represent seasonal high and low groundwater conditions. The wells will be monitored by one of the STRGBA GSA member agencies.

7.2. PROTOCOLS FOR DATA COLLECTION AND MONITORING

As required by the GSP regulations, protocols are provided for groundwater elevation monitoring in the representative monitoring wells in the monitoring network. Applicable portions of DWR's best management practices (BMP) for monitoring protocols have been considered and incorporated. As required by the regulations, monitoring protocols will be reviewed at least every five years as part of the periodic evaluation of the GSP, and modified as necessary.

Protocols are focused on groundwater elevation monitoring standards because that is the only monitoring method applicable to the monitoring network for the Modesto Subbasin (see justification and rationale for the use of groundwater elevations for applicable sustainability indicators described in **Chapter 6**). As discussed in **Section 7.1.4.**, water quality monitoring will be conducted by others, and therefore water quality sampling protocols are not included in this section.

This section describes general procedures for documenting wells in the monitoring program and for collecting consistent high quality groundwater elevation data. In general, the methods for establishing location coordinates (and reference point elevations) follow the data and reporting standards described in the GSP Regulations (§352.4) and the guidelines presented by USGS Groundwater Technical Procedures. These procedures are summarized below.

7.2.1. Field Methods for Monitoring Well Surveying

As described previously, further improvements to the monitoring network will be made in the future. When new monitoring wells are constructed, the following survey procedures will be followed:

- Location coordinates will be surveyed with a survey grade Global Positioning System (GPS). The coordinates will be in Latitude/Longitude decimal degrees and reference the NAD83 datum.
- Reference point elevations will be surveyed with a survey grade GPS with elevation accuracy of approximately 0.5 feet. During surveying, the elevations of the reference point and ground surface near the well will be measured to the nearest 0.5 foot. All elevation measurements will reference NAVD88 vertical datum.

7.2.2. Additional Well Standards

Additional standards and information applicable to new and existing wells are also incorporated into the monitoring network as required by the GSP regulations. This information is summarized on **Tables 7-1** and **7-2** and includes the following:

- CASGEM Well ID (as applicable),
- Well location, ground surface elevation and reference point elevation,
- Description of the well use and status (i.e., active irrigation well or monitoring well),
- Well depth and screen interval depth, and
- Principal Aquifer that is being monitored.

Additional information will be provided on the DWR templates for wells and water levels. For example, well completion report number, well construction diagram and geophysical log will be provided, if available. Additional well details such as boring total depth and well casing diameter, if available, will also be provided on the DWR templates.

There are three representative wells in the monitoring network for which the screen interval information is unknown: CASGEM wells Gates Road 101, Machado 23 and Warnock 46 (see **Tables 7-1** and **7-2**). But, based on the total depths of these wells, they are completed in the Western Upper Principal Aquifer.

7.2.3. Field Methods for Groundwater Elevation Monitoring

Field methods for collecting depth to water measurements at representative monitoring wells in the Modesto Subbasin GSP monitoring network are described below:

- Active production wells will be turned off prior to collecting a depth to water measurement.
- The standard period of time that a well needs to be off before a static measurement is taken is 48 hours; field personnel will attempt to verify the time that the pump last ran and record that time in the field notes.

- To verify that the wells are ready for measurement, STRGBA GSA will coordinate with well operators and/or owners as necessary.
- Coordination with well operators/owners should occur approximately four days prior to the expected measurement date.
- Each well has a unique manner to access the well bore (e.g., inspection port, sounding tube, hole drilled into the side of the casing).
- Depth to groundwater will be measured relative to the established reference point elevation, which will be marked with a marker or notch in the top of the well casing. In the absence of a mark or notch, the groundwater elevation will be measured from the north side of the well casing and then marked for future measurements.
- If a pressure release is observed when the well cap or sounding port plug is removed, the water level will be allowed to stabilize for a short period of time before the depth to groundwater measurement is taken.
- Depth to groundwater measurements are collected by either electric sounding tape (Solinst or Powers type sounders) or by steel tape methods. The depth to water measurement methods described in DWR's Groundwater Elevation Monitoring Guidelines, will apply to the Modesto Subbasin monitoring network for wells monitored with electric sounding tape or a steel tape (DWR, 2010).
- Depth to groundwater will be measured and reported in feet to the nearest 0.01 foot relative to the reference point.
- The measurement will be recorded on a field sheet with the date and time the measurement was made. Any factor that may influence the depth to water measurement will be noted, such as well condition or local flooding.
- The well cap or sounding port cap will be placed back on the well, and the well will be secured and locked.

7.2.4. Frequency and Timing of Groundwater Elevation Monitoring

- Semi-annual monitoring is determined to be appropriate to capture the seasonal high and low groundwater elevations associated with the irrigation pumping cycle.
- Groundwater elevations will be measured in monitoring network wells within as short a time as possible, preferably within a 1 to 2 week period (DWR, 2016c), in order to:
    - provide a snapshot of elevations in time to support mapping and management;
    - capture the seasonal high and low elevations in the Subbasin; and
    - meet reporting requirements for semi-annual monitoring data as required by DWR.
- Based on historical data and current land uses in the Modesto Subbasin, the following measurement time intervals are established:
    - Seasonal high: February 1 through April 15 for reporting to DWR by July 1.
    - Seasonal low: September 1 through November 30 for reporting to DWR by January 1. Although October and November are technically part of the subsequent water year, they are included in the fall monitoring event to ensure that the seasonal low water level can be measured. Depending on

the hydrology, agricultural fields may be irrigated through October in the Modesto Subbasin.

- Water level measurements may be adjusted within the time intervals based on hydrologic and land use conditions at that time. The timing for the monitoring events will be coordinated among the GSAs.

7.3. ASSESSMENT AND IMPROVEMENT OF MONITORING NETWORK

The Modesto Subbasin took a big step towards improving the monitoring network by constructing 17 monitoring wells at 11 locations throughout the Subbasin in 2021 with Proposition 68 grant funding. However, as described in **Section 3.2.9**, data gaps still exist in the Western Lower Principal Aquifer, Eastern Principal Aquifer and along the river boundaries. These data gaps are consistent with the gaps in well coverage in the monitoring networks, described in **Section 7.1**. The following specific data gaps have been identified for the GSP monitoring network, organized by each sustainability indicator:

- Chronic Lowering of Groundwater Levels: Insufficient number and location of accessible and representative wells screened in the Western Lower Principal Aquifer and in the eastern region of the Eastern Principal Aquifer.
- Reduction of Groundwater in Storage: Insufficient number and location of accessible and representative wells screened in the Western Lower Principal Aquifer and in the eastern region of the Eastern Principal Aquifer.
- Seawater Intrusion: Not applicable.
- Degraded Water Quality: No data gaps. GSAs will rely on a robust water quality monitoring network that combines numerous ongoing monitoring programs conducted by others (see **Section 7.1.4** and **Figure 7-4**).
- Land Subsidence: Insufficient number and location of accessible and representative wells screened in the Western Lower Principal Aquifer.
- Depletions of Interconnected Surface Water: Insufficient number and location of appropriately constructed, accessible, and representative wells along various segments of all three river boundaries to measure the water table in the Western Upper Principal Aquifer and Eastern Principal Aquifer.

The GSAs have committed to a data gap analysis to make ongoing improvements to the current GSP monitoring network (see **Section 9.5.1**). Additional improvements to the monitoring network are envisioned in the first five years of GSP implementation as described in **Section 9.5.1**. In addition, the monitoring network will be reviewed and evaluated in each five-year assessment in compliance with GSP regulations (§354.38, see **Section 9.4.4**).

7.4. DATA MANAGEMENT SYSTEM

Groundwater elevation data measured in the representative monitoring wells and the additional SGMA wells will be recorded in the data management system (DMS) developed for the GSP. The data collected for the GSP from the GSA member agencies, and other

sources, currently resides in relational databases, which consist of an Access database, GIS geodatabase, and Excel workbooks. Future upgrades to this DMS are being considered by the GSAs. The DMS will be updated with the monitoring data annually and provided in the GSP annual reports. Monitoring data will also be submitted to DWR on the Monitoring Network Module of the online SGMA portal.

Legend

- CASGEM Well -- Western Upper (12)
- City of Modesto Monitoring Well (2)
- Prop 68 Monitoring Well (2)
- USGS Monitoring Well (1)
- Corcoran Clay Extent (Burow et al., 2004)

Management Area

- Modesto ID (17)
- Oakdale ID (0)
- Non-District West (0)
- Non-District East (0)

(MT / MO) MT = minimum threshold, MO = measurable objective

Values in parentheses in legend represent number of wells

N

0 3

Miles

MW-1S
(33 / 43)

Hart Road 88
(35 / 40)

MOD-MWB-1
(40 / 49)

Curtis #2 100
(34 / 41)

North Ave 103
(41 / 50)

Machado 23
(31 / 40)

Van Buren 43
(38 / 45)

Gates Road 101
(24 / 33)

Warnock 46
(35 / 42)

MOD-MWD-1
(30 / 40)

Katen 69
(27 / 33)

MRWA-2
(36 / 43)

Young 76
(36 / 42)

Canfield 90
(32 / 36)

MW-2S
(34 / 41)

Philbrick 201
(34 / 41)

Paradise 235
(34 / 41)

Note:
This monitoring network is used as a proxy for the reduction of groundwater in storage and land subsidence sustainability indicators.

December 2021

TODD GROUNDWATER

Figure 7-1
Monitoring Network, Chronic Lowering of Water Levels, Western Upper Principal Aquifer

Legend

- City of Modesto Monitoring Well (2)
- Prop 68 Monitoring Well (2)
- USGS Monitoring Well (1)
- Corcoran Clay Extent (Burow et al., 2004)

Management Area

- Modesto ID (5)
- Oakdale ID (0)
- Non-District West (0)
- Non-District East (0)

(MT / MO) MT = minimum threshold, MO = measurable objective

Values in parentheses in legend represent number of wells

N

0 3

Miles

MW-1D
(14 / 27)

MOD-MWB-2
(26 / 34)

MOD-MWD-3
(30 / 37)

MW-2D
(35 / 40)

MRWA-3
(28 / 36)

Note:
This monitoring network is used as a proxy for the reduction of groundwater in storage and land subsidence sustainability indicators.

December 2021

TODD GROUNDWATER

Figure 7-2
Monitoring Network,
Chronic Lowering of Water Levels,
Western Lower Principal Aquifer

Legend

- CASGEM Well -- Eastern (25)
- City of Modesto Monitoring Well (2)
- Prop 68 Monitoring Well (10)
- USGS Monitoring Well (2)
- Corcoran Clay Extent (Burow et al., 2004)

Management Area

- Modesto ID (24)
- Oakdale ID (7)
- Non-District West (1)
- Non-District East (7)

(MT / MO) MT = minimum threshold, MO = measurable objective

Values in parentheses in legend represent number of wells

N

0 3

Miles

Allen OID-01 (72 / 81)

Marquis OID-10 (85 / 91)

MW-5S (69 / 89)

Langdon Merle 241 (50 / 62)

American 208 (48 / 55)

Riverbank OID-13 (42 / 54)

Head Lateral 8 194 (40 / 47)

Birnbaum OID-03 (72 / 86)

MW-7 (75 / 110)

MW-10 (72 / 101)

MW-4S (56 / 67)

Crane OID-06 (66 / 77)

MW-8 (75 / 110)

Claribel 206 (49 / 62)

Furtado OID-07 (69 / 81)

Bangs Ave 243 (32 / 46)

Cavil 214 (53 / 73)

Bentley OID-02 (71 / 85)

Paulsell 1 OID-11 (88 / 117)

Paulsell 2 OID-12 (94 / 123)

FPA-2 (38 / 48)

OFPB-2 (35 / 53)

Wood 210 (52 / 66)

Wellsford 233 (62 / 77)

Blossom 230 (61 / 78)

Perley 202 (36 / 45)

Head Lateral 3 215 (56 / 73)

MW-6S (65 / 83)

MOD-MWC-3 (40 / 50)

MW-3D (25 / 31)

MW-11 (35 / 48)

Albers 232 (60 / 76)

MW-9 (150 / 180)

MOD-MWA-2 (30 / 36)

Jones WID 228 (55 / 75)

Quesenberry 223 (89 / 110)

Schmidt 227 (59 / 78)

MW-3S (25 / 31)

Lateral one 195 (42 / 52)

Ripon

Escalon

Ceres

Hughson

Keyes

Hickman

Westley

Salida

Oakdale

Modesto

Turlock

Denair

Woodward Reservoir

Modesto Reservoir

Turlock Lake

Turlock Lake State Park

Laird Park

California State Univ Stanislaus

Escalon-Bellota Rd

Crows Landing Rd

Santa Fe Ave

Maze Blvd

Lone Tree Creek

Littlejohns Creek

Martel's Creek

Rybberg Creek

Gallup Creek

STANISLAUS

TUOLUMNE

CALAVERAS

Note:
This monitoring network is used as a proxy for the reduction of groundwater in storage and land subsidence sustainability indicators.

December 2021

TODD GROUNDWATER

Figure 7-3
Monitoring Network, Chronic Lowering of Water Levels, Eastern Principal Aquifer

Legend

- Nitrate as N (323)
- Uranium (57)
- PCE (162)
- 1,2,3-TCP (88)
- DBCP (144)
- TDS (150)
- Arsenic (174)
- Corcoran Clay Extent (Burow et al., 2004)

Values in parentheses in legend represent number of wells

Note

N

0 3

Miles

December 2021

TODD GROUNDWATER

Figure 7-4
Water Quality Monitoring Sites, October 2019 to September 2020

Legend

- CASGEM Well -- Western Upper (4)
- CASGEM Well -- Eastern (11)
- Prop 68 Monitoring Well (5)
- Corcoran Clay Extent (Burow et al., 2004)

Management Area

- Modesto ID (13)
- Oakdale ID (3)
- Non-District West (2)
- Non-District East (2)

(MT / MO) MT = minimum threshold, MO = measurable objective

Values in parentheses in legend represent number of wells

Western Upper Principal Aquifer (5)

Eastern Principal Aquifer (15)

N

0 3

Miles

Allen OID-01
(75 / 83)

Langdon Merle 241
(50 / 62)

Head Lateral 8 194
(40 / 47)

Marquis OID-10
(86 / 92)

Birnbaum OID-03
(74 / 87)

MW-4S
(56 / 67)

American 208
(48 / 55)

Riverbank OID-13
(42 / 54)

Katen 69
(27 / 33)

Canfield 90
(33 / 37)

Philbrick 201
(38 / 43)

Paradise 235
(34 / 41)

MW-2S
(38 / 43)

MW-3S
(26 / 32)

Lateral one 195
(42 / 52)

Jones WID 228
(55 / 75)

MW-6S
(65 / 83)

Schmidt 227
(59 / 78)

Quesenberry 223
(89 / 110)

MW-9
(150 / 180)

December 2021

TODD GROUNDWATER

Figure 7-5
Monitoring Network, Interconnected Surface Water

8. PROJECTS AND MANAGEMENT ACTIONS

The GSA acknowledges that during the 20-year GSP implementation period it will be necessary to implement Projects and Management Actions (PMA)s to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042. Therefore, multiple PMAs have been identified and considered by the GSAs that are designed to avoid undesirable results over the remainder of a 50-year planning horizon, as required by SGMA regulations.

Descriptions of PMAs that will contribute to the achievement of sustainability goals in the Subbasin are provided herein. PMAs are described in accordance with §354.42 and §354.44 of the SGMA regulations. Evaluations of the benefits and/or impacts on groundwater levels and storage volumes are also provided for their respective projects.

"Projects" refer to physically constructed (structural) features whereas "Management Actions" refer to non-structural programs or policies designed to incentivize reductions in groundwater pumping or optimize management of the Subbasin. **Chapter 9: Plan Implementation** of the GSP describes the plan for implementing the PMAs detailed in this chapter.

The STRGBA GSA approved a resolution[23] adopting the revised GSP and commitment to implementing demand management actions (Resolution) on July 10, 2024, to develop and implement management actions in order to arrest groundwater level declines by 2027 and raise groundwater levels after 2027, and to manage the Subbasin in a sustainable manner. The Tuolumne County GSA approved the same resolution on June 18, 2024. The GSAs are committed to developing management actions no later than January 31, 2026, and implementing these management actions no later than January 31, 2027. However, the GSAs may decide that one or more management actions will be rolled out in 2026 to ensure that groundwater level inflection is achieved in 2027. The Resolution approves the revised Modesto Subbasin GSP, commits to developing and implementing a well mitigation plan, and commits to developing and implementing management actions. The full text of the Resolution can be found in **Appendix C**.

The management actions to be considered include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing, and

[23] *Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency 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*: Appendix C

- Conservation practices
- A dry well mitigation program

Management actions will be developed to include triggers, based on sustainable management criteria established in the GSP, so the GSAs have the ability to readily respond to changing hydrologic conditions within the Subbasin. Development of management actions and their components are discussed in **Section 8.4**.

A range of PMAs are presented to allow the GSAs flexibility in their response to changing hydrologic and groundwater conditions. It is anticipated that a subset of projects will provide the Subbasin with a suitable amount of groundwater needed for the Subbasin to achieve its sustainability goal. As a result, certain PMAs may not need to be implemented for the Subbasin, however, the GSAs will consider these PMAs for future initiatives or as means to achieve local goals and support the sustainability goal. Given their commitment to tangible results by 2027, the GSAs will place highest priority on implementation of PMAs with most rapid results, to be demonstrated with empirical data.

PMAs will be evaluated periodically during the GSP implementation period. PMAs, specifically management actions, are in early stages of development. Complete information on construction requirements, operations, costs, permitting requirements, and other details are not uniformly available for all the PMAs. Implementation schedules, costs, and funding mechanisms are provided for each PMA based on the latest information available. Information related to PMAs still in development will be reported in Annual Reports and Periodic Evaluations of the GSP. For more detailed information, refer to **Chapter 9: Plan Implementation**.

8.1. MANAGEMENT ACTIONS

This section identifies and describes proposed Management Actions (MA) that will be undertaken by the GSAs as an element of GSP implementation. Management Actions refer to non-structural programs or policies designed to incentivize or enforce reductions in groundwater pumping, optimize management of the Subbasin, or implement GSA management authorities. **Table 8-1** shows a list of the seven MAs organized into two categories: pumping management framework (**Section 8.1.1**) and demand reduction strategies (**Section 8.1.2**). The pumping management framework provides a suite of administrative procedures, programs, and policies that describe how the GSAs will manage and monitor groundwater extractions. Implementation activities such as monitoring, annual reporting, and GSP updates are discussed in further detail in **Chapter 9**. Demand reduction strategies are a broad and strategic set of actions intended to reduce water demand, some of which may be incentivized by State programs or policies, or by a pumping management framework.

As described in **Chapter 5**, the Subbasin has experienced overdraft conditions. Per § 354.44(b)(2), the GSP must describe Projects or MAs, including a quantification of demand reduction or other methods, for the mitigation of overdraft. Several Projects identified in

earlier sections of this chapter would increase the available water in the Subbasin through increased recharge or use of alternate supplies and are expected to reduce the groundwater deficit sufficiently to achieve the Subbasin's sustainability goal. Additionally, Supplemental Projects may contribute to further improve groundwater conditions. MAs presented in the GSP are designed for the GSA to promptly implement, while Projects are being designed and implemented. The extent and effectiveness of the MAs described in **Sections 8.1.1** and **8.1.2** are not yet known, however, these programs will be developed for the GSAs to readily arrest groundwater level decline and storage deficits.

While the tools described in this section will be available for implementation Subbasin-wide, implementation may be prioritized in areas based on groundwater conditions. As such, it is anticipated that responsibility for implementing MAs will correspond with the relative contribution of each Management Area to overdraft and impacts associated with other sustainability criteria.

Multiple MAs are presented to allow the GSAs flexibility in their response to changing groundwater conditions and as data gaps and uncertainties are addressed during GSP implementation. However, it is anticipated that not all MAs will need to be applied during the GSP implementation period. In addition, implementation and/or escalation of MAs will be based on ongoing monitoring of groundwater conditions using the monitoring network. Monitoring data will be used to assess the need for MAs in the Subbasin as a whole and in specific areas. In general, the potential for undesirable results to be approached, exceedances of minimum thresholds, and poor Project performance will serve as triggers for scaling and implementing MAs in both a targeted and proportional manner, consistent with conditions observed in the Subbasin. The full scope of MAs including program descriptions, triggering criteria, GSA authorities, costs and funding, management of water sources, monitoring processes, and applicable areas will be developed by January 31, 2026, in accordance with the resolution.

Table 8-1 lists the MAs described in the sections that follow. Each MA description is organized to address the applicable regulatory requirements:

- Management Action Description: 23 CCR §354.44(b)
- Public Notice: 23 CCR §354.44(b)(1)(B)
- Permitting and Regulatory Process: 23 CCR §354.44(b)(3)
- Expected Benefits: 23 CCR §354.44(b)(4), §354.44(b)(5)
- Implementation Criteria, Status, and Plan: 23 CCR §354.44(b)(1)(A); §354.44(b)(4); §354.44(b)(6)
- Water Source and Reliability: 23 CCR §354.44(b)(6)
- Legal Authority: 23 CCR §354.44(b)(7)
- Estimated Costs and Funding Plan: 23 CCR §354.44(b)(8)
- Management of Groundwater Extractions and Recharge: 23 CCR §354.44(b)(9)

Summary of Criteria for Project Implementation (23 CCR §354.44(b)(1)(A))

MAs described in this section will be fully developed into MA-specific policies, resolutions, and/or implementation plans during the first years of GSP implementation as discussed in the subsequent sections. These MAs will be implemented by the GSAs, indicated by forthcoming triggering criteria, to achieve and maintain long-term sustainable groundwater management across the Subbasin. The GSAs will prioritize development of the Pumping Management Framework MAs. These MAs are based on authorities granted to the GSAs through SGMA as a means to establish groundwater extraction limitations and allocations, regulate the pumping of groundwater, and implement special taxes, assessments, and user fees. The Pumping Management Framework provides the GSAs with readily implementable methods to restrict groundwater extraction throughout the entire or portions of the Subbasin. This approach will be informed by continued monitoring of groundwater conditions, using the monitoring network and methods that will be established in forthcoming MA-specific policies, resolutions, and/or implementation plans. MA's and MA-specific policies will be developed with public participation and input from stakeholders within the Subbasin.

Table 8-1: List of Management Actions

Category	Number	Proponent[2]	Management Action	Primary Mechanism(s)[1]	Partner(s)
Pumping Management Framework	1	Modesto Subbasin GSAs	Groundwater Allocation and Pumping Management Program	Pumping Reduction	N/A
	2	Modesto Subbasin GSAs	Groundwater Extraction and Surface Water Reporting Program	Pumping Reduction	N/A
	3	Modesto Subbasin GSAs	Groundwater Extraction Fee	Pumping Reduction	N/A
	4	Modesto Subbasin GSAs	Groundwater Pumping Credit Market and Trading Program	Pumping Reduction	N/A
Demand Reduction Strategies	5	Modesto Subbasin GSAs	Voluntary Conservation and/or Land Fallowing	Conservation/ Land Fallowing	N/A
	6	Modesto Subbasin GSAs	Conservation Practices	Conservation	N/A
Dry Well Mitigation	7	Modesto Subbasin GSAs	Dry Well Mitigation Program	(multiple)	N/A

[1]*The primary mechanism of the MA as conceptualized. MAs may support groundwater sustainability through multiple mechanisms during implementation.*

[2] *It is anticipated that MAs will be implemented by the GSAs or by each GSA member agency as needed to mitigate overdraft within their jurisdictional areas and assure that the SMC adopted in **Chapter 6** are met.*

8.1.1. Pumping Management Framework

The Pumping Management Framework consists of four tiered MAs that would be implemented in a prioritized order as determined by the GSAs. Not all MAs may be needed – Subbasin conditions will be evaluated against the sustainability management criteria when considering whether an additional tiered MA is needed. The tiered order of implementing Pumping Management Framework MAs is:

1. Groundwater Allocation Program (MA 1) – see **Section 8.1.1.1**
2. Groundwater Extraction and Surface Water Accounting Reporting or Monitoring Program (MA 2) – see **Section 8.1.1.2**
3. Groundwater Extraction Fee (MA 3) – see **Section 8.1.1.3**
4. Groundwater Pumping Credit Market and Trading Program (MA 4) – see **Section 8.1.1.4**

8.1.1.1. Groundwater Allocation Program (Management Action 1)

8.1.1.1.1. Management Action Description

As previously discussed, the Subbasin has overdraft conditions. While the Projects identified in **Section 8.2** may provide the Subbasin with water necessary to achieve the sustainability goal, management actions will be necessary. As a result, GSAs will develop a Groundwater Allocation Program (Management Action) to allocate the sustainable yield of native groundwater in the Subbasin as a policy-driven approach to arrest groundwater level declines. The GSAs are currently in the process of evaluating and developing methods for the Management Action. In accordance with the Resolution, management actions will be developed by January 31, 2026, and implemented by January 31, 2027.

Outlined here is a framework for how the Modesto Subbasin GSAs might develop and implement pumping allocations in the Subbasin based on the magnitude of projected overdraft estimated by Subbasin modeling.

There are four key steps to developing pumping allocations:

1. Identify the sources of water contributing to the native yield and estimate the quantity of native yield for the Subbasin annually (see **Chapter 5** of this GSP)
2. Estimate the amount of native yield that can be used annually consistent with the Sustainable Yield
3. Allocate native yield to groundwater right holders based on:
    a. Priority of right
    b. Prescription
    c. Other legal principles, such as reasonable use

4. Determine how to account for new/additional supplies.
5. Develop a timeline for reducing pumping to achieve allocations over time.

The Groundwater Allocation Program is currently conceptual and actively being evaluated and developed. There are numerous ways to structure and implement an allocation program which will need to be further evaluated, developed, and refined by the GSAs prior to implementation.

8.1.1.1.2. Public Noticing

Development of a Groundwater Allocation Program requires substantial public input to understand the potential impacts of groundwater allocations and baseline needs that should be accounted for. The Modesto Subbasin GSAs anticipates that public outreach would include multiple public workshops and meetings, potential website and/or email announcements, along with other public notices for the workshops. The Groundwater Allocation Program would be circulated for public comment before finalized, though final approval of the plan would be made by the Modesto Subbasin GSAs in partnership with their respective member agencies. Implementation of the program may be confined to specific Management Areas.

8.1.1.1.3. Permitting and Regulatory Process

Development of a Groundwater Allocation Program would not require any permitting but would require consideration of existing water rights and applicable permits and regulations associated with groundwater pumping in the Subbasin.

8.1.1.1.4. Expected Benefits

Benefits to Sustainability Indicators

Sustainability indicators benefitting from the Groundwater Allocation Program include:

- Chronic lowering of groundwater levels – By reducing groundwater demand, this MA would reduce pumping and pumping-related contributions to chronic lowering of groundwater levels.
- Reduction of groundwater storage – Reduced pumping throughout the Subbasin contributes to a smaller rate of reduction in groundwater storage.
- Degraded water quality – This MA does not impact this sustainability indicator.
- Land subsidence – Reduced groundwater pumping may reduce the risk of subsidence associated with lowering of groundwater levels.
- Depletion of interconnected surface water – Reduced pumping would reduce the potential for negative impacts to surface water flows associated with lowering groundwater levels.

Benefits to Disadvantaged Communities

Benefits to disadvantaged communities overlap with the benefits described above for sustainability indicators.

Volumetric Benefits to Subbasin Groundwater System

The volumetric benefit to the groundwater system will depend on the structure of the allocation framework and will be further studied when the program is fully developed by the GSAs.

8.1.1.1.5. Implementation Criteria, Status, and Plan

The allocation program and its criteria for implementation are still under development. It is anticipated that the program will be implemented after groundwater conditions in the Subbasin do not improve as expected in conjunction with implementation of Group 1 and Group 2 Projects. These conditions may include unstable groundwater levels, groundwater levels observed consistently nearing interim milestones, continued overdraft conditions, or increased amounts of pumping beyond the sustainable yield.

The program will be developed by January 31, 2026, and implemented by January 31, 2027, in accordance with the Resolution. The intent is that groundwater users will have a year to adapt and adjust their pumping operations as necessary to meet the requirements of the program. This Resolution was adopted by the STRGBA GSA and the Tuolumne County GSA and can be found in **Appendix C**. The progress of this program will be presented in Annual Reports and is expected to be completed by the forthcoming periodic evaluation.

8.1.1.1.6. Water Source and Reliability

This program does not rely on the supplies from outside the Subbasin because it is a planning effort that will result in conservation. It will support overall supply reliability by reducing overdraft in the Subbasin and moving the Subbasin towards sustainability.

8.1.1.1.7. Legal Authority

Under SGMA, GSAs have authority to establish groundwater extraction allocations. Specifically, SGMA authorizes GSAs to control groundwater by regulating, limiting, or suspending extractions from individual wells or extractions in the aggregate.[24] SGMA and GSPs adopted under SGMA cannot alter water rights.

8.1.1.1.8. Estimated Costs and Funding Plan

Development and initiation of an allocation program is expected to include upfront costs to conduct the analysis, set up the tracking system, and conduct outreach. Costs to implement the plan would depend on the level of enforcement required to achieve allocation targets and the level of outreach required annually to remind users of their allocation for a given year. The Groundwater Allocation Program would also include an annual cost that covers ongoing enforcement and implementation. Because the Groundwater Allocation Program is in the preliminary stages of development, no costs have been estimated. Sources of funding will be determined during the development of the program.

[24] California Water Code § 10726.4(a)(2)

8.1.1.1.9. Management of Groundwater Extractions and Recharge

The Groundwater Allocation Program would include provisions for the recovery of groundwater levels and groundwater storage during non-drought periods.

8.1.1.2. Groundwater Extraction and Surface Water Accounting Reporting or Monitoring Program (Management Action 2)

8.1.1.2.1. Management Action Description

As required in SGMA regulations, groundwater extractions have been calculated by the GSAs for this GSP using the CV2SIM-TM model (**Appendix D**). Presently, the GSAs intend to continue with their current data collection and groundwater extraction monitoring techniques. This MA is provided as an alternative to allow the GSAs flexibility and additional options in the event more or alternative forms of data are needed in the future.

There are several ways that this MA could be implemented by the GSAs. For this plan, two potential components have been developed which include a voluntary program and a comprehensive program. However, these two potential components are provided only as options, and likely would be implemented in Management Areas if the triggering criteria is met. If initiated, the GSAs will further develop options before implementation.

- Voluntary program - This program is intended to provide an annual reporting of groundwater use by agricultural and other well owners and surface water transfers for in-lieu use. The Data Management System will be set up with appropriate input data forms for voluntary reporting of groundwater use as well as other relevant information, such as irrigated acreage, crop type, and sources of water.

- Comprehensive program - This program is a more robust and elaborate strategy for reporting groundwater extraction that is intended to cover all groundwater users and surface water transfers for in-lieu use. Implementation of this program may incorporate satellite imagery to estimate the evapotranspiration of crops by parcel. Additionally, this strategy can take the form of requiring the installation of meters at all agricultural and other non-exempt wells.

The Groundwater Extraction Reporting Program would exclude *de minimis* extractors (domestic use of 2 AF or less per year) but may also include surface water accounting in the Subbasin due to the amount of surface water transferred from MID and OID to the NDE area used for in-lieu and direct recharge.

8.1.1.2.2. Public Noticing

Successful implementation of either component of this program would require the support and coordination of member agencies, well owners throughout the Subbasin, and other stakeholders.

The voluntary program would be noticed via public outreach and education about the logistics of participating in the program as well as the purpose and importance of doing so. Outreach may include public notices, meetings, potential website presence and email announcements.

The comprehensive program would involve more of a robust planning process. The Modesto Subbasin GSAs anticipate that public outreach and education on the potential structure of this program would be necessary, including public notices, meetings, potential website presence and email announcements.

8.1.1.2.3. 8.1.1.2.3 Permitting and Regulatory Process

The Groundwater Extraction Reporting Program is not expected to require any permitting or regulatory involvement.

8.1.1.2.4. Expected Benefits

Benefits to Sustainability Indicators

Direct measurement of groundwater extractions may not have direct impacts on sustainability indicators but would improve future water budget and sustainable yield refinement. The accurate and widespread collection of extraction data would provide the Modesto Subbasin GSAs with critical information to assist in management of the Subbasin, development of additional MAs, and monitoring the success of the GSP against the sustainable management criteria.

Benefits to Disadvantaged Communities

The Groundwater Extraction Reporting Program would exclude *de minimis* extractors, including those in disadvantaged communities.

Volumetric Benefits to Subbasin Groundwater System

Additional measurements and reporting of groundwater extractions would provide a higher resolution of groundwater use in the Subbasin. The addition of these data would provide the GSAs with the ability to further improve current and projected water budgets and basin storage calculations.

8.1.1.2.5. Implementation Criteria, Status, and Plan

The Modesto Subbasin GSAs will develop Annual Reports to evaluate progress toward meeting the sustainability goal. If monitoring efforts demonstrate that the Projects and MAs being implemented are not effective in achieving stated targets, the GSAs will convene a working group to evaluate the implementation of additional supply-side and demand-side actions, such as the implementation of tiered approaches of the Water Accounting Framework.

8.1.1.2.6. Water Source and Reliability

This management action is an accounting and monitoring program and as such does not rely on water availability. The Groundwater Extraction and Surface Water Accounting Reporting or Monitoring Program is a planning effort that will support overall supply reliability by

providing additional information for better management of the Subbasin and moving the Subbasin towards sustainability.

8.1.1.2.7. Legal Authority

SGMA provides GSAs with the authority to regulate the pumping of groundwater in order to stabilize the region's water supply and recharge aquifers. As such, the GSAs have the authority to: "control groundwater extractions by regulating, limiting, or suspending extractions from individual groundwater wells or extractions from groundwater wells in the aggregate, . . . or otherwise establishing groundwater extraction allocations" (CWC, §10726.4(a)).

8.1.1.2.8. Estimated Costs and Funding Plan

The estimated costs for the Groundwater Extraction Reporting Program would vary depending on the components that are implemented:

- The costs for the voluntary component are minimal and include:
    - One-time costs for initial public outreach and setup of tools and procedures to receive and compile voluntary submitted data
    - Ongoing annual administrative costs to review and compile the voluntarily submitted data as well as continued outreach
- The costs for implementing the more comprehensive program would be larger as they may include:
    - One-time costs to develop a remote sensing system or a more comprehensive program to track and monitor well meters, in addition to public outreach
    - Ongoing annual costs to administer the program, whether via purchase and analysis of the latest remote sensing data or to track and collect data from well meters

The Groundwater Extraction Reporting Program is in the preliminary stages of discussion and possible consideration. Therefore, no costs have been estimated for its development and implementation. Such costs would be developed should the Modesto Subbasin GSAs decide to pursue a program in the future.

8.1.1.2.9. Management of Groundwater Extractions and Recharge

This program would directly develop and expand the reporting of groundwater extractions, including during both dry and wet periods, to support better management of the Subbasin.

8.1.1.3. Groundwater Extraction Fee (Management Action 3)

8.1.1.3.1. Management Action Description

This strategy entails setting up a Groundwater Extraction Fee structure for each groundwater user. The fee structure could work in conjunction with the groundwater allocation and reporting programs, such that groundwater use above a certain allocation can

be subject to a fee. This strategy could be implemented within areas of the Subbasin where triggering criteria has been met, as needed to achieve the sustainability goals.

Revenue from these fees could then be used to pay for a variety of activities, such as the construction of water infrastructure, protection of groundwater, proper construction and destruction of wells to prevent contamination, groundwater recharge and recovery projects, purchase of imported water or other supplies to replenish the groundwater basin, and/or purchasing and permanent fallowing of marginally productive agricultural lands dependent on groundwater. Fees could also be used to pay for administration, enforcement, and implementation of the MA.

8.1.1.3.2. Public Noticing

Development of a Groundwater Extraction Fee would require substantial public input to understand the potential impacts and needs that should be considered. The Modesto Subbasin GSAs anticipate that public outreach would include multiple public workshops and meetings, potential website and/or email announcements, along with other public notices for the workshops. The Groundwater Extraction Fee framework would be circulated for public comment before being finalized, though final approval of the plan would be made by the Modesto Subbasin GSAs in partnership with their member agencies.

Additional noticing for the public would be conducted consistent with permitting requirements in the case of the enactment of fees. GSA outreach may include public notices, meetings, website or social media presence, and email announcements. Prior to implementing any fee or assessment program, the GSAs would complete a rate assessment study or other analysis if required by the regulatory requirements.

Per Water Code §10730, prior to imposing or increasing a fee, a groundwater sustainability agency shall hold at least one public meeting, at which oral or written presentations may be made as part of the meeting. Notice of the time and place of the meeting shall include a general explanation of the matter to be considered and a statement that the data required by this section is available. The notice shall be provided by publication pursuant to §6066 of the Government Code, by posting notice on the Internet Web site of the groundwater sustainability agency, and by mail to any interested party who files a written request with the agency for mailed notice of the meeting on new or increased fees. A written request for mailed notices shall be valid for one year from the date that the request is made and may be renewed by making a written request on or before April 1 of each year. At least 20 days prior to the meeting, the groundwater sustainability agency shall make available to the public data upon which the proposed fee is based. Any action by a groundwater sustainability agency to impose or increase a fee shall be taken only by ordinance or resolution.

8.1.1.3.3. Permitting and Regulatory Process

Fees imposed pursuant to Water Code §10730 shall be adopted in accordance with all applicable laws.

A fee or charge shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:

- Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
- Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted. Standby charges, whether characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with Section 4 of the California Water Code (Water Code §10730).
- No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services, where the service is available to the public at large in substantially the same manner as it is to property owners.

8.1.1.3.4. Expected Benefits

Benefits to Sustainability Indicators
Collection of groundwater extraction fees incentivizes the use of supplemental or alternative water supplies where fees can also fund activities/projects that increase groundwater supplies, such as groundwater recharge, thus reducing declines in groundwater elevations and groundwater storage. Other sustainability indicators benefitting from the Groundwater Extraction Fee program include:

- Degraded water quality – Funded activities and projects can also reduce degradation of groundwater quality (such as proper construction/destruction of wells to prevent contamination).
- Land subsidence – Reduced groundwater pumping would reduce the risk of subsidence associated with lowering of groundwater levels.
- Depletion of interconnected surface water – Reduced pumping would reduce the potential for negative impacts to surface water flows associated with lowering groundwater levels.

Benefits to Disadvantaged Communities
Any fees would comply with CWC, §10730(a) and shall exclude *de minimis* extractors from fees, where appropriate.

Volumetric Benefits to Subbasin Groundwater System
The volumetric benefit to the groundwater system would depend on the framework of the fee implemented and would be further studied as the Groundwater Extraction Fee framework was developed by the GSAs.

8.1.1.3.5. Implementation Criteria, Status, and Plan
The Modesto Subbasin GSAs will develop Annual Reports to evaluate progress toward meeting the sustainability goal. If monitoring efforts demonstrate that the Projects and MAs being implemented are not effective in achieving stated targets, the GSAs will convene a working group to evaluate the implementation of additional supply-side and demand-side actions, such as the implementation of tiered approaches in the Water Accounting Framework.

8.1.1.3.6. Water Source and Reliability
The Groundwater Extraction Fee program will apply in both drought and non-drought periods.

8.1.1.3.7. Legal Authority
The GSAs possess the legal authority to implement special taxes, assessments, and user fees within the Project proponent service area or area of Project benefit. Fees imposed include fixed fees and fees charged on a volumetric basis, including, but not limited to, fees that increase based on the quantity of groundwater produced annually, the year in which the production of groundwater commenced from a groundwater extraction facility, and impacts to the basin.

8.1.1.3.8. Estimated Costs and Funding Plan
While there are certain administrative costs anticipated with the development and implementation of a Groundwater Extraction Fee, the Groundwater Extraction Fee itself is a potential mechanism to fund the costs of groundwater management. This includes, but is not limited to, the following:

- Administration, operation, and maintenance, including a prudent reserve
- Acquisition of lands or other property, facilities, and services
- Supply, production, treatment, or distribution of water
- Other activities necessary or convenient to implement the plan

8.1.1.3.9. Management of Groundwater Extractions and Recharge
This program, in conjunction with the Groundwater Extraction Reporting Program, would directly develop and expand the reporting of groundwater extractions, including during both drought and non-drought periods, to support better management of the Subbasin.

8.1.1.4. Groundwater Pumping Credit Market and Trading Program (Management Action 4)

8.1.1.4.1. Management Action Description

Groundwater credit markets and trading programs can be used to exchange and trade the allocation of groundwater use by each landowner within the Subbasin. This strategy is contingent upon implementation of the groundwater reporting and allocation programs (MAs 1 and 2), so that the credit and trading market can monitor the exchange of groundwater allocations among the landowners and/or the GSAs. Should the Modesto Subbasin GSAs decide to pursue a program in the future, they would seek guidance from agencies with experience in water markets to identify options for communications and outreach with stakeholders, program design, and mechanisms to ensure that non-participating stakeholders are not adversely impacted by the program.

8.1.1.4.2. Public Noticing

Development and implementation of a Groundwater Pumping Credit Market and Trading Program would require substantial public input to understand the potential impacts and nuances of implementing such a program. The Modesto Subbasin GSAs anticipate that public outreach would include multiple public workshops and meetings, potential website and/or email announcements, along with other public notices for the workshops. The program plan would be circulated for public comment before being finalized, though final approval of the plan would be made by the Modesto Subbasin GSAs in partnership with their member agencies.

8.1.1.4.3. Permitting and Regulatory Process

Permitting and other regulatory compliance issues will be identified and addressed when the program is being further explored and developed, consistent with SGMA §10726.4 (a) (3 & 4).

8.1.1.4.4. Expected Benefits

Benefits to Sustainability Indicators

Sustainability indicators benefitting from the Groundwater Pumping Credit Market and Trading Program include:

- Chronic lowering of groundwater levels – By reducing groundwater demand, this MA would reduce pumping and pumping-related contributions to chronic lowering of groundwater levels.
- Reduction of groundwater storage – Reduced pumping throughout the Subbasin contributes to a smaller rate of reduction in groundwater storage.
- Degraded water quality – This MA does not address this sustainability indicator.
- Land subsidence – Reduced groundwater pumping would reduce the risk of subsidence associated with lowering of groundwater levels.

- Depletion of interconnected surface water – Reduced pumping would reduce the potential for negative impacts to surface water flows associated with lowering groundwater levels.

Benefits to Disadvantaged Communities
Benefits to disadvantaged communities overlap with the benefits described above for sustainability indicators.

Volumetric Benefits to Subbasin Groundwater System
The volumetric benefit to the groundwater system will depend on the framework of the credit market and trading program implemented and would be further studied when the program was developed by the GSAs.

8.1.1.4.5. Implementation Criteria, Status, and Plan
The Modesto Subbasin GSAs will develop Annual Reports to evaluate progress toward meeting the sustainability goal. If monitoring efforts demonstrate that the Projects and MAs being implemented are not effective in achieving stated targets, the GSAs will convene a working group to evaluate the implementation of additional supply-side and demand-side actions, such as the implementation of tiered approaches in the Pumping Management Framework.

8.1.1.4.6. Water Source and Reliability
The Subbasin area will be the source of groundwater and will be limited by the hydrology of the region.

8.1.1.4.7. Legal Authority
SGMA §10726.4 (a) (3 & 4) provide legal authority for groundwater transfer and accounting programs.

8.1.1.4.8. Estimated Costs and Funding Plan
The Groundwater Pumping Credit Market and Trading Program is in preliminary stages of discussion and possible consideration. Therefore, no costs have been estimated for its development and implementation. Such costs would be developed should the Modesto Subbasin GSAs decide to pursue a program in the future. Costs would likely include additional staffing required to administer the program and would be borne by the participants.

8.1.1.4.9. Management of Groundwater Extractions and Recharge
The implementation of a Groundwater Pumping Credit Market and Trading Program will include provisions for the recovery of groundwater levels and groundwater storage during non-drought periods.

8.1.2. Demand Reduction Strategies

Demand reduction strategies will be developed to manage the agricultural and urban water demands in the Subbasin. These strategies could be implemented in the form of voluntary

conservation and/or land fallowing (see **Section 8.1.2.1**) or other urban and agricultural conservation practices (see **Section 8.1.2.2**). While conservation practices are expected to be implemented throughout GSP implementation, specific strategies are in preliminary stages of discussion and possible consideration. Should the Modesto Subbasin GSAs decide to pursue a program in the future, the program would be implemented as necessary in a targeted and proportional manner consistent with conditions observed in the Subbasin. Similarly, the Conservation Practices MA is expected to be implemented adaptively.

8.1.2.1. Voluntary Conservation and/or Land Fallowing (Management Action 5)

8.1.2.1.1. Management Action Description

Voluntary Conservation and/or Land Fallowing covers several strategies that can be designed to achieve both temporary and permanent water demand reduction. Should the Modesto Subbasin GSAs decide to pursue such strategies, this MA would assess options and develop a program to incentivize voluntary conservation and/or fallowing strategies in close coordination and collaboration with the landowners. Examples of this strategy could include repurposing of lands growing lower value crops. These lands could be dry farmed, fallowed in rotation, or used for recreation, habitat restoration, groundwater recharge, or solar power generation. This MA would also try to prioritize those lands that are more favorable for groundwater recharge projects.

Temporary or permanent land fallowing could also be combined with recharge projects through the application of surplus surface water supplies to the fallowed lands.

8.1.2.1.2. Public Noticing

A successful Voluntary Conservation and/or Land Fallowing program will require a comprehensive and strategic outreach effort, including multiple public workshops and meetings, potential website and/or email announcements, along with other public notices for the workshops. The outreach will be targeted to both potential participants of the program (landowners) as well as other stakeholders who may be impacted by changes to land and water use.

8.1.2.1.3. Permitting and Regulatory Process

Preparation of a CEQA evaluation for a fallowing program will identify potential environmental impacts and identify feasible alternatives or feasible mitigation measures. Establishment of a voluntary land fallowing program is expressly authorized under SGMA (CWC, §10726.2(c)). The fallowing program, including program standards, will be developed and undergo CEQA review as necessary.

8.1.2.1.4. Expected Benefits

Benefits to Sustainability Indicators

Sustainability indicators that could benefit from Voluntary Conservation and/or Land Fallowing include:

- Chronic lowering of groundwater levels – By reducing groundwater demand, this MA would reduce pumping and pumping-related contributions to chronic lowering of groundwater levels.
- Reduction of groundwater storage – Reduced pumping throughout the Subbasin contributes to a smaller rate of reduction in groundwater storage.
- Land subsidence – Depending on the location of land fallowing or conservation, reduced pumping stress on local aquifer(s) may reduce the potential for subsidence.
- Depletion of interconnected surface water – Reduced pumping would reduce the potential for negative impacts to surface water flows associated with lowering groundwater levels.

Benefits to Disadvantaged Communities

Benefits to disadvantaged communities overlap with the benefits described above for sustainability indicators. Land repurposing can also provide other ancillary benefits to local communities, such as recreation.

Volumetric Benefits to Subbasin Groundwater System

The volumetric benefit to the groundwater system would depend on the extent to which a Voluntary Conservation and/or Land Fallowing program is adopted and would be further studied when the program is implemented by the GSAs.

8.1.2.1.5. Implementation Criteria, Status, and Plan

Temporary fallowing is a quick way to reduce demand with no capital costs or infrastructure needed. Because it is inexpensive, it can be implemented earlier and quicker while other long-term solutions like land repurposing are investigated. The Modesto Subbasin GSAs may explore options for encouraging voluntary and temporary fallowing during GSP implementation while developing a more structured program and exploring funding opportunities.

The Voluntary Conservation and/or Land Fallowing program is in preliminary stages of discussion and consideration. Should the Modesto Subbasin GSAs decide to pursue a program in the future, the program would be implemented as necessary in a targeted and proportional manner consistent with conditions observed in the Subbasin. To maximize recharge potential, the preservation lands that are more favorable for recharge projects could be prioritized while developing this MA. The implementation timeline has yet to be determined but will be provided in GSP Annual Reports and five-year updates when known. Any future changes in implementation would be communicated with the public and other agencies and would be documented in GSP Annual Reports and five-year updates.

8.1.2.1.6. Water Source and Reliability

This program does not rely on the supplies from outside the Subbasin because it is a planning effort that will result in conservation. It will support overall supply reliability by reducing overdraft in the Subbasin and moving the Subbasin towards sustainability.

8.1.2.1.7. Legal Authority

The GSAs have authority to "provide for a program of voluntary fallowing of agricultural lands or validate an existing program" (CWC, §10726.2(c)).

This MA carries forward the policy of the state and satisfies SGMA requirements by establishing a voluntary program that encourages water within the Subbasin to be dedicated to beneficial uses of water in a manner designed to achieve the sustainability goals and to protect against undesirable results.

8.1.2.1.8. Estimated Costs and Funding Plan

The Voluntary Conservation and/or Land Fallowing program is in preliminary stages of discussion and possible consideration. Therefore, no costs have been estimated for its development and implementation. Such costs would be developed, should the Modesto Subbasin GSAs decide to pursue a program in the future. Separately, multiple funding programs exist as a potential source of revenue for individual landowners looking at options for land repurposing, including (EDF, 2021):

- Mitigation or Conservation Banks
- Conservation Easements
- Solar Rentals
- Grazing Leases
- Converting to Low Water Intensity Crops
- Federal and State Grant Funding Programs

8.1.2.1.9. Management of Groundwater Extractions and Recharge

This MA encourages the conservation of water; this will be applicable during both drought and non-drought conditions.

8.1.2.2. Conservation Practices (Management Action 6)

8.1.2.2.1. Management Action Description

This MA would create a program to support the use of conservation practices in both urban and agricultural sectors.

Urban water suppliers are already obligated to consider demand reduction and conservation efforts during dry periods. These demand MAs are described in their respective Urban Water Management Plans (UWMPs). These include:

- City of Modesto Urban Water Management Plan (West Yost Associates, 2016b)
    - https://www.modestogov.com/860/Urban-Water-Management-Plan
- Modesto Irrigation District Urban Water Management Plan (West Yost Associates, 2021)

    - https://wuedata.water.ca.gov/public/uwmp_attachments/2173444449/R%20-%20418%20-%20City%20of%20Modesto_MID%20-%20Final%202020%20UWMP%20%20-%2006-23-21.pdf
- City of Riverbank Urban Water Management Plan (KSN Inc, 2016)
    - https://www.riverbank.org/610/Urban-Water-Management-Plan-WSCP
- City of Oakdale Urban Water Management Plan (MCR Engineering, 2015)
    - https://cadwr.app.box.com/s/hg3k8bc9vuka689jkh1x4f9i1n58ey9a/file/521558561581
- City of Waterford (covered under City of Modesto 2015 UWMP)

In addition, SB 606 and AB 1668, both signed into law in May 2018, are laws that introduce conservation mandates that will cap indoor residential use and set a target for efficient outdoor landscape irrigation based on local climate and size of landscaped areas. Urban water suppliers will be required to report on progress to meeting urban water use objectives beginning in 2023 and comply with them beginning in 2028.

In addition to meeting urban water use objectives, this MA could include changing standards for storm drainage so that storm flows do not discharge straight to a river, creek, or canal, as contemplated by the City of Modesto as a potential Group 3 Project. This would help increase the sustainability footprint of the City of Modesto as it grows. Currently approximately 36% of the City of Modesto area drains to a river or canal, while approximately 64% is captured for local recharge. If the City of Modesto adopts new Storm Drain Standards, 100% of runoff from newly developed areas would reach a retention system and contribute to recharge.

Agricultural water suppliers serving more than 25,000 irrigated acres must adopt an Agricultural Water Management Plan (AWMP) that include reports on the implementation status of specific Efficient Water Management Practices required by the Water Conservation Act of 2009 (SB X7-7). Agencies that have developed AWMPs include:

- Modesto Irrigation District Agricultural Water Management Plan
    - https://www.mid.org/water/awmp/default.html
- Oakdale Irrigation District Agricultural Water Management Plan
    - https://wuedata.water.ca.gov/public/awmp_attachments/3350354850/OID%202020%20AWMP%20FINAL%20210323.pdf

The Modesto Subbasin GSAs may choose to evaluate the existing UWMPs and AWMPs in the Subbasin and either expand upon minimum requirements to increase the impact of such programs or implement similar conservation practice programs in other areas of the Subbasin that may not be covered under an UWMP or AWMP.

Notably, conservation practices must be considered in the greater context of the Subbasin water budget, especially at the nexus between on-farm water use and groundwater sustainability. In areas where groundwater is the primary or sole water supply, conservation

practices that reduce water demand may also reduce groundwater consumption, but conservation practices may also have unintended consequences that impede water conservation and sustainable groundwater management. Some of these consequences directly result from irrigation efficiency improvements: applying less water to an area and reducing the gap between irrigation and consumptive use also reduces deep percolation and seepage to the groundwater system. Other consequences may stem from behavioral responses and changes in irrigation resulting from these technologies and policies. If less water can be used to produce the same amount of a crop product, growers may be inclined to use the same amount of water and produce more (Lankford, et al., 2020). Additional considerations on the promises, pitfalls, and paradoxes of irrigation efficiency in water management planning are described by Lankford et al. (2020).

Further details on any expansion of the Conservation Practices program are preliminary as of the time of publishing and would need to be developed and refined further during GSP implementation.

8.1.2.2.2. Public Noticing

The Modesto Subbasin GSAs anticipates that public outreach and education on the potential structure of the Conservation Practices program, as well as feasible monitoring and enforcement mechanisms, would be necessary to enable a successful program. Outreach may include public notices, meetings, potential website presence and email announcements. Initial program implementation would likely focus on voluntary compliance while the GSAs or GSAs member agencies consider the necessary elements to begin enforcing the program potentially by 2027 (five years after adopting and submitting the GSP). This date is contingent upon monitoring results and achievement of Interim Milestones.

8.1.2.2.3. Permitting and Regulatory Process

Development of a Conservation Practices program is not a Project as defined by the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) and would therefore not trigger either.

8.1.2.2.4. Expected Benefits

Benefits to Sustainability Indicators

Sustainability indicators benefitting from Conservation Practices include:

- Chronic lowering of groundwater levels – By reducing groundwater demand, this MA would reduce pumping and pumping-related contributions to chronic lowering of groundwater levels.
- Reduction of groundwater storage – Reduced pumping throughout the Subbasin contributes to a smaller rate of reduction in groundwater storage.
- Degraded water quality – This MA does not address this sustainability indicator.
- Land subsidence – Depending on the location of Conservation Practices, reduced pumping stress on local aquifer(s) may reduce the potential for subsidence.

- Depletion of interconnected surface water – Reduced pumping would reduce the potential for negative impacts to surface water flows associated with lowering groundwater levels.

Benefits to Disadvantaged Communities

Benefits to disadvantaged communities overlap with the benefits described above for sustainability indicators. Depending on how they are structured, urban conservation programs may also provide a financial benefit to individual users who reduce their water consumption, either via a lower water bill or reduced demand on a domestic well.

Volumetric Benefits to Subbasin Groundwater System

The volumetric benefit to the groundwater system will depend on the extent to which a Conservation Practices program is implemented and will be further studied if a program is developed by the GSAs.

8.1.2.2.5. Implementation Criteria, Status, and Plan

The implementation timeline has yet to be determined but will be provided in GSP Annual Reports and five-year updates when known. Any future changes in implementation would be communicated with the public and other agencies and would be documented in GSP Annual Reports and five-year updates.

8.1.2.2.6. Water Source and Reliability

This MA does not rely on the supplies from outside the Subbasin because it is a planning effort that will result in conservation benefits. It will support overall supply reliability by reducing groundwater demand in the Subbasin and moving the Subbasin towards sustainability.

8.1.2.2.7. Legal Authority

The Modesto Subbasin GSAs have the authority to develop a Conservation Practices program and may perform implementation and enforcement of practices via implementation of fees for noncompliance or through metering or other methods to quantify groundwater use. Mechanisms for enforcement would be outlined in the Conservation Practices program once developed and are expected to be enforced by the Modesto Subbasin GSAs and/or member agencies.

8.1.2.2.8. Estimated Costs and Funding Plan

Costs for UWMP and AWMP report preparation and submittals are ongoing for urban and agricultural water suppliers, respectively. Any future costs related to additional programming or program enforcement have yet to be developed.

8.1.2.2.9. Management of Groundwater Extractions and Recharge

This MA encourages the conservation of water; this will be applicable during both wet and dry conditions.

8.1.3. Dry Well Mitigation (Management Action 7)

This MA will develop and implement a well mitigation program to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs.

Management Action Description
This Dry Well Mitigation Program provides mitigation measures for water supply wells that have experienced adverse impacts due to declining groundwater levels, as described in **Section 6.3.3.1**. It will cover eligible mitigation claims accrued after January 31, 2022, the date the original GSP was adopted. This program will specify mitigation measures, organization of the program, estimated costs and means of funding. As stated in the Resolution, this program will be developed and implemented no later than January 31, 2026, and will continue into perpetuity unless otherwise directed by the STRGBA GSA.

Dry Well Mitigation Program Measures
This Dry Well Mitigation Program will describe potential short-term and long-term measures to mitigate impacts to domestic wells. Mitigation measures may include, but are not limited to:

- Short-term emergency solutions, such as delivery of bottled water and/or water tanks. (Considered only for temporary mitigation while other actions are in progress.)
- Setting well pump at deeper depths, replacement of well pump, well rehabilitation or replacement of wells (including abandonment of existing wells).
- Connection to a public water system.

Long-term management actions and projects may include, but are not limited to:

- Reduction of groundwater demand around communities reliant on groundwater for drinking water, e.g., create buffer zones for drinking water users.
- Support for managed aquifer recharge near affected communities.

Development of the Dry Well Mitigation Program
The Dry Well Mitigation Program will be developed with potential elements including:

- One or more committees to develop and implement the program on behalf of the STRGBA GSA,
- A fund to support dry well mitigation and implementation of the program,
- Public outreach to publicize this program,
- Definition of eligibility criteria to guide well owners in considering a claims application for mitigation, such as well failure or diminished well yield due to groundwater levels declining below MTs,

- Definition of an application process, including application submittal, review and investigation of an application, decision-making, reporting, and agreements for approved applications.

8.1.3.1. Public Notice

Public outreach and notice will be included in the Dry Well Mitigation Program. In addition, it is anticipated that the program plan will be circulated for public comment prior to being finalized, although final approval of the plan will be made by STRGBA GSA.

8.1.3.2. Permitting and Regulatory Process

Permitting and other regulatory compliance issues will be identified as the program is developed, consistent with CWC §10726.4 (a) (3 & 4).

8.1.3.3. Expected Benefits

Benefits to Sustainability Indicators

This Management Action provides a program for direct mitigation of impacts to domestic wells during early years of GSP implementation.

Benefits to Disadvantaged Communities

The Dry Well Mitigation Program provides significant direct benefits to disadvantaged communities who rely on groundwater and supply wells and additional potential benefits for other sustainability indicators (see analyses in **Section 6.3.3.2**).

Volumetric Benefits to Subbasin Groundwater System

The Dry Well Mitigation Program provides benefits to users of the groundwater basin storage who rely on reliability of groundwater and supply wells.

8.1.3.4. Implementation Criteria, Status, and Plan

These components are described in **Section 8.1.3**. The Dry Well Mitigation Program will be developed and implemented no later than January 31, 2026, and will continue into perpetuity unless otherwise directed by the STRGBA GSA.

8.1.3.5. Water Source and Reliability

This program provides mitigation measures for domestic water supply wells that have experienced adverse impacts due to declining groundwater levels occurring after January 31, 2022, the date of adoption of the Joint GSP. It supports reliable access to groundwater in response to eligible claims at the discretion of the STRGBA GSA.

8.1.3.6. Legal Authority

Legal authority for implementation of this action is provided by STRGBA GSA Resolution No. 2024-XX.

8.1.3.7. Estimated Costs and Funding Plan

As stated in the Resolution, the GSA is establishing baseline funding amounting to $300,000 no later than January 31, 2026.

8.1.3.8. Management of Groundwater Extractions and Recharge

This program involves mitigation for well failures or diminished well yields of existing domestic water supply wells. It is not intended to provide a net increase beyond original well yield. Accordingly, no long-term net increase in groundwater extractions is planned as part of this program. Long-term management actions and projects associated with this program may include support for managed aquifer recharge or in lieu recharge near impacted wells or areas vulnerable to wells going dry.

8.2. PROJECTS OVERVIEW

This section describes the Projects that are in place, planned, or may be considered for implementation in the Subbasin. In accordance with 23 CCR §354.44, Projects were developed to help achieve and maintain the Subbasin sustainability goal by 2042 and avoid undesirable results over the GSP planning and implementation horizon. Broadly, Projects provide tools that can be used to achieve and maintain groundwater sustainability.

Projects were developed to be aligned with State grant program preferences and the Governor's Water Action Plan. Projects, where possible, were designed to provide benefits to surface water users, groundwater users, and disadvantaged communities (DACs) and embrace innovation and new technologies. The GSP prioritizes Projects that contain multi-benefit approaches to address multiple needs and expand the utilization of natural infrastructure, including the Subbasin itself for storage and the natural waterways and floodplains as recharge areas. Projects that are located in targeted areas to achieve maximum recharge results and address water level decline are a point of emphasis for the Subbasin to achieve its sustainability goal. Additionally, the PMAs prioritize coordination among users, STRBGA GSA member agencies, and neighboring basins to improve the region's groundwater conditions while achieving sustainability.

Projects were identified in the Modesto Subbasin through a several-month process involving the STRGBA GSA Technical Advisory Committee. Project information was provided by the STRGBA GSA and compiled into a draft list. The initial set of projects was reviewed further, and a final list of 13 possible projects was identified for inclusion in the GSP. The project types presented in the GSP include direct and in-lieu recharge, water recycling, and improvements to metering infrastructure. Projects are classified into three categories based on project status:

- Group 1 – Projects that are in place and will continue to be implemented and expanded upon by specific participating agencies within the Subbasin to support groundwater management and GSP implementation.
- Group 2 – Projects that are still in the development phase but are anticipated to be implemented shortly after adoption of the GSP. Group 2 Projects are expected to greatly contribute to achieving the Subbasin's sustainability goal and continue supporting GSP implementation efforts. Project statuses and implementation schedules are presented in **Sections 8.2.2** and **8.2.3** of the GSP.

- Supplemental Projects – Projects which have been identified for consideration in the Subbasin for future GSA activities. Supplemental Projects are not currently planned for implementation; however, the GSAs will continue assessing their feasibility to support local goals. Should these Projects be implemented, they would support Group 1 and Group 2 Projects' benefits in attainment of SMCs and support the sustainability goal.

Group 1 and Group 2 Projects are summarized in **Section 8.3: Projects Developed for Implementation**. These Projects were analyzed as part of scenarios using the C2VSimTM model to estimate their benefit to the groundwater system over the projected planning period. The results of the model scenarios are discussed in **Section 8.5**: Plan for Achieving Sustainability.

Supplemental Projects are summarized in **Section 8.4**: **Supplemental Projects**. These Projects are currently not evaluated in detail and are described at a more general level, reflecting their conceptual nature and planning status. Additional feasibility studies and details for these Projects may be developed in the future and their progress will be reported in Annual Reports and Periodic Evaluations should they be implemented.

The Projects identified in this section will be either directly funded and implemented by the Project Proponent or will be subject to grant funding requests through state and federal funding opportunities. Project proponents are listed in **Table 8-2**.

Each Project proponent will manage the permitting and oversee implementation for their own Projects. Inclusion of Projects in this GSP does not forego any obligations regarding individual Project implementation under local, state, or federal regulatory programs. While the GSAs do have an obligation to oversee progress towards groundwater sustainability, they are not the primary regulator of land use, water quality, or environmental Project compliance. It is the responsibility of the Project-implementing agencies to ensure that they are collaborating with outside trustees and regulatory agencies to ensure the Projects are in compliance with all applicable laws and permitting requirements.

The GSAs will collaborate with Project proponents and partners to track progress and support Project implementation. The implementation of PMAs will be enhanced by the development of policies and guidance by the GSAs that consider applicable SMCs and establish PMA-specific monitoring and reporting frameworks to facilitate adaptive management. GSP implementation will include guidelines and protocols to coordinate implementation of Projects in such a way that sustainability is achieved through coordinated efforts between the GSAs, Project proponents and sponsors, and other stakeholders.

Table 8-2 shows the Projects within their respective groups. This represents an initial list of Projects; additional Projects may be added during GSP implementation, with updates included in Annual Reports and the Periodic Evaluations. Detailed descriptions of each Project are provided in **Sections 8.3** [Projects Developed for Near-Term Implementation (Groups 1 and 2)] and **Section 8.4** [Supplemental Projects].

Table 8-2: List of Projects

Number	Proponent(s)	Project Name	Primary Mechanism(s)[1]	Partner(s)	Group	Included in Modeling Scenario
Urban Projects						
1	City of Modesto	Growth Realization of Surface Water Treatment Plant Phase II	In-Lieu Groundwater Recharge	N/A	1	Baseline
2	City of Modesto	Advanced Metering Infrastructure Project (AMI)	Conservation	N/A	1	×
3	City of Modesto	Storm Drain Cross Connection Removal Project	Stormwater Capture	N/A	2	×
4	City of Waterford	Project 3: Waterford/Hickman Surface Water Pump Station and Storage Tank	In-Lieu Groundwater Recharge	City of Modesto, MID	2	×
In-Lieu & Direct Recharge Projects						
5	Non-District East Areas	Modesto Irrigation District In-lieu and Direct Recharge Project	Direct and In-Lieu Groundwater Recharge	Modesto ID	2	×
6	NDE Areas	Oakdale Irrigation District In-lieu and Direct Recharge Project	Direct and In-Lieu Groundwater Recharge	OID	2	×
Flood Mitigation Projects						
7	NDE Areas	Tuolumne River Flood Mitigation and Direct Recharge Project	Direct Groundwater Recharge	Modesto ID	2	×
8	NDE Areas	Dry Creek Flood Mitigation and Direct Recharge Project	Direct Groundwater Recharge	Stanislaus County	2	×
Supplemental Projects						
9	NDE Areas	Stanislaus River Flood Mitigation and Direct Recharge Project	Direct Groundwater Recharge	Stanislaus County	3	
10	City of Modesto	Retention System Standards Specifications Update	Groundwater Recharge	N/A	3	
11	NDE Areas	Recharge Ponds	Groundwater Recharge	N/A	3	
12	City of Oakdale	OID Irrigation and Recharge to Benefit City of Oakdale	Direct or In-Lieu Groundwater Recharge	N/A	3	
13	MID	MID Flood-MAR Projects	Direct Groundwater Recharge	N/A	3	

These Projects are considered as potential projects to support the GSP implementation. They are currently considered as alternative options and are not directly analyzed in this Chapter.

8.3. PROJECTS DEVELOPED FOR NEAR-TERM IMPLEMENTATION (GROUPS 1 AND 2)

This section describes the Projects that were developed for near-term implementation in the Subbasin and are categorized by proponent. This includes all Group 1 and 2 Projects identified in **Table 8-2**. These Projects are either:

- Currently in place and will continue to be implemented by specific participating agencies with future expansions planned, or
- Currently planned and will be implemented or started by specific participating agencies in the next five years.

The Projects developed for near-term implementation were modeled in the C2VSimTM to estimate their potential benefit to the groundwater system over the projected future water budget period. Applicable assumptions used to model each Project are described in each Project description. The results of these model scenarios are discussed in **Section 8.5**: **Plan for Achieving Sustainability**. C2VSimTM modeling results of Group 1 and Group 2 Projects indicate that Projects developed for near-term implementation are expected to be sufficient in the Subbasin for reaching its sustainability goal. However, the GSAs understand that assumptions used in modeling may differ from actual conditions. As a result, the GSAs have begun developing Management Actions that will be implemented to arrest groundwater level declines by 2027 and raise groundwater levels after 2027. These Management Actions currently under development are presented in **Section 8.1: Management Actions**.

Table 8-3 lists all Group 1 and Group 2 Projects described in the subsections that follow. Each Project description is organized to address the applicable regulatory requirements:

- Project Description: 23 CCR §354.44(b)
- Public Noticing: 23 CCR §354.44(b)(1)(B)
- Permitting and Regulatory Process: 23 CCR §354.44(b)(3)
- Expected Benefits: 23 CCR §354.44(b)(4), §354.44(b)(5)
- Implementation Criteria, Status, and Plan: 23 CCR §354.44(b)(1)(A); §354.44(b)(4); §354.44(b)(6)
- Water Source and Reliability: 23 CCR §354.44(b)(6)
- Legal Authority: 23 CCR §354.44(b)(7)
- Estimated Costs and Funding Plan: 23 CCR §354.44(b)(8)
- Management of Groundwater Extractions and Recharge: 23 CCR §354.44(b)(9)

Summary of Criteria for Project Implementation (23 CCR §354.44(b)(1)(A))

As described above, the Group 1 and Group 2 Projects presented in this section are either currently in place or are planned to be initiated within five years. Projects that are currently in place will continue to be implemented over the 2042 Plan horizon.

Table 8-3: Projects Developed for Near-Term Implementation

Location (Proponent)	Project Name	Primary Mechanism(s)[1]
City of Modesto	Project 1: Growth Realization of Surface Water Treatment Plant Phase II	In-Lieu Recharge
	Project 2: Advanced Metering Infrastructure Project (AMI)	Water Conservation
	Project 3: Storm Drain Cross Connection Removal Project	Stormwater Capture
City of Waterford	Project 4: Waterford/Hickman Surface Water Pump Station and Storage Tank	Water Conservation
NDE Areas	Project 5: Modesto Irrigation District In-lieu and Direct Recharge Project	In-lieu and Direct Recharge Project
	Project 6: Oakdale Irrigation District In-lieu and Direct Recharge Project	In-lieu and Direct Recharge Project
	Project 7: Tuolumne River Flood Mitigation and Direct Recharge Project	Flood control and Direct Recharge Project
	Project 8: Dry Creek Flood Mitigation and Direct Recharge Project	Flood control and Direct Recharge Project

[1]The primary mechanism of the Project as conceptualized, although during implementation Projects may be used for multiple functions to support groundwater sustainability and beneficial users.

8.3.1. Urban and Municipal Projects

Projects developed for implementation by urban and municipal proponents in the Modesto Subbasin are summarized in the sections below.

8.3.1.1. Growth Realization of Surface Water Treatment Plant Phase II (Project 1)

8.3.1.1.1. Project Description

The Growth Realization of Surface Water Treatment Plant Phase II project (Project) continues the water purchase agreement between Modesto Irrigation District (MID) and the City of Modesto to meet urban demands. It utilizes the expansion from Phase II of the Modesto Regional Water Treatment Plant (MRWTP).

The Modesto Irrigation District operates the MRWTP to treat surface water for use within the City of Modesto and has been expanding its capacity to meet growing and future water demands from its customers. The Initial Phase (first phase) of the MRWTP Project included the construction of a 30 million-gallon per day (mgd) surface water treatment plant, two 5-million-gallon (MG) terminal storage tanks and associated pumping facility. The pump

station delivered water into the MID transmission system for distribution into either the Del Este or City of Modesto water distribution systems through several MID turnouts. The City of Modesto now owns the Del Este water system.

The Expansion Phase of the MRWTP Project (Phase II) included the construction of a new parallel treatment process consisting of low-pressure membranes, ozone disinfection system, a dissolved air flotation thickener and a new Supervisory Control and Data Acquisition (SCADA) system. The total capacity available at the MRWTP with the completion of the MRWTP Phase II Expansion Project is 60 mgd with a maximum annual supply of up to 67,200 AFY.

The City of Modesto currently operates its treatment and conveyance systems at capacity and has not been able to utilize any additional surface water supply. However, recently the City of Modesto has taken several steps to increase its infrastructural optimization, particularly its water utilization and storage. Some of these steps include: (1) the submittal of a conceptual grant application to modify up to four recharge basins to dilute aquifer contaminants, increase aquifer storage, and improve water quality, and (2) hiring an outside consultant to study system optimization and (3) investigate the feasibility of integrating additional surface water supply for recharge in wet years.

8.3.1.1.2. Public Noticing

The public and other agencies will be notified of the planned or ongoing implementation of Project activities through the outreach and communication channels identified in the GSP and during updates presented at regularly scheduled STRGBA GSA meetings. Noticing will occur as potential activities are being considered for implementation, and as ongoing and planned activities are implemented. Noticing will inform the public and other agencies that the proponent is considering related to the Project and will provide a description of the actions that will be taken.

Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

8.3.1.1.3. Permitting and Regulatory Process

This Project includes the continued transfer of water purchased between MID and the City of Modesto, therefore, permitting and regulatory requirements have already been completed. Future permitting and regulatory processes, if needed to continue or expand Project activities, will be managed through MID and the City of Modesto.

8.3.1.1.4. Expected Benefits

Benefits to Sustainability Indicators

Utilization of purchased water for urban water demands is expected to offset groundwater pumping demands through in-lieu groundwater recharge benefits to the Subbasin. The sustainability indicators expected to benefit from this Project are groundwater levels,

groundwater storage, land subsidence, and interconnected surface water. Project benefits to sustainability indicators will be evaluated through monitoring groundwater levels within the GSP's representative monitoring network.

Benefits to Disadvantaged Communities

Water supplied through this Project directly benefits areas within the City of Modesto's water service areas within the Subbasin, most of which are classified as DACs. By supplementing and diversifying their drinking water supply, this Project will provide an alternate drinking water source and operational flexibility to remove or blend production wells with treated surface water to comply with safe drinking water regulations and meeting MCLs. The additional surface water supply will also reduce groundwater pumping and increase groundwater levels near the communities which can reduce pumping costs and potentially mitigate some groundwater quality concerns. Additionally, benefits to groundwater conditions in the Subbasin are also expected to benefit all local DACs, SDACs (Severely Disadvantaged Communities), and EDAs (Economically Distressed Areas).

Volumetric Benefits to the Subbasin Groundwater System

The expected yield of the benefits from the Project was estimated by simulations performed in the C2VSimTM model. General information and assumptions used to simulate this Project are summarized in the Implementation section below. Additional information is provided in **Section 8.5**: **Plan for Achieving Sustainability**.

This Project has provided an estimated additional 10 mgd (11,200 AFY) starting in 2016 and continuing at 10 mgd through 2020, and then is anticipated to gradually increase to an additional 30 mgd (33,600 AFY) by 2050.

Evaluation of benefits will be based on analysis of without-Project and with-Project measurements supported by modeling. Measured parameters will include surface water deliveries and groundwater levels. Modeling will be done with the C2VSimTM model used in developing the GSP.

8.3.1.1.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline

This Project is being implemented by the City of Modesto and MID and provides 10 mgd and will eventually increase to 30 mgd. This Project includes the expansion of current water transfers between MID and the City of Modesto. Updates on the status and continuation of this agreement and Project will be provided in Annual Reports and Periodic Evaluations.

Implementation Assumptions for Modeling

Impacts to the Subbasin from the Project were already captured in the Projected Conditions Baseline and thus no additional changes were needed to simulate this Project in the modeling scenarios. Baseline conditions include both the expansion of the City of Modesto's footprint and the resulting increase of surface water available for urban use.

8.3.1.1.6. Water Source and Reliability

This Project would use water from MID to supplement water for the City of Modesto for urban demands. The Project has provided an estimated additional 10 mgd (11,200 AFY) starting in 2016 and continuing at 10 mgd through 2020, and then is anticipated to gradually increase to an additional 30 mgd (33,600 AFY) by 2050. These assumptions are included in the model development. Volumetric groundwater benefits will be reported in Annual Reports and Periodic Evaluations.

8.3.1.1.7. Legal Authority

The GSAs, Districts, and Project proponents have the authority to plan and implement Projects through consultation with applicable governing agencies. MID has the authority to construct and continue to operate its water treatment plant and to continue to transfer water to the City of Modesto.

8.3.1.1.8. Estimated Costs and Funding Plan

The Project is a continuation of water transfers from MID to the City of Modesto. Because an agreement and water transfers have already commenced, the estimated costs of this Project are low and include agreement/coordination costs and yearly costs. Infrastructure for this Project has already been constructed and additional infrastructure is not required. The ongoing capital cost for this Project is $4.1M annually, which will increase to $8.3M in FY 2024 when payment towards the principal balance begins. The City of Modesto has been utilizing the Water Fund as a funding source to cover Project costs as part of Project development and continuation. Other funding sources, such as grants (e.g., Prop 1, Prop 68m, NRCS), fees, local cost share, and loans, may be pursued in the future if needed.

8.3.1.1.9. Management of Groundwater Extractions and Recharge

Per 23 CCR § 354.44(b)(9), all PMAs developed for implementation are targeted to maintain the balance of groundwater extractions and recharge to help ensure that lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels and storage in other years.

In-lieu recharge benefits of this Project are expected to increase the use and recharge of available surface water supplies during wetter years, helping to offset potential increases in groundwater pumping during drought when surface water supplies are limited.

8.3.1.2. Advanced Metering Infrastructure Project (AMI) (Project 2)

The Advanced Metering Infrastructure (AMI) Project (Project) involves the installation of AMI throughout the City of Modesto. The City of Modesto is in the initial stages of installing AMI smart meters to support water reduction goals. Smart meters will assist the City of Modesto in notifying residents of leaking pipes and helping to reduce overall domestic water consumption through improved and direct consumer data.

8.3.1.2.1. Project Description

The City of Modesto is in progress of upgrading 75,000 meters to AMI smart meters to support water reduction goals. Smart meters will assist the City of Modesto in providing

analytical tools to manage water usage better such as identifying potential leaks sooner and providing customers with more usable and user-friendly data to manage their water usage.

8.3.1.2.2. Public Noticing

Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

8.3.1.2.3. Permitting and Regulatory Process

Required permitting and regulatory review will be Project-specific and initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated may include, but are not limited to: DWR, SWRCB, CDFW, Flood Board, Regional Water Boards, USFWS, NMFS, LAFCO, County of Stanislaus, and CARB.

8.3.1.2.4. Expected Benefits

Benefits to Sustainability Indicators

The sustainability indicators expected to benefit from the Project are groundwater levels, groundwater storage, land subsidence, and interconnected surface water.

Benefits to Disadvantaged Communities

This Project would apply to and benefit all water customers served by the City of Modesto, most of which are considered a DAC or SDAC.

Volumetric Benefits to the Subbasin Groundwater System

The Project is currently in development and AMI is actively being installed throughout the Project area. As a result, the expected yield of this Project has not been determined. Volumetric benefits will be reported in Annual Reports and Periodic Evaluations. However, the Project is expected to reduce water use in the City of Modesto to meet future water use mandates and conservation goals.

Evaluation of benefits will be based on analysis of without-Project and with-Project effects on the SGMA sustainability indicators. Project is evaluated as part of C2VSimTM modeling scenarios used to assess the benefits and impacts on the Subbasin.

8.3.1.2.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline

This Project would install AMI smart meters to support water reduction goals by helping the City of Modesto obtain the analytical tools to manage water usage better. The planning phase was completed between 2022 and 2023. Installation activities began in 2024 and Project completion is anticipated in 2026.

Implementation Assumptions for Modeling
The Project was modeled in the C2VSimTM model. Additional information on Project-related modeling is described in **Section 8.5**: **Plan for Achieving Sustainability**.

The following information and assumptions were used to simulate implementation of the Project:

- Modeled as part of scenario of ongoing conservation efforts within the City of Modesto. Simulated change includes the reduction of urban water demand from 228 gallons per person per day (GPCD) (2015 City of Modesto UWMP) to 175 GPCD (2020 City of Modesto UWMP) (West Yost Associates, 2016 & 2021).

8.3.1.2.6. Water Source and Reliability
This Project would not directly use a water source but would help to manage and enhance use of existing water City of Modesto supplies.

8.3.1.2.7. Legal Authority
The GSAs, Districts, and Project proponents have the authority to plan and implement Projects.

8.3.1.2.8. Estimated Costs and Funding Plan

The anticipated cost of this Project is estimated to be $20 million. Any updates or changes to the estimated costs will be reported in Annual Reports and Periodic Evaluations. Funding for planning and development of the Project was sourced through the City of Modesto's Water Fund. The Project proponent will identify funding sources to cover ongoing development and implementation costs as part of Project development. These may include additional funding through the Water Fund, grants, fees, loans, and other sources.

8.3.1.2.9. Management of Groundwater Extractions and Recharge
AMI does not rely on a water source (e.g., no groundwater extraction or recharge is involved), but the Project would help manage and enhance use of existing City of Modesto water supplies.

8.3.1.3. Storm Drain Cross Connection Removal Project (Project 3)

8.3.1.3.1. Project Description
The Storm Drain Cross Connection Removal Project (Project) captures, treats, and infiltrates stormwater within the City of Modesto. The Project components use low impact development (LID) techniques including bio-retention planters, infiltration trenches, and underground retention basins within city parks for groundwater recharge. Additional benefits include the reduction of stormwater flows to the City of Modesto's wastewater treatment plant and sanitary sewer overflows, reduction of localized flooding, and improved water quality within Dry Creek and the Lower Tuolumne River. Each project component is located in areas with no positive storm drainage systems within the City of Modesto's jurisdiction. The Project components are a cost effective and LID alternative to constructing

detention basins in undeveloped portions of the city and constructing miles of storm drains. This Project also includes the removal of failed dry wells and storm to sanitary sewer cross connections. The Project components, status, and expected recharge benefits are included in **Table 8-4**.

Table 8-4: Storm Drain Cross Connection Removal Project Components, Status, and Expected Recharge Benefit

Component	Status	Expected Recharge Benefit
Garrison Park	Completed	12 AFY
Roosevelt Park	Completed	29 AFY
JM Pike Park	Construction	53 AFY
Catherine Everett Park	Planning/Construction (2026 completion)	29 AFY
Other	Planning	125 AFY
Removal of failed dry wells and storm to sanitary sewer cross connection	In Progress	N/A

8.3.1.3.2. Public Noticing

The public and other agencies will be notified of the planned or ongoing implementation of Project activities through the outreach and communication channels identified in the GSP, during the preparation process of the PEIR (if applicable), and during updates presented at regularly scheduled STRGBA GSA meetings. Noticing will occur as potential activities are being considered for implementation, and as ongoing and planned activities are implemented. Noticing will inform the public and other agencies that the proponent is considering modifications to the Project and will provide a description of the actions that will be taken.

Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

8.3.1.3.3. Permitting and Regulatory Process

Required permitting and regulatory review is being initiated as necessary through consultation with applicable governing agencies. Governing agencies that may be consulted for this Project include, but are not limited to: DWR, SWRCB, the California Department of Fish and Wildlife (CDFW), the Central Valley Flood Protection Board (Flood Board), Regional Water Boards, the United States Bureau of Reclamation (Reclamation or USBR), the United States Army Corps of Engineers (USACE), the United States Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), Local Agency Formation

Commissions (LAFCo), the County of Stanislaus and/or Tuolumne, and the California Air Resources Board (CARB).

8.3.1.3.4. Expected Benefits

Benefits to Sustainability Indicators
Stormwater flows going to sanitary sewer systems will be disconnected and rerouted to provide direct groundwater recharge. Sustainability indicators expected to benefit from this Project are groundwater levels, groundwater storage, land subsidence, and interconnected surface water. All benefits to sustainability indicators will be evaluated through groundwater monitoring at nearby monitoring sites as identified in **Section 7.1** of the GSP.

Benefits to Disadvantaged Communities
The Storm Drain Cross Connection Removal Project is expected to provide direct recharge in and around the City of Modesto. Most communities in the Modesto Subbasin are classified as DACs, SDACs, or EDAs (according to 2018 census data, evaluated by place, tract, and block group). Depending on which specific parcels receive surface water deliveries, this Project may directly benefit specific DACs in this area. In addition, maintenance or improvement of groundwater levels will help to protect beneficial groundwater use by rural domestic wells from potential adverse impacts related to chronic groundwater level decline. Benefits to groundwater conditions in the Subbasin are also expected to benefit all DACs, SDACs, and EDAs.

Volumetric Benefits to the Subbasin Groundwater System
The expected yield of the Project was estimated by simulations run in the C2VSimTM model. General information and assumptions used to simulate this Project are summarized in the following section. Additional information is provided in **Section 8.5: Plan for Achieving Sustainability**.

On average across all years, the Project is expected to provide approximately 248 AFY of recharge benefit to the Subbasin.

Evaluation of benefits will be based on analysis of without-Project and with-Project measurements supported by modeling. Measured parameters will include surface water deliveries and groundwater levels. Modeling may be done with the C2VSimTM model used for GSP development to evaluate volumetric benefits.

8.3.1.3.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline
This Project consists of several different components of a larger program which has relied on the success of previous grant funds. For the components included in this Project, work is already in progress. The JM Pike Park component is currently under construction. Overall, the final storm to sewer cross connection removals for the program are estimated to be completed in 2061.

Implementation Assumptions for Modeling
The Storm Drian Cross Connection Removal Project has been modeled in the C2VSimTM model. Additional information about Project-related modeling is described in **Section 8.5**: **Plan for Achieving Sustainability**.

The following general information and assumptions were used to simulate implementation of the Project:

- Volume of water: 41 AFY were provided during the first 10 years of simulation, 70 AFY during the following 5 years of simulation, and 248 AFY for the rest of the simulation, distributed evenly between the months of October and April. The annual average during the 50-year simulation period would be 189 AFY.
- The total volume would be provided as direct recharge.

8.3.1.3.6. Water Source and Reliability
This Project would utilize flows that become available from disconnecting storm drain flows going to sanitary sewer systems and redirecting them for groundwater recharge. Stormwater flows are more dependent on precipitation events. It is anticipated that annual contributions from this project will collect approximately 12 AF from Garrison Park, 29 AF from Roosevelt Park, 53 AF from JM Pike Park, 29 AF from Catherine Everett, and an additional 125 AF from other areas. Changes to water source availability will be identified as the Project is evaluated further. This information will be reported in Annual Reports and Periodic Evaluations.

8.3.1.3.7. Legal Authority
The GSAs, Districts, and Project proponents have the authority to plan and implement Projects. Required permitting and regulatory review will be Project-specific and initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated may include, but is not limited to: DWR, SWRCB, CDFW, Flood Board, Regional Water Boards, USFWS, NMFS, LAFCO, Stanislaus County, and CARB.

8.3.1.3.8. Estimated Costs and Funding Plan
Potential costs of this Project include construction or improvements to new or existing recharge basin and alteration of current stormwater and sewer system connections. The estimated cost for this Project is $40 million for all components. Funding for Project development was sourced through the City of Modesto's Sewer Fund and grant funding. The City of Modesto will continue utilizing the Sewer Fund during Project development and implementation and will also identify additional funding sources to cover Project costs as part of development. These may include grants (e.g., Prop 1, Prop 68, NRCS), fees, local cost share, loans and other sources.

8.3.1.3.9. Management of Groundwater Extractions and Recharge
Per 23 CCR § 354.44(b)(9), all PMAs developed for implementation are expected to maintain the balance of groundwater extractions and recharge to ensure that lowering of

groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels and storage in other years.

8.3.1.4. Surface Water Pump Station and Storage Tank (Project 4)

8.3.1.4.1. Project Description

The Surface Water Pump Station and Storage Tank project (Project entails connecting the City of Waterford's water supply system to MID's water treatment plant and potable surface water supply system. The Project includes several components, described in order of the flow of the surface water. Surface water will be diverted from MID's distribution network at a pipeline turn-out located at the corner of Tim Bell and Vineyard Road, northeast of the City of Waterford. The surface water will be piped into a one-million-gallon storage tank that will be constructed at this intersection. A pump station at this location and transmission line will also be constructed that transports the water to Yosemite Boulevard in the City of Waterford. This Project involves water supply agreements between Modesto Irrigation District, the City of Modesto, and the City of Waterford, the details of which are currently being negotiated.

Another component of this Project entails combining the City of Waterford's distribution network and providing water to the disadvantaged community of Hickman by 2023. While Hickman is in the Turlock Subbasin, supplying surface water to the community would support the Modesto Subbasin's sustainability goals of mitigating stream depletions along the Tuolumne River and protecting domestic wells by reinforcing groundwater levels along the Subbasin boundary.

8.3.1.4.2. Public Noticing

The public and other agencies will be notified of the planned or ongoing implementation of Project activities through the outreach and communication channels identified in the GSP, during the preparation process of the PEIR (if applicable), and during updates presented at regularly scheduled STRGBA GSA meetings. Noticing will occur as potential activities are being considered for implementation, and as ongoing and planned activities are implemented. Noticing will inform the public and other agencies that the proponent is considering modifications to the Project and will provide a description of the actions that will be taken.

Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

8.3.1.4.3. Permitting and Regulatory Process

Required permitting and regulatory review would be initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated may include, but are not limited to: DWR, SWRCB, CDFW, Flood Board, Regional Water Boards, USFWS, NMFS, LAFCO, Counties of Stanislaus and/or Tuolumne, and CARB. Specific

permitting and regulatory processes that may potentially affect the construction of Project-related infrastructure include, but are not limited to:

- USACE Section 404 Permits (potential exemption under Section 404(f)(1)(C) of Clean Water Act)
- Regional Water Quality Control Board Section 401 Water Quality Certification (not required if exempt from USACE Section 404)
- SWRCB Construction General Permit and Storm Water Pollution Prevention Plan (SWPPP)
- State Historic Preservation Office (SHPO) and National Historic Preservation Act (NHPA) Section 106 Coordination
- CEQA Environmental Review Process
- California Endangered Species Act (CESA) Consultation
- Endangered Species Act (ESA) Compliance
- National Environmental Policy Act (NEPA) Compliance (expected to require either an Environmental Impact Report and Negative Declaration or Mitigated Negative Declaration)

8.3.1.4.4. Expected Benefits

Benefits to Sustainability Indicators

Utilization of surface water for urban water demands in Waterford and Hickman is expected to offset groundwater pumping demands, with in-lieu groundwater recharge benefits to the Subbasin. Because Waterford and Hickman use a combined system, Hickman (which lies in the Turlock Subbasin) will also benefit. Benefits in this area are seen in Tuolumne River stream conditions and will further protect domestic wells in both the Modesto and Turlock Subbasins. The sustainability indicators expected to benefit from this project are groundwater levels, groundwater storage, land subsidence, and interconnected surface water. All benefits to sustainability indicators in the Subbasin will be evaluated through groundwater monitoring at nearby monitoring sites, identified in the GSP.

Benefits to Disadvantaged Communities

The Waterford/Hickman Surface Water Pump Station and Storage Tank Project directly benefits Waterford and Hickman, both classified as DACs, by supplementing and diversifying their drinking water supply. This Project will provide an alternate drinking water source in case of infrastructure or contamination concerns with the communities' groundwater production wells. The additional surface water supply will also reduce groundwater pumping and increase groundwater levels near the communities which can reduce pumping costs, decrease the likelihood of dewatering domestic wells, and potentially mitigate some groundwater quality concerns. Additionally, benefits to groundwater conditions in the Subbasin are also expected to benefit all DACs, SDACs, and EDAs in the Modesto Subbasin.

Volumetric Benefits to the Subbasin Groundwater System
The expected yield of the Waterford/Hickman Surface Water Pump Station and Storage Tank was estimated through simulations in the C2VSimTM model. General information and assumptions used to simulate this Project are summarized in the Implementation section below. Additional information is provided in **Section 8.5: Plan for Achieving Sustainability**.

It is assumed that MID will provide 900 AFY to Waterford and Hickman, except for critical years which will provide a partial allotment (approximately 750 AFY in critical years).

Evaluation of benefits will be based on analysis of without-Project and with-Project measurements supported by modeling. Measured parameters will include surface water deliveries and groundwater levels. Modeling will be done with the C2VSimTM model used for GSP development.

8.3.1.4.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline
The Waterford/Hickman Surface Water Pump Station and Storage Tank will be implemented by the City of Waterford. Waterford will oversee the Project financing and funding, permitting, and construction. The Project will require an agreement(s) between MID and the City of Modesto to purchase treated surface water. Negotiations are underway but have not been concluded. Once negotiations are finalized and financing is secured, then design and subsequent construction will begin. This Project is currently in the early conceptual stage. Thus, the start and completion dates for this Project have yet to be determined and will be provided in GSP Annual Reports and Periodic Evaluations when known. Once the Project construction is complete, it is expected that MID would provide 900 AFY to Waterford and Hickman in all water years except critical years which will provide a partial allocation.

Implementation Assumptions for Modeling
The Waterford/Hickman Surface Water Pump Station and Storage Tank has been modeled in the C2VSimTM model. Additional information about Project-related modeling is described in **Section 8.5: Plan for Achieving Sustainability**.

The following general information and assumptions were used to simulate implementation of the Project:

- Estimated volume of surface water deliveries: Proportional to the MID irrigation water allotment based on water year type, not to exceed 900 AFY. The surface water deliveries are distributed throughout the months proportional to monthly urban demands.
- Area receiving surface water deliveries: Surface water is delivered to the jurisdictional extent of the Hickman and Waterford communities, consistent with the extent in the historical C2VSimTM model. Surface water is distributed between Waterford and Hickman proportionally to simulated demands of each community.

- Water source: It is assumed that all surface water is diverted from MID's distribution system, with no adjustment to modeled MID diversions, spillage, and seepage.
- Groundwater pumping: It is assumed that groundwater production is reduced by the volume of surface water deliveries which is distributed evenly among all wells in Waterford and Hickman.

8.3.1.4.6. Water Source and Reliability

The Waterford/Hickman Surface Water Pump Station and Storage Tank will use water diverted from MID's surface water distribution network. MID has existing water rights on the Tuolumne River and existing storage and conveyance facilities that afford secure surface water supplies. Surface water is expected to be available for this Project in all hydrologic years, proportional to MID irrigation allotment, while still meeting the demand of existing MID customers.

8.3.1.4.7. Legal Authority

The GSAs, Districts, and Project proponents have the authority to plan and implement Projects through consultation with applicable governing agencies. MID and the City of Modesto have the authority to sell surface water to the City of Waterford.

8.3.1.4.8. Estimated Costs and Funding Plan

Costs of this Project include right of way purchase, environmental permitting, design, construction, and Project management costs. The estimated cost is approximately $8.5 million. However, this Project is currently in the early conceptual stage and a more refined cost can be reported in GSP Annual Reports and Periodic Evaluations when known. It is anticipated that the City of Waterford would identify grant funding sources to cover Project costs as part of development.

8.3.1.4.9. Management of Groundwater Extractions and Recharge

Per 23 CCR § 354.44(b)(9), all PMAs developed for implementation are expected to maintain the balance of groundwater extractions and recharge to ensure that lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels and storage in other years.

In-lieu recharge benefits from this Project are expected to increase the use and recharge of available surface water supplies, helping to offset any potential increases in groundwater pumping during drought when surface water supplies are limited.

8.3.2. In-Lieu & Direct Recharge Projects

8.3.2.1. Modesto Irrigation District In-Lieu and Direct Recharge Project (Project 5)

8.3.2.1.1. Project Description

The Modesto Irrigation District In-Lieu and Direct Recharge Project (Project), also known as the Long-Term Groundwater Replenishment Program (GRP), is intended to be a cooperative long-term Project between MID and the non-district east (NDE) landowners. The purpose of

this Project is to allow MID to facilitate recharge for NDE landowners during times and conditions that will not impact MID's existing agricultural and urban customers. The Project would be operated separately but coordinated with the Oakdale Irrigation District In-lieu and Direct Recharge Project, which shares a similar goal of facilitating groundwater sustainability in the NDE areas.

Developed agriculture in the NDE areas of the Subbasin is estimated to be approximately 36,000 acres, of which approximately 30,000 acres are permanent crops such as deciduous fruits and nuts. With limited exception, the entire NDE area is solely reliant on groundwater from the Subbasin. This Project involves the delivery of approximately 60,000 AF of surface water from the Tuolumne River in Wet and Above Normal water years (WYs). Deliveries would be supplied through a number of new points of diversions on MID's existing irrigation conveyance infrastructure and subsequent conveyance through newly constructed private irrigation conveyance infrastructure. Water supply would be provided to NDE during the growing season in the form of in-lieu and direct recharge. Historically (1972-2020), Wet and Above Normal WYs have occurred approximately 47% of the time within the Subbasin. Under the current Final Environmental Impact Statement for the relicensing of Don Pedro Reservoir, there is estimated to be approximately 1,500,000 AF of surface water in Wet WYs and 620,000 AF of surface water in Above Normal WYs in the Tuolumne River. These water volumes exceed what is necessary to meet existing customer demands (all Tuolumne River Partners) and the recommended instream flow obligations. As a result, 60,000 AF of Tuolumne River surface water to applicable NDE areas amounts to approximately 4% and 10% of available surface water supply for Wet and Above Normal WYs, respectively. Project operation is intended to make surface water delivery available to applicable NDE areas in Above Normal and Wet WYs.

8.3.2.1.2. Public Noticing

The public and other agencies will be notified of the planned or ongoing implementation of Project activities through the outreach and communication channels identified in the GSP, during the preparation process of the PEIR (if applicable), and during updates presented at regularly scheduled STRGBA GSA meetings. Noticing will occur as potential activities are being considered for implementation, and as ongoing and planned activities are implemented. Noticing will inform the public and other agencies that the proponent is considering or will be implementing the Project and will provide a description of the actions that will be taken.

During the development of the Revised GSP, MID has held multiple meetings and workshops to promote the program:

- Landowner Meeting held March 4, 2024, at MID Downtown Office
- Landowner Meeting held March 5, 2024, at Waterford Council Chambers
- Long-term Groundwater Replenishment Program Workshop held April 23, 2024, at MID Downtown Office
- Long-term Groundwater Replenishment Program Workshop held April 24, 2024, at Waterford Council Chambers

Additionally, MID has promoted the program at STRGBA meetings and Stanislaus County meetings, as well as issued social media notifications and postcard fliers.

Additional public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

8.3.2.1.3. Permitting and Regulatory Process

Required permitting and regulatory review would be initiated as necessary through consultation with applicable governing agencies. Surface water would be diverted for this Project by MID through existing pre- and post-1914 water rights. Governing agencies that may be consulted for this Project include but are not limited to the State Water Resources Control Board (SWRCB), Stanislaus and/or Tuolumne Counties of Stanislaus and/or Tuolumne, and DWR.

If necessary for field flooding, the Project proponent will obtain land grading permits from the Stanislaus and/or Tuolumne Counties. Environmental review under CEQA may also be required for the Projects.

8.3.2.1.4. Expected Benefits

Benefits to Sustainability Indicators

Surface water deliveries during the non-irrigation season are expected to provide direct recharge to the Subbasin. For fields that are irrigated using groundwater, surface water deliveries during the irrigation season are expected to offset groundwater demand and provide in-lieu groundwater recharge benefits. In both cases, the sustainability indicators expected to benefit from this Project are groundwater levels, groundwater storage, land subsidence, and interconnected surface water. All benefits to sustainability indicators in the Subbasin will be evaluated through groundwater monitoring at nearby monitoring sites, identified in the GSP.

Benefits to Disadvantaged Communities

The MID In-Lieu and Direct Recharge Project is expected to provide direct or in-lieu recharge for use in the NDE area. Most communities in the Subbasin, particularly in the NDE area, are classified as DACs, SDACs, or EDAs (according to 2018 census data, evaluated by place, tract, and block group). Depending on which specific parcels receive surface water deliveries, this Project may directly benefit certain DACs in this area. In addition, maintenance or improvement of groundwater levels will help to protect beneficial groundwater use by rural domestic wells from potential adverse impacts related to groundwater level decline. Benefits to groundwater conditions in the Subbasin are also expected to benefit all DACs, SDACs, and EDAs.

Volumetric Benefits to the Subbasin Groundwater System

The expected yield of the Project was estimated through simulations in the C2VSimTM model. General information and assumptions used to simulate this project are summarized

in the following section. Additional information is provided in **Section 8.5: Plan for Achieving Sustainability**.

On average across all years, the MID In-Lieu and Direct Recharge Project is expected to provide an annual benefit of 28,800 AFY to the Subbasin. These benefits would accrue in years with Wet or Above Normal hydrologic conditions when sufficient water is expected to be available for on-farm recharge (approximately 47 percent of years historically). In Above Normal and Wet WYs, approximately 60,000 AFY of groundwater recharge is expected to be supplied.

Evaluation of benefits will be based on analysis of without-Project and with-Project measurements supported by modeling. Measured parameters will include surface water deliveries and groundwater levels. Modeling will be done with the C2VSimTM model used for GSP development.

8.3.2.1.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline

The Project involves the delivery of surface water from the Tuolumne River in Wet and Above Normal WYs through a limited number of new points of diversions on MID's existing irrigation conveyance infrastructure and subsequent conveyance through existing and newly constructed private irrigation conveyance infrastructure for in-lieu and direct recharge during the growing season. Modeling results indicate that that most of the surface water made available will be used to meet agricultural demand during the irrigation season throughout the NDE area. This in-lieu use is intended to reduce the pumping needed in this area of the Subbasin in Wet and Above Normal WYs.

On January 23, 2024, the MID Board of Directors approved the implementation of the GRP and adopted an Addendum to the Modesto Irrigation District Comprehensive Water Resources Management Plan Final Programmatic Environmental Impact Report which incorporated the Long-term Groundwater Replenishment Program. Project activities, such as surface water deliveries, are anticipated to begin January 2024.

The GRP is planned to be expanded to parcels outside of the MID Service Boundary but within the Modesto Subbasin following adoption of the Revised GSP. Project updates will be provided in Annual Reports and Periodic Evaluations.

Implementation Assumptions for Modeling

The MID In-lieu and Direct Recharge Project has been modeled in the C2VSimTM model. Additional information about Project-related modeling is described in **Section 8.5: Plan for Achieving Sustainability.**

The following general information and assumptions were used to simulate implementation of the Project:

- Volume of water: 60,000 AFY were provided during Wet and Above Normal WYs, distributed in the months following the demand distribution. During the 50-year simulation period, the average annual water supply from this Project would be 28,800 AFY.
- One third of the total volume would be provided as direct recharge and the remainder would be delivered as in-lieu recharge.
- The location of the in-lieu and direct recharge would be within the NDE area, located near existing MID conveyance facilities and those parcels with low/medium infrastructure requirements.

8.3.2.1.6. Water Source and Reliability

The Project involves the delivery of approximately 60,000 AF of surface water from the Tuolumne River in Wet and Above Normal WYs. Under the current Final Environmental Impact Statement for the relicensing of Don Pedro Reservoir, there is estimated to be approximately 1,500,000 AF of surface water in Wet WYs and 620,000 AF of surface water in Above Normal WYs in the Tuolumne River above and beyond that necessary to meeting existing customer demands (all Tuolumne River Partners) and the recommended instream flow obligations. As a result, 60,000 AF of Tuolumne River surface water to applicable NDE areas amounts to approximately 4% and 10% of available surface water supply respectively, for Wet and Above Normal WYs.

8.3.2.1.7. Legal Authority

The GSAs, Districts, and Project proponents have the authority to plan and implement Projects through consultation with applicable governing agencies. MID has the authority to contract with and provide deliveries to parcels in the NDE area, and individual irrigators have the authority to apply surface water to their fields for on-farm recharge.

8.3.2.1.8. Estimated Costs and Funding Plan

Potential costs of this Project may include coordination and administration, financial, or other incentives to encourage on-farm recharge, field preparation to enhance flooding, and other potential on-field monitoring equipment. Costs per site may vary depending on changes in Project implementation and incentives. Slightly higher costs per site would likely be incurred in the first year an irrigator participates, as more coordination and site preparation may be required. The total costs of the Project will vary over time, depending on the number of sites receiving water, the extent to which irrigators require coordination and support, and any applicable Project incentives.

This Project is currently in the early conceptual stage. Thus, the anticipated costs contained herein are planning level costs and subject to change. However, high-level initial estimates are on the order of $53,340,000 – $75,000,000 of new conveyance infrastructure. Most costs are anticipated to be borne by the NDE participants; however, member agencies of the STRGBA GSA may identify funding sources to cover Project costs as part of development. These may include grants (e.g., Prop 1, Prop 68, NRCS, others), fees, and loans. Participating

NDE landowners are ultimately responsible for payment and installation of their private conveyance systems and the volumetric rate of MID surface water deliveries.

8.3.2.1.9. Management of Groundwater Extractions and Recharge

Per 23 CCR § 354.44(b)(9), all PMAs developed for implementation are targeted to maintain the balance of groundwater extractions and recharge to help ensure that lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels and storage in other years.

In-lieu recharge benefits of this Project are expected to increase the use and recharge of available surface water supplies during wetter years, helping to offset potential increases in groundwater pumping during drought when surface water supplies are limited.

8.3.2.2. Oakdale Irrigation District In-lieu and Direct Recharge Project (Project 6)

8.3.2.2.1. Project Description

The Oakdale Irrigation District In-lieu and Direct Recharge Project (Project) is intended to be a cooperative long-term Project between OID and the NDE east landowners. The purpose of this Project is to allow OID to facilitate recharge for NDE landowners during times and conditions that will not impact OID's existing agricultural customers. The Project is separate from but similar to the Modesto Irrigation District In-Lieu and Direct Recharge Project and shares a similar goal of facilitating groundwater sustainability in the NDE areas. Coordination between the two Districts is ongoing and these Projects may be operated in tandem, utilizing the MID-OID interconnected distribution systems to potentially work together and convey water to the NDE or others from OID.

Developed agriculture in the NDE areas of the Subbasin is estimated to be approximately 36,000 acres, of which approximately 30,000 acres are permanent crops such as deciduous fruits and nuts. With limited exception, the NDE area is solely reliant on groundwater from the Subbasin. The Project is anticipated to provide approximately 20,000 AF of surface water from the Stanislaus River in all WYs except Critically Dry WYs. Deliveries would be supplied through several existing and new points of diversions on OID's existing irrigation conveyance infrastructure and subsequent conveyance through newly constructed infrastructure. Water supply benefits would be provided to NDE between March 1st and September 31st in the form of in-lieu and direct recharge. Some direct recharge is expected to occur as canal or reservoir seepage in the expanded conveyance network. The Project will not deliver water supply to the NDE between October 1st- March 1st The OID Board of Directors would consider and define the volume of water (if any) available to this Project on an annual basis outside of the Project's scope (Critically Dry WYs). Significant progress has been made with this Project since the adoption of the 2022 Modesto Subbasin GSP. The 10-Year out-of-District Water Sales Program (10-Year Program) began in 2023 and includes 4,882 irrigated acres in the Modesto Subbasin within the NDE. Under the 10-Year Program, participating landowners are required to purchase a minimum of 1.5 acre-feet per irrigated acre during each year that surplus surface water is available from OID. The landowners also have the opportunity to purchase and use additional surplus surface water throughout the

irrigation season if available. Under the 10-Year Program, a minimum of 7,300 acre-feet will be purchased each year that out-of-District water is available.

The Paulsell Lateral Expansion (Paulsell Expansion) has been approved by OID and will be funded at least in part with $14.4M of SGMA Implementation Grant funding that was awarded to OID in October 2023. Working in sync with the 10-Year Program, the Paulsell Expansion will rehabilitate, automate, and expand the Paulsell Lateral, largely within the existing right of way, to accommodate an additional 150 cfs, allowing OID to deliver up to 20,000 AFY of available surface water for in-lieu and direct recharge. Infrastructure improvements will also provide further in-lieu recharge benefits by improving irrigation service to in-District lands served by OID, but that have resorted in part to pumping groundwater to supplement irrigation due to service issues on the Paulsell Lateral. In total, the Paulsell Expansion is expected to provide in-lieu and direct recharge benefits across 11,000 irrigated acres in the Subbasin.

Historically (2010-2019), OID diverts between approximately 165,000 AF to 246,000 AF, with an overall average of approximately 208,000 AF. Given OID's existing surface water rights of 300,000 AF from the Stanislaus River and its overall average system inflows, the surface water deliveries estimated from this Project amounts to approximately 22% of the total available surface water supply. As a result, this Project provides the opportunity for OID to meet a portion of the NDE area needs.

Voluntary transfers of water have provided a basis for funding improvements to the OID distribution system under the District's Water Resources Plan. As water is conserved and transferred, OID receives revenue and implements additional improvements, resulting in additional water conservation. More information on OID's WRP implementation to date can be found in Section 8 of OID's AWMP. Both the OID WRP and AWMP are available for reference on OID's website (www.oakdaleirrigation.com). OID has participated in numerous water transfers in the past and continues to seek opportunities for mutually beneficial temporary transfer agreements with water users (agricultural, urban, and others) outside of the District.

8.3.2.2.2. Public Noticing

The public and other agencies will continue to be notified of the planned or ongoing implementation of project activities through the outreach and communication channels identified in the GSP, during the preparation process of the PEIR (if applicable), and during updates presented at regularly scheduled STRGBA GSA meetings. Noticing will occur as potential activities are being considered for implementation, and as ongoing and planned activities are implemented. Noticing will inform the public and other agencies that the proponent is considering or will be implementing the project and will provide a description of the actions that will be taken.

Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

Review and approval of both the 10-Year Program and the Paulsell Expansion has occurred at public OID Board of Directors meetings. Numerous presentations of both the 10-Year Program and the Paulsell Expansion have occurred at other Board meetings, workshops, and venues. Landowners impacted by the Paulsell Expansion and those participating in the 10-Year Program continue to be updated by OID staff about project progress on a regular basis.

8.3.2.2.3. Permitting and Regulatory Process

Required permitting and regulatory review would be initiated as necessary through consultation with applicable governing agencies. Surface water would be diverted through this Project by OID via existing water rights. Governing agencies that may be consulted for this Project include but are not limited to the State Water Resources Control Board (SWRCB), Stanislaus and/or Tuolumne Counties, USBR, and DWR.

If necessary, the Project proponent will obtain any applicable permits from the Tuolumne and/or Stanislaus Counties. Recharge projects and construction or expansion of conveyance facilities may also require an environmental review process under CEQA. CEQA review has been completed for both the 10-Year Program and the Paulsell Expansion.

8.3.2.2.4. Expected Benefits

Benefits to Sustainability Indicators

For fields that are irrigated using groundwater, surface water deliveries during the irrigation season are expected to offset groundwater demand and provide in-lieu groundwater recharge benefits. Some additional recharge is anticipated to occur from canal and reservoir seepage in the expanded conveyance network. The sustainability indicators expected to benefit from this Project are groundwater levels, groundwater storage, land subsidence, and interconnected surface water. All benefits to sustainability indicators in the Subbasin will be evaluated through groundwater monitoring at nearby monitoring sites, identified in the GSP.

Benefits to Disadvantaged Communities

The Oakdale Irrigation District In-Lieu and Direct Recharge Project is expected to provide direct and in-lieu recharge for parcels in the NDE area. Several communities in the Subbasin, including the NDE area, are classified as DACs, SDACs, or EDAs (according to 2018 census data, evaluated by place, tract, and block group). Depending on which specific parcels receive surface water deliveries, this Project may directly benefit specific DACs in this area. In addition, maintenance or improvement of groundwater levels will help to protect beneficial groundwater use by rural domestic wells from potential adverse impacts related to groundwater level decline. Benefits to groundwater conditions in the Subbasin are also expected to benefit all DACs, SDACs, and EDAs.

Volumetric Benefits to the Subbasin Groundwater System

The expected yield of the Project was estimated through simulations using the C2VSimTM model. General information and assumptions used to simulate this Project are summarized in the following section. Additional information is provided in **Section 8.5: Plan for Achieving Sustainability**.

On average across all years, the Project is expected to provide approximately 14,400 AFY of recharge benefit to the Subbasin. These benefits would accrue in all hydrologic conditions except for Critically Dry WYs (approximately 72 percent of years historically). In non-Critically Dry WYs, approximately 20,000 AFY of groundwater recharge is expected to occur.

Evaluation of benefits will be based on analysis of without-Project and with-Project measurements supported by modeling. Measured parameters will include surface water deliveries, groundwater levels, and other parameters to be determined. Modeling has been done with the C2VSimTM model used for GSP development and will continue to be analyzed during plan implementation.

8.3.2.2.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline

The Project involves the delivery of surface water from the Stanislaus River in Wet, Above Normal, Below Normal and Dry WYs through a limited number of existing and new points of diversions off OID's existing irrigation conveyance infrastructure and subsequent newly constructed private irrigation conveyance infrastructure for in-lieu and direct recharge during the growing season. The 10-Year Program has entered its second year and the 10-Year term ends in 2032, at which time the OID Board of Directors may decide to extend the program at the request of the participants for another 10-Year term. New turnouts for participants without existing service connections have been installed on the OID canals and it is expected that those landowners will have their private conveyance systems connected no later than the start of the 2025 irrigation season.

Construction of the Paulsell Expansion is proposed to start in Fall 2024 with completion by Spring 2026.

Implementation Assumptions for Modeling

The OID In-Lieu and Direct Recharge Project has been modeled in the C2VSimTM model. Additional information about Project-related modeling is described in **Section 8.5: Plan for Achieving Sustainability.**

The following general information and assumptions were used to simulate implementation of the Project:

- Volume of water: Up to 20,000 AFY of water was made available in all years except critically dry hydrologic year types. Surface water deliveries were made within the irrigation season, distributed based on agricultural demand. The annual average water supply during the 50-year simulation period would be approximately 14,400 AFY.
- The location of the in-lieu and direct recharge would be within the NDE area, located near existing OID conveyance facilities and those parcels with low/med infrastructure requirements.

8.3.2.2.6. Water Source and Reliability

The Project anticipates the delivery of approximately 20,000 AF of surface water from the Stanislaus River in all WYs except Critically Dry WYs. Historically (2010-2019), OID diverts between approximately 165,000 AF to 246,000 AF, with an overall average of approximately 208,000 AF. Given OID's existing surface water rights of up to 300,00 AF from the Stanislaus and its overall average system inflows, the surface water deliveries expected from this Project amounts to approximately 22% of the total available surface water. As a result, this Project provides the opportunity for OID to meet a portion of the NDE area needs.

8.3.2.2.7. Legal Authority

The GSAs, Districts, and Project proponents have the authority to plan and implement Projects through consultation with applicable governing agencies. OID has the authority to contract with and provide deliveries to NDE landowners; individual irrigators have the authority to apply surface water to their fields for in-lieu recharge.

8.3.2.2.8. Estimated Costs and Funding Plan

Potential costs of this Project include coordination and administration, permitting, CEQA analysis, construction or expansion of conveyance facilities, and financial or other incentives to encourage in-lieu use. Costs per site may vary depending on proximity to OID conveyance facilities and changes in Project implementation or incentives. The total costs of the Project will vary over time depending on how many NDE landowners participate, the amount of construction necessary, the volumetric rate of OID surface water deliveries, and the extent to which irrigators require coordination and support.

Costs related to the new turnout construction, CEQA process, and private irrigation infrastructure for the 10-Year Program have been borne by the program participants.

The participating NDE landowners will also be responsible for maintenance costs of the turnout, flowmeter, and appurtenances as well as the volumetric rate of OID surface water deliveries. The volumetric price of out-of-District surface water began at $200 per acre-foot during the first year of the 10-Year Program and is subject to a rate increase of 3% each year thereafter.

The estimated cost of design and construction of all three phases of the Paulsell Expansion was $18.6M. OID received $14.4M in funding under a DWR SGMA Implementation Grant for the design of all three phases and the construction of the first phase of the Paulsell Expansion. The first phase includes most of the major construction components (tunnels, siphons, control structures), and will provide a significant improvement to the level of irrigation service. OID or NDE stakeholder groups may pursue future grant funding opportunities to complete construction of the final two phases of the Paulsell Expansion.

8.3.2.2.9. Management of Groundwater Extractions and Recharge

Per 23 CCR § 354.44(b)(9), all PMAs developed for implementation are targeted to maintain the balance of groundwater extractions and recharge to help ensure that lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels and storage in other years.

In-lieu recharge benefits of this Project are expected to increase the use and recharge of available surface water supplies during wetter years, helping to offset potential increases in groundwater pumping during drought when surface water supplies are limited.

8.3.3. Flood Mitigation Projects

8.3.3.1. Tuolumne River Flood Mitigation and Direct Recharge Project (Project 7)

8.3.3.1.1. Project Description

The Tuolumne River Flood Mitigation and Direct Recharge Project (Project) is intended to be a cooperative long-term Project between MID and the NDE landowners and is designed to be implemented with no impacts to MID's existing agricultural and urban customers. Currently developed agriculture in the NDE areas of the Subbasin is estimated to be approximately 36,000 acres, of which approximately 30,000 acres is deciduous fruits and nuts (permanent crops). With limited exception, the entire NDE area is solely reliant on groundwater from the Modesto subbasin. The Project differs from the Modesto Irrigation District In-lieu and Direct Recharge Project, namely from a timing perspective, and involves the delivery of approximately 20,000 AF of surface water from the Tuolumne River in Wet and Above Normal WYs during the non-growing season. Historically (1972-2020), Wet and Above Normal WYs have occurred approximately 47% of the time on the Tuolumne River. In addition to measurable benefits to groundwater resources within the Subbasin, this Project is intended to mitigate flood releases from Don Pedro Reservoir during the winter months whereby reducing impacts on the lower Tuolumne River (City of Modesto and growers near the confluence of the lower Tuolumne River and the San Joaquin River), the San Joaquin River and the Delta. Under the current Final Environmental Impact Statement for the relicensing of Don Pedro Reservoir, there is estimated to be approximately 1,500,000 AF of surface water in Wet WYs and 620,000 AF of surface water in Above Normal WYs in the Tuolumne River. These water volumes exceed what is necessary to meet existing customer demands (all Tuolumne River Partners) and the recommended instream flow obligations. As a result, 20,000 AF of Tuolumne River surface water to applicable NDE areas during the non-growing season amounts to approximately 1% and 3% of available surface water supply respectively, for Wet and Above Normal WYs. New licenses for diversions/water rights may be required for this Project.

8.3.3.1.2. Public Noticing

The public and other agencies will be notified of the planned or ongoing implementation of Project activities through the outreach and communication channels identified in the GSP, during the preparation process of the PEIR (if applicable), and during updates presented at regularly scheduled STRGBA GSA meetings. Noticing will occur as potential activities are being considered for implementation, and as ongoing and planned activities are implemented. Noticing will inform the public and other agencies that the proponent is considering or will be implementing the Project and will provide a description of the actions that will be taken.

Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other

public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

8.3.3.1.3. Permitting and Regulatory Process

Required permitting and regulatory review would be initiated as necessary through consultation with applicable governing agencies. Surface water would be diverted through this project by MID via existing water rights. Governing agencies that may be consulted for this Project include but are not limited to the State Water Resources Control Board (SWRCB), Stanislaus and/or Tuolumne Counties, USBR, and DWR.

If necessary, Project proponents will obtain any applicable permits from the Tuolumne and Stanislaus Counties. Recharge projects and construction or expansion of conveyance facilities may also require an environmental review process under CEQA.

8.3.3.1.4. Expected Benefits

Benefits to Sustainability Indicators

Surface water deliveries during the non-irrigation season are expected to provide direct groundwater recharge to the Subbasin. For fields that are irrigated using groundwater, surface water deliveries during the irrigation season are expected to offset groundwater demand and provide groundwater recharge benefits. In both cases, the sustainability indicators expected to benefit from this Project are groundwater levels, groundwater storage, land subsidence, and interconnected surface water. All benefits to sustainability indicators in the Subbasin will be evaluated through groundwater monitoring at nearby monitoring sites, identified in the GSP.

Benefits to Disadvantaged Communities

The Tuolumne River flood mitigation and direct recharge Project is expected to provide direct recharge for NDE landowners area. Most communities in the Subbasin, particularly the NDE area, are classified as DACs, SDACs, or EDAs (according to 2018 census data, evaluated by place, tract, and block group). Depending on which specific parcels receive surface water deliveries, this Project may directly benefit specific DACs in this area. In addition, maintenance or improvement of groundwater levels will help to protect beneficial groundwater use by rural domestic wells from potential adverse impacts related to groundwater level decline. Benefits to groundwater conditions in the Subbasin are also expected to benefit all DACs, SDACs, and EDAs.

Volumetric Benefits to the Subbasin Groundwater System

The expected yield of the Tuolumne River Flood Mitigation and Direct Recharge Project was estimated through simulations using the C2VSimTM model. General information and assumptions used to simulate this Project are summarized in the following section below. Additional information is provided in **Section 8.5**: **Plan for Achieving Sustainability.**

On average across all years, the project is expected to provide approximately 9,600 AFY of recharge benefit to the Subbasin. These benefits would accrue in years with Wet or Above Normal hydrologic conditions when sufficient water is expected to be available for on-farm

recharge (approximately 50 percent of years historically). In those years, approximately 20,000 AFY of groundwater recharge is expected to occur.

Evaluation of benefits will be based on analysis of without-project and with-project measurements supported by modeling. Measured parameters will include surface water deliveries, groundwater levels, and other parameters to be determined. Modeling for the Project will be done with the C2VSimTM model used for GSP development.

8.3.3.1.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline

Project involves the delivery of surface water from the Tuolumne River in Wet and Above Normal WYs through a limited number of new points of diversions off MID's existing irrigation conveyance infrastructure and subsequent conveyance through newly constructed private irrigation conveyance infrastructure for direct recharge during the growing season. It is expected that fields with non-permanent crops, permeable soils, and existing flood irrigation infrastructure will be most suitable for Project participation.

The Project is planned for discussion with the MID Water Advisory Committee to determine if an implementation plan will be prepared and recommended to Board of Directors for approval. Thus, the start and completion dates for this Project have yet to be determined and will be provided in Annual Reports and Periodic Evaluations.

However, once Project implementation begins, it is expected that MID would deliver surface water during wet and above normal hydrologic years (approximately 50 percent of years historically) when sufficient water is available for field flooding and on-farm recharge. MID would deliver surface water to participating fields, and irrigators would use that water to flood their fields for recharge. Subsequent analysis of projected water availability, actual annual application rates, and extent of participating lands will be necessary as Project development continues and implementation begins.

Implementation Assumptions for Modeling

The Tuolumne River Flood Mitigation Direct Recharge Project has been modeled in the C2VSimTM model. Additional information about project-related modeling is described in **Section 8.5: Plan for Achieving Sustainability**.

The following general information and assumptions were used to simulate implementation of the Project:

- Volume of water: 20,000 AFY were provided during Wet and Above Normal years, distributed between the months of January and February for direct recharge. The annual average during the 50-year simulation period would be 9,600 AFY.

8.3.3.1.6. Water Source and Reliability

The Project involves the delivery of approximately 20,000 AF of surface water from the Tuolumne River in Wet and Above Normal WYs through a limited number of new points of

diversions off MID's existing irrigation conveyance infrastructure and subsequent conveyance through newly constructed private irrigation conveyance infrastructure for and direct recharge during the non-growing season. Historically (1972-2020), Wet and Above Normal WYs have occurred approximately 47% of the time on the Tuolumne River. Under the current Final Environmental Impact Statement for the relicensing of Don Pedro Reservoir, there is estimated to be approximately 1,500,000 AF of surface water in Wet WYs and 620,000 AF of surface water in Above Normal WYs in the Tuolumne River above and beyond that necessary to meeting existing customer demands (all Tuolumne River Partners) and the recommended instream flow obligations. As a result, 20,000 AF of Tuolumne River surface water to applicable NDE areas during the non-growing season amounts to approximately 1% and 3% of available surface water supply respectively, for Wet and Above Normal WYs. New licenses for diversions/water rights may be required for this project.

8.3.3.1.7. Legal Authority

The GSAs, Districts, and individual Project proponents have the authority to plan and implement projects through consultation with applicable governing agencies. MID has the authority to contract with and provide deliveries to NDE landowners, and individual irrigators have the authority to apply surface water to their fields for on-farm recharge.

8.3.3.1.8. Estimated Costs and Funding Plan

Potential costs for this Project include coordination and administration, financial, or other incentives to encourage on-farm recharge, field preparation to enhance flooding, and other potential on-field monitoring equipment. Costs per site may vary depending on changes in Project implementation and incentives. Slightly higher costs per site would likely be incurred in the first year an irrigator participates, as more coordination and site preparation may be required. The total costs of the Project will vary over time, depending on the number of sites receiving water, the extent to which irrigators require coordination and support, and any applicable Project incentives.

This Project is currently in the early conceptual stage. Thus, the anticipated costs have yet to be determined and will be reported in GSP Annual Reports and Five-Year Assessment Reports when known. This project shares the same infrastructural development as the Modesto Irrigation District In-Lieu and Direct Recharge Project (Project 5). However, if implemented without Project 5, high-level initial estimates are on the order of $53,340,000 – $75,000,000 of new conveyance infrastructure. It is anticipated that STRGBA GSA member agencies and/or NDE landowners would identify funding sources to cover Project costs as part of Project development. These may include grants (e.g., Prop 1, Prop 68, NRCS, others), fees, and loans.

8.3.3.1.9. Management of Groundwater Extractions and Recharge

Per 23 CCR § 354.44(b)(9), all PMAs developed for implementation are targeted to maintain the balance of groundwater extractions and recharge to help ensure that lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels and storage in other years.

Recharge benefits of this Project are expected to increase the use and recharge of available surface water supplies during wetter years, helping to offset potential increases in groundwater pumping during drought when surface water supplies are limited.

8.3.3.2. Dry Creek Flood Mitigation and Direct Recharge Project (Project 8)

8.3.3.2.1. Project Description

The Dry Creek Flood Mitigation and Direct Recharge Project (Project) is intended to be a cooperative long-term Project implemented by the NDE landowners and is designed to be constructed and managed in a way to prevent negative impacts to downstream users. Currently developed agriculture in the NDE areas is estimated to be approximately 36,000 acres, of which approximately 30,000 acres are deciduous fruits and nuts. With limited exception, the entire NDE area is solely reliant on groundwater from the Modesto Subbasin. The Project involves the delivery of approximately 5,400 AF of surface water from Dry Creek through a limited number of new and/or existing points of diversions off Dry Creek and subsequent conveyance through new and/or existing private irrigation conveyance infrastructure for direct recharge during the non-growing season. The volume of water associated with this Project was derived from previous work done on behalf of Stanislaus County and is representative of only a fraction of modeled results for a 2-year storm event in the lower reaches of Dry Creek. As a result, both the frequency and volume of water available are conservative estimates. In addition to measurable benefits to groundwater resources within the Modesto subbasin, this Project is intended to mitigate flood flows in Dry Creek whereby reducing impacts on the lower Tuolumne River (City of Modesto and growers near the confluence of the lower Tuolumne River and the San Joaquin River), the San Joaquin River and the Delta. New licenses for diversions/water rights may be required for this project.

8.3.3.2.2. Public Noticing

The public and other agencies will be notified of the planned or ongoing implementation of Project activities through the outreach and communication channels identified in the GSP, during the preparation process of the PEIR (if applicable), and during updates presented at regularly scheduled STRGBA GSA meetings. Noticing will occur as potential activities are being considered for implementation, and as ongoing and planned activities are implemented. Noticing will inform the public and other agencies that the proponent is considering or will be implementing the Project and will provide a description of the actions that will be taken.

Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.

8.3.3.2.3. Permitting and Regulatory Process

Required permitting and regulatory review would be initiated as necessary through consultation with applicable governing agencies. Surface water would be diverted through this project by MID via existing water rights. Governing agencies that may be consulted for

this project include but are not limited to the State Water Resources Control Board (SWRCB), Stanislaus and/or Tuolumne Counties, USBR, and DWR.

If necessary, Project proponents will obtain any applicable permits from the Tuolumne and Stanislaus Counties. Recharge projects and construction or expansion of conveyance facilities may also require an environmental review process under CEQA.

8.3.3.2.4. Expected Benefits

Benefits to Sustainability Indicators

Surface water deliveries from storm events during the non-irrigation season are expected to provide direct groundwater recharge to the Subbasin. The sustainability indicators expected to benefit from this project are groundwater levels, groundwater storage, land subsidence, and interconnected surface water. All benefits to sustainability indicators in the Subbasin will be evaluated through groundwater monitoring at nearby monitoring sites, identified in the GSP.

Benefits to Disadvantaged Communities

The Dry Creek Flood Mitigation and Direct Recharge Project is expected to provide direct recharge for NDE landowners area. Most communities in the Subbasin, including the NDE area, are classified as DACs, SDACs, or EDAs (according to 2018 census data, evaluated by place, tract, and block group). Depending on which specific parcels receive surface water deliveries, this Project may directly benefit specific DACs in this area. In addition, maintenance or improvement of groundwater levels will help to protect beneficial groundwater use by rural domestic wells from potential adverse impacts related to chronic groundwater level decline. Benefits to groundwater conditions in the Subbasin are also expected to benefit all DACs, SDACs, and EDAs.

Volumetric Benefits to the Subbasin Groundwater System

The expected yield of the Dry Creek Flood Mitigation and Direct Recharge Project was estimated through simulations in the C2VSimTM model. General information and assumptions used to simulate this Project are summarized in the following section. Additional information is provided in **Section 8.5**: **Plan for Achieving Sustainability**.

On average across all years, the Project is expected to provide approximately 5,400 AFY of recharge benefit to the Subbasin.

Evaluation of benefits will be based on analysis of without-project and with-project measurements supported by modeling. Measured parameters will include surface water deliveries, groundwater levels, and other parameters to be determined. Modeling will be done with the C2VSimTM model used for GSP development.

8.3.3.2.5. Implementation Criteria, Status, and Strategy

Implementation Strategy and Timeline

The Project anticipates the delivery of approximately 5,400 AF of surface water from Dry Creek through a limited number of new and/or existing points of diversions off Dry Creek and subsequent conveyance through new and/or existing private irrigation conveyance infrastructure for direct recharge during the non-growing season. At the initiation of this Project and on an ongoing basis, the GSAs and/or NDE landowners plan to identify fields that are most suitable for groundwater recharge. It is expected that fields with non-permanent crops, permeable soils, and existing flood irrigation infrastructure will be most suitable for Project participation.

This Project is currently in the early conceptual stage. Thus, the start and completion dates for this Project have yet to be determined and will be provided in Annual Reports and Periodic Evaluations.

However, once Project implementation begins, it is expected that storm water would be available for diversion during wet and above normal hydrologic years (approximately 50 percent of years historically) when sufficient water is available for field flooding and on-farm recharge. Subsequent analysis of projected water availability, actual annual application rates, and extent of participating lands will be necessary as Project development continues and implementation begins.

Implementation Assumptions for Modeling

The Dry Creek Flood Mitigation Direct Recharge Project has been modeled in the C2VSimTM. Additional information about project-related modeling is described in **Section 8.5: Plan for Achieving Sustainability**.

The following general information and assumptions were used to simulate implementation of the project:

- Volume of water: 5,400 AFY were diverted during all years, distributed evenly in the months of January and February. The annual average during the 50-year simulation period would be 5,400 AFY.
- The total volume would be applied as direct recharge over the aquifer.

8.3.3.2.6. Water Source and Reliability

The Project involves the diversion and application of approximately 5,400 AF of surface water from Dry Creek through a limited number of new and/or existing points of diversions off Dry Creek and subsequent conveyance through new and/or existing private irrigation conveyance infrastructure for direct recharge during the non-growing season. The volume of water associated with this Project was derived from previous work done on behalf of Stanislaus County and is representative of only a fraction of modelled results for a 2-year storm event in the lower reaches of Dry Creek. As a result, both the frequency and volume of water available are conservative estimates. In addition to measurable benefits to

groundwater resources within the Subbasin, this Project is intended to mitigate flood flows in Dry Creek whereby reducing impacts on the lower Tuolumne River (City of Modesto and growers near the confluence of the lower Tuolumne River and the San Joaquin River), the San Joaquin River and the Delta. New licenses for diversions/water rights may be required for this project.

8.3.3.2.7. Legal Authority

The GSAs and Project proponents have the authority to plan and implement projects through consultation with applicable governing agencies. Individual irrigators have the authority to apply surface water to their fields for on-farm recharge. However, new licenses for diversions/water rights may be required for this Project.

8.3.3.2.8. Estimated Costs and Funding Plan

Potential costs of this Project include coordination and administration, financial, or other incentives to encourage on-farm recharge, field preparation to enhance flooding, and other potential on-field monitoring equipment. Costs per site may vary depending on changes in project implementation and incentives. Slightly higher costs per site would likely be incurred in the first year an irrigator participates, as more coordination and site preparation may be required. The total costs of the Project will vary over time, depending on the number of sites receiving water, the extent to which irrigators require coordination and support, and any applicable Project incentives.

This Project is currently in the early conceptual stage. Thus, the anticipated costs have yet to be determined and will be reported in Annual Reports and Periodic Evaluations. However, high-level initial estimates are on the order of $4,800,600 - $6,750,000 of new conveyance infrastructure. It is anticipated that STRGBA GSA member agencies would identify funding sources to cover Project costs as part of development. These may include grants (e.g., Prop 1, Prop 68, NRCS, others), fees, and loans.

8.3.3.2.9. Management of Groundwater Extractions and Recharge

Per 23 CCR § 354.44(b)(9), all PMAs developed for implementation are targeted to maintain the balance of groundwater extractions and recharge to help ensure that lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels and storage in other years.

Recharge benefits of this project are expected to increase the use and recharge of available surface water supplies during wetter years, helping to offset potential increases in groundwater pumping during drought when surface water supplies are limited.

8.4. SUPPLEMENTAL PROJECTS

This section describes Projects that may be implemented in the Subbasin to support local goals and future GSA activities (Supplemental Projects, **Table 8-3**). Group 3 projects are not currently planned for implementation; however, the GSAs will continue assessing their feasibility to support sustainable groundwater management. Regardless, should these projects be implemented, the projects would provide benefits in contributing to the

attainment of SMCs and the sustainability goal. Group 3 projects are in the early conceptual or planning stages at this time, with no specific implementation timeline established.

Summary of Criteria for Project Implementation (23 CCR §354.44(b)(1)(A))

As described above, the Projects described in this section are still in the early conceptual or planning stages. The GSAs will continue evaluating the feasibility for implementing these projects in the future. Additional projects may be added to this list as they are identified and reported through Annual Reports and Periodic Evaluations of the GSP.

In addition, there are projects that have been considered in the past as part of the Integrated Regional Water Management Planning (IRWMP) and are included in the East Stanislaus IRWMP project database[1]. These projects are considered as potential projects to support the groundwater sustainability in the Subbasin but are currently considered as alternative options and are not directly analyzed in this Chapter.

8.4.1. Stanislaus River Flood Mitigation and Direct Recharge Project (Project 9)

The Stanislaus River Flood Mitigation and Direct Recharge Project (Project) is proposed by the NDE landowners to be a cooperative long-term Project with OID and is designed to be implemented with no impacts to OID's existing agricultural customers. The project differs from the Oakdale Irrigation District In-lieu and Direct Recharge Project, namely from a timing perspective, and involves the delivery of approximately 5,000 AF of surface water from the Stanislaus River in Wet WYs through a limited number of new points of diversion off OID's existing irrigation conveyance infrastructure and subsequent newly constructed private irrigation conveyance infrastructure for direct recharge during the non-growing season. Storage in New Melones is approximately 2.5 times what the watershed yields on an average annual basis and as a result, the magnitude and frequency (5,000 AF and Wet WYs) of this Project has been limited. Nonetheless, this Project is intended to mitigate flood releases from New Melones Reservoir during the winter months whereby reducing impacts on the lower Stanislaus River (growers along the lower Stanislaus River), the San Joaquin River and the Delta. This Project may require the acquisition of a right to divert flood flows and supplemental groundwater storage application, as well as agreements with multiple agencies potentially including but not limited to, UBSR, OID, and the SWRCB for the revised operation of existing storage facilities, water diversion and rights on the Stanislaus River.

Further analysis, consultation, and review is anticipated prior to any determination of water availability and utilization for the project. Additional considerations may include the terms and negotiations of a new water rights permit/license. Historical operations of New Melones Reservoir and future water supply availability also have the potential to change significantly if the Lower San Joaquin River flow objectives proposed in the Bay-Delta Plan amendments and Final SED are implemented.

[1] http://www.eaststanirwm.org/projects/

A summary of the Project is provided in **Table 8-5.**

Table 8-5: Stanislaus River Flood Mitigation and Direct Recharge Project: Summary (23 CCR §354.44(b))

Item in GSP Regulations	Description
Implementation Strategy and Criteria (§354.44(b)(1)(A); §354.44(b)(6))	Utilizing the conveyance infrastructure provided by the OID In-lieu and Direct Recharge Project, this Project would provide approximately 5,000 AF of surface water from the Stanislaus River in Wet WYs. The Project is intended to mitigate flood releases from New Melones Reservoir during the winter months whereby reducing impacts on the lower Stanislaus River, the San Joaquin River, and the Delta. The Project is currently in the conceptual stage and will continue to be evaluated by the GSAs and NDE landowners.
Timeline and Implementation Status (§354.44(b)(4))	Project start and completion dates have not been determined. Updates to Project activities will be provided in Annual Reports and Periodic Evaluations. Benefits are expected to accrue in wet hydrologic year types when flood water is available for use, potentially beginning the first year of Project implementation.
Public Noticing (§354.44(b)(1)(B))	Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.
Water Source & Reliability (§354.44(b)(6))	The Project would use available flood water from the Stanislaus River. The precise reliability of available water would be identified when the Project has been evaluated and developed for implementation. This information will be reported in Annual Reports and Periodic Evaluations.
Legal Authority, Permitting and Regulatory Processes, (§354.44(b)(3); §354.44(b)(7))	Required permitting and regulatory review will be Project-specific and initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated will be identified during Project evaluation.
Benefits and benefit evaluation methodology (§354.44(b)(5))	The sustainability indicators expected to benefit would be determined during Project evaluation. Conceptually, groundwater levels, groundwater storage, land subsidence, and interconnected surface water would benefit from this project. The expected groundwater benefits from the Project are not yet known and will be determined during project evaluation. Evaluation of benefits will be based on analysis of without- project and with-project effects on sustainability indicators. Each Project may be evaluated as part of a scenario and the C2VSimTM would be used to assess the benefits and impacts on the subbasin sustainability.
Costs (§354.44(b)(8))	The anticipated costs of this Project will be determined during its evaluation. The Project proponent would identify funding sources to cover costs as part of Project development. These may include grants, fees, loans, and other assessments.

8.4.2. Retention System Standards Specifications Update (Project 10)

The Retention System Standards Specifications Update Project (Project) would aim to change standards for future storm drains so that the drains would not discharge straight to rivers, creeks, or canals but rather to retention systems. This would increase the sustainability footprint of the City of Modesto through future growth. Approximately 36 percent of the surface area in the City of Modesto drains to surface water, with approximately 64 percent draining and contributing to local recharge. If the City of Modesto adopts new storm drain standards, 100 percent of runoff from newly developed areas would reach a retention system with an approximate runoff coefficient of 0.7 and an average rainfall of 12.14 inches per year.

A summary of the Project is provided in **Table 8-6**.

Table 8-6: Retention System Standards Specifications Update: Summary (23 CCR §354.44(b))

Item in GSP Regulations	Description
Implementation Strategy and Criteria (§354.44(b)(1)(A); §354.44(b)(6))	The Project would aim to change standards for future storm drains so that the drains would not discharge straight to rivers, creeks, or canals but rather to retention systems. The Project is currently in the conceptual stage and is being evaluated by the GSAs.
Timeline and Implementation Status (§354.44(b)(4))	Project start and completion dates have not been determined. Updates on Project activities will be provided in Annual Reports and Periodic Evaluations. Benefits are expected to accrue in all years and potentially beginning the first year of implementation.
Public Noticing (§354.44(b)(1)(B))	Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.
Water Source & Reliability (§354.44(b)(6))	This Project would use urban storm runoff flows from the City of Modesto. This Project is currently in the early conceptual stage. The precise reliability of available water would be identified when the Project has been evaluated and selected and developed for implementation. This information will be reported in Annual Reports and Periodic Evaluations.
Legal Authority, Permitting and Regulatory Processes (§354.44(b)(3); §354.44(b)(7))	Required permitting and regulatory review will be project-specific and initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated will be identified during Project evaluation.
Benefits and Benefit Evaluation Methodology (§354.44(b)(5))	The sustainability indicators expected to benefit would be determined during Project evaluation. Conceptually, groundwater levels, groundwater storage, land subsidence, and interconnected surface water would benefit from this Project. The expected groundwater benefits from the project are not yet known and will be determined during project evaluation. Evaluation of benefits will be based on analysis of without- project and with-project effects on sustainability indicators. Each Project may be evaluated as part of a scenario and the C2VSimTM would be used to assess the benefits and impacts on the subbasin sustainability.
Costs (§354.44(b)(8))	The anticipated costs of this Project will be determined during its evaluation. The project proponent would identify funding sources to cover costs as part of Project development. These sources may include grants, fees, loans, and other assessments.

8.4.3. Recharge Ponds Constructed by Non-District East Landowners (Project 11)

The Recharge Ponds Constructed by Non-District East Landowners Project (Project) would capture wintertime runoff from the Dry Creek Watershed by constructing detention basins. It is anticipated the basins would be constructed by NDE Landowners. NDE participants have identified five reservoirs for direct diversion and off-stream storage through an existing water right on Dry Creek. Diversions would originate from a facility on Dry Creek, which was constructed and fully operational by February 2021, to the reservoirs for storage. Stored water would then be used during the growing season in-lieu of groundwater while also providing direct recharge benefits. Conveyance infrastructure from the diversion facility to the proposed reservoirs and receiving irrigated acreage was completed in April 2024. The Project is currently in the conceptual phase. Project scope, implementation schedule, groundwater benefits, and costs will be evaluated further and presented in Annual Reports and Periodic Evaluations.

A summary of the Project is provided in **Table 8-7**.

Table 8-7: Recharge Ponds Constructed by Non-District East Landowners: Summary (23 CCR §354.44(b))

Item in GSP Regulations	Description
Implementation Strategy and Criteria (§354.44(b)(1)(A); §354.44(b)(6))	This Project would capture wintertime runoff from the Dry Creek Watershed by constructing detention basins. It is anticipated the basins would be constructed by NDE Landowners. The project is currently in the conceptual stage and is being evaluated by the GSAs.
Timeline and Implementation Status (§354.44(b)(4))	Project start and completion dates have not been determined. Updates on Project activities will be provided in Annual Reports and Periodic Evaluations. Benefits are expected to accrue during the winter months beginning the first year of implementation.
Public Noticing (§354.44(b)(1)(B))	Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.
Water Source & Reliability (§354.44(b)(6))	This project would use water from the Dry Creek Watershed. This Project is currently in the early conceptual stage. The precise reliability of available water would be identified when the project has been evaluated and selected and developed for implementation. This information will be reported in Annual Reports and Periodic Evaluations.
Legal Authority, Permitting and Regulatory Processes (§354.44(b)(3); §354.44(b)(7))	Required permitting and regulatory review will be project-specific and initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated will be identified during project evaluation.
Benefits and Benefit Evaluation Methodology (§354.44(b)(5))	The sustainability indicators expected to benefit would be determined during project evaluation. Conceptually, groundwater levels, groundwater storage, land subsidence, and interconnected surface water would benefit from this project. The expected groundwater benefits from the project are not yet known and will be determined during project evaluation. Evaluation of benefits will be based on analysis of without- project and with-project effects on sustainability indicators. Each Project may be evaluated as part of a scenario and the C2VSimTM would be used to assess the benefits and impacts on the subbasin sustainability.
Costs (§354.44(b)(8))	The anticipated costs of this project will be determined during its evaluation. The project proponent would identify funding sources to cover costs as part of project development. These sources may include grants, fees, loans, and other assessments.

8.4.4. OID Irrigation and Recharge to Benefit City of Oakdale (Project 12)

The OID Irrigation and Recharge to Benefit City of Oakdale Project (Project) proposes to utilize surface water from OID to irrigate the City of Oakdale's parks. The first phase of this Project was constructed at two City of Oakdale parks to assess the costs and benefits for implementation of additional components. The two parks involved in the initial phase are located near an existing OID conveyance system. Surface water for irrigation is being provided for City of Oakdale use during the irrigation, starting as early as March 1st and ending no later than October 31st each year. Anticipated yield from the Project is approximately 50 AF per year. Pending results from the initial phase of the Project, expanded implementation of this Project in cooperation with OID may be subsequently considered by the City of Oakdale.

A summary of the Project is provided in **Table 8-8**.

Table 8-8: OID Irrigation and Recharge to Benefit City of Oakdale Summary (23 CCR §354.44(b))

Item in GSP Regulations	Description
Implementation Strategy and Criteria (§354.44(b)(1)(A); §354.44(b)(6))	This Project aims to reduce City of Oakdale groundwater pumping by providing OID surface water for irrigation of City parks. Construction of the first phase of implementation has been completed. The City of Oakdale may decide to pursue expansion in the future if the first phase is successful and additional strategies are needed to reach sustainability.
Timeline and Implementation Status (§354.44(b)(4))	Construction of the first phase of the Project was completed by the summer of 2023. Updated Project results will be provided in GSP Annual Reports and Five-Year Assessment Reports. Benefits are expected to accrue in all hydrologic year types provided OID's surface water allocation is sufficient, potentially beginning the first year of Project implementation.
Public Noticing (§354.44(b)(1)(B))	Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.
Water Source & Reliability (§354.44(b)(6))	The City of Oakdale remains within the OID boundary and thus is entitled to receive OID surface water when it is available.
Legal Authority, Permitting and Regulatory Processes (§354.44(b)(3); §354.44(b)(7))	The Districts, Cities, and Project proponents have the authority to plan and implement projects. Required permitting and regulatory review will be project-specific and initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated will be identified during project evaluation.
Benefits and Benefit Evaluation Methodology (§354.44(b)(5))	The sustainability indicators expected to benefit are groundwater levels, groundwater storage, land subsidence, and interconnected surface water. This first phase of the Project has been constructed. The anticipated yield of this Project is approximately 50 AF per year; results will be reported in Annual Reports and Periodic Evaluations once available. Evaluation of benefits will be based on analysis of without-project and with-project impacts on the sustainability indicators. The project may be evaluated as part of a scenario and the C2VSimTM would be used to assess the benefits and impacts on the Subbasin.
Costs (§354.44(b)(8))	This first phase of the project cost approximately $250,000. Costs of any future expansion have not been determined. The project proponent would identify funding sources to cover project costs as part of project development. These may include grants, fees, loans, and other assessments.

8.4.5. MID Flood-MAR Projects (Project 13)

The MID Flood-MAR Projects (Project) would support the development of flood managed aquifer recharge (Flood-MAR) activities in locations in MID boundaries where storm flows are available, or where existing surface water facilities can be utilized to direct and control surface water for various beneficial uses. Components of this Project would be developed privately or as coordinated efforts. Necessary infrastructure would be installed to connect existing delivery systems to Flood-MAR activities. The Project is still conceptual and undergoing evaluation, however, the next steps would likely include a feasibility analysis and design.

A summary of the Project is provided in **Table 8-9**.

Table 8-9: MID Flood-MAR Projects Summary (23 CCR §354.44(b))

Item in GSP Regulations	Description
Implementation Strategy and Criteria (§354.44(b)(1)(A); §354.44(b)(6))	This Project would support the development Flood-MAR activities in locations in MID where storm flows are available, or where existing surface water facilities can be utilized to direct and control stormwater for various beneficial uses.
Timeline and Implementation Status (§354.44(b)(4))	Project start and completion dates have not been determined. Updates on project activities will be provided in Annual Reports and Periodic Evaluations. Benefits would be expected to accrue in Wet and Above Normal WYs when flood water is available for use.
Public Noticing (§354.44(b)(1)(B))	Public and/or inter-agency noticing may be facilitated through STRGBA GSA meetings and/or local agency meetings, associated website(s), inter-basin coordination meetings, other public meetings hosted by the GSAs, Annual Reports and Periodic Evaluations, public scoping meetings, and/or applicable permitting notification processes.
Water Source & Reliability (§354.44(b)(6))	This Project would use water from storm flows or other excess flow. This Project is currently in the early conceptual stage. The precise reliability of available water would be identified when the project has been evaluated and selected and developed for implementation. This information will be reported in Annual Reports and Periodic Evaluations.
Legal Authority, Permitting and Regulatory Processes (§354.44(b)(3); §354.44(b)(7))	Required permitting and regulatory review will be project-specific and initiated through consultation with applicable governing agencies. Governing agencies for which consultation will be initiated will be identified during project evaluation.
Benefits and Benefit Evaluation Methodology (§354.44(b)(5))	The sustainability indicators expected to benefit would be determined during project evaluation. Conceptually, groundwater levels, groundwater storage, land subsidence, and interconnected surface water would benefit from this project. The expected groundwater benefits from the project are not yet known and will be determined during project evaluation. Evaluation of benefits will be based on analysis of without- project and with-project effects on sustainability indicators. Each Project may be evaluated as part of a scenario and the C2VSimTM would be used to assess the benefits and impacts on the subbasin sustainability.
Costs (§354.44(b)(8))	The anticipated costs of this project will be determined during its evaluation. The project proponent would identify funding sources to cover costs as part of project development. These sources may include grants, fees, loans, and other assessments.

8.5. PLAN FOR ACHIEVING SUSTAINABILITY

8.5.1. Integrated Modeling Scenarios

To evaluate the effects of PMAs in meeting the sustainability goals of the Modesto Subbasin, Group 1 and 2 Projects have been analyzed using the C2VSimTM model. C2VSimTM is a fully integrated surface and groundwater flow model capable of analyzing the effects of the PMAs on the land surface, stream, and groundwater systems of the Modesto Subbasin. The C2VSimTM model is used to develop the GSP's water budget estimates for historical, current, and projected conditions, as well as Subbasin groundwater levels, streamflow, and interconnected surface water bodies under historical, baseline, and various Project conditions. It is understood that the projections of future groundwater conditions using the C2VSimTM model are based on the current understanding of the Subbasin, which can be further refined as more information becomes available. The 50-year projection of groundwater conditions using C2VSimTM is based on assumptions that has uncertainties in hydrologic and climatic conditions, agricultural crop mix and patterns, irrigation practices, population growth patterns and urban development trends, and land use plans, and environmental regulations. However, the C2VSimTM is currently the best available analysis tool to assist in evaluation of Project benefits and impacts, not in an absolute sense, but in a relative scale.

The analysis below evaluates the proposed projects relative to the C2VSimTM Projected Conditions Baseline. The results of this analysis are then compared to MTs to estimate the approximate amount of additional net demand reduction that will be needed to meet the sustainability goal of the Subbasin. The Projected Conditions Baseline applies the projected water supply and demand conditions under the 50-year hydrologic period of WYs 1969-2018. A total of seven (7) Group 1 and 2 Projects were grouped into two (2) scenarios based on their use-sector and Project type. **Table 8-10** shows a matrix of the simulated projects and their respective scenarios. Each of these projects are described in detail in **Section 8.2**, with modeling assumptions outlined in **Section 5** for each Project.

Table 8-10: Projects Analyzed Using C2VSimTM Model

Urban and Municipal Projects		Scenario 1	Scenario 2
1	Growth Realization of Surface Water Treatment Plant Phase II	**Baseline**	**Baseline**
2	Municipal Conservations Projects	**X**	**X**
3	Storm Drain Cross Connection Removal Project	**X**	**X**
4	Surface Water Supply Project	**X**	**X**
In-lieu Supply or Recharge Projects			
5	MID to Out-of-District Lands In-lieu and Direct Recharge Project		**X**
6	OID to Out-of-District Lands In-lieu and Direct Recharge Project		**X**
Flood Mitigation Projects			
7	Tuolumne River Flood Mitigation Direct Recharge Project		**X**
8	Dry Creek Flood Mitigation Direct Recharge Project		**X**

Scenario 1: Urban and Municipal Surface Water Supply

Scenario 1 includes the three urban and municipal projects as proposed by their respective agencies. These projects, shown in **Table 8-11** total an average net-recharge of 13,700 AFY over the 50-year simulation period. Impacts to the subbasin were simulated by reducing the urban demand in the City of Modesto, providing surface water supplies to the City of Waterford, and incorporating additional recharge facilities throughout the City of Modesto. **Table 8-11** below summarizes the individual and cumulative impacts of each Project within this scenario.

Table 8-11: Scenario 1 Project Summary

	Project	Direct Recharge	In-Lieu Recharge	Demand Reduction
Urban and Municipal Projects	Municipal Conservation Projects[1]			12,800
	Storm Drain Cross Connection Removal Project	200		
	City of Waterford Surface Water Supply Project[1]		700	
	All Urban and Municipal Projects	200	700	12,800
All Scenario 1 Projects		**200**	**700**	**12,800**

Notes: All Units are in acre-feet

[1] The City of Modesto Conservation Projects and the City of Waterford Surface Water Supply Project include beneficiaries in both the Turlock and Modesto Subbasin. The volumes in this table represent an estimated fraction of the effective contribution to the Modesto Subbasin

Scenario 1 projects are expected to reduce net groundwater pumping in the Subbasin by 13,700 AFY. The net benefit to groundwater storage is to reduce the projected average annual groundwater storage deficit from 11,000 AFY under the Baseline conditions to 9,500 AFY with these projects, resulting in a net savings of 1,500 AFY of groundwater in storage. Details are shown in **Table 8-13** and **Figure 8-1**.

Principally, Scenario 1 projects were implemented to mitigate lowering groundwater levels, depletions of interconnected surface water systems, and potential subsidence near the urban centers within the Modesto Subbasin. **Section 8.5.2** presents the simulated groundwater conditions under both the projected conditions baseline and each of the PMA scenarios.

Scenario 1 is anticipated to be implemented in conjunction with multiple other agriculturally based projects to further improve and project aquifer conditions. See the descriptions of the following scenario for information on the cumulative impacts to the system.

Scenario 2: In-Lieu Supply Recharge and Flood Mitigation Projects

Scenario 2 builds on the benefits of Scenario 1 to incorporate the agriculturally based in-lieu and direct recharge projects. The addition of the projects to this scenario increases the net simulated contribution to the groundwater system from an average of 13,700 AF to 71,900 AFY. The four proposed projects include

1. The MID to Out-of-District Lands In-lieu and Direct Recharge Project, providing up to 60,000 AF of in-lieu recharge in Wet and Above Normal years, or an average annual contribution of 28,800 over the 50-year simulation period.

2. The OID to Out-of-District Lands In-lieu and Direct Recharge Project, providing up to 20,000 AFY of in-lieu recharge in all non-critically dry years, providing an average of 14,400 across the planning horizon.
3. The Tuolumne River Flood Mitigation Direct Recharge Project, providing 20,000 AFY of direct recharge in Wet and Above Normal years (9,600 AFY in the 50-year simulation average),
4. The Dry Creek Flood Mitigation Direct Recharge Project, providing 5,400 AFY of direct recharge in all year types.

Table 8-12 below summarizes the individual and cumulative impacts of each Project within this scenario.

Table 8-12: Scenario 2 Project Summary

	Project	Direct Recharge	In-Lieu Recharge	Demand Reduction
Urban and Municipal Projects	Municipal Conservation Projects[1]			12,800
	Storm Drain Cross Connection Removal Project	200		
	City of Waterford Surface Water Supply Project[1]		700	
	All Urban and Municipal Projects	200	700	12,800
In-lieu Supply and Direct Recharge Projects	MID to Out-of-District Lands In-lieu and Direct Recharge Project	9,600	19,200	
	OID to Out-of-District Lands In-lieu and Direct Recharge Project	1,400	13,000	
	All In-lieu Supply or Recharge Projects	11,000	32,200	0
Flood Mitigation Projects	Tuolumne River Flood Mitigation Direct Recharge Project	9,600		
	Dry Creek Flood Mitigation Direct Recharge Project	5,400		
	All In-lieu Supply or Recharge Projects	15,000	0	0
All Scenario 2 Projects		**26,200**	**32,900**	**12,800**

Notes: All Units are in acre-feet

[1] The City of Modesto Conservation Projects and the City of Waterford Surface Water Supply Project include beneficiaries in both the Turlock and Modesto Subbasin. The volumes in this table represent an estimated fraction of the effective contribution to the Modesto Subbasin

Scenario 2 projects are expected to reduce groundwater pumping in the subbasin by 44,400 AFY. The net benefit to groundwater storage projected is to reduce the average annual groundwater storage deficit from 11,000 AFY under the Baseline conditions to an average annual positive change in storage of 1,400 AFY with these projects, resulting in a net savings of 12,400 AFY of groundwater in storage. Details are shown in **Table 8-13** and **Figure 8-1.**

Analysis of conditions under Scenario 2 show that under Project buildout, sustainability goals as defined by the Minimum Thresholds (MTs) outlined in **Chapter 6, Sustainable Management Criteria,** can be met without demand management. **Section 8.5.2** below shows how Scenarios 1 and 2 effect groundwater levels at representative monitoring locations throughout the subbasin relative to the simulated minimum thresholds.

While simulated conditions meet sustainability metrics in the long-term, the Modesto Subbasin acknowledges that these scenarios assume immediate implementation of the projects and MAs listed above. In the near-term, sustainability of the Modesto Subbasin relies on the NDE area to actively pursue the development of these projects and understands that interim MAs, including the potential for demand reduction, may be necessary to meet SMCs.

Figure 8-1: Scenario 1-2 Cumulative Change in Storage

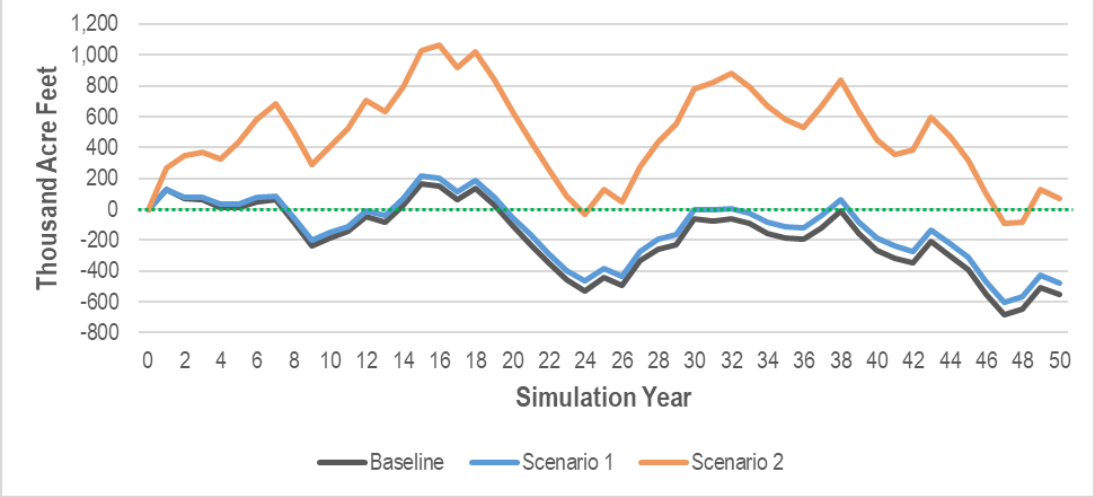


Figure 8-2: Scenario 2 Groundwater Budget

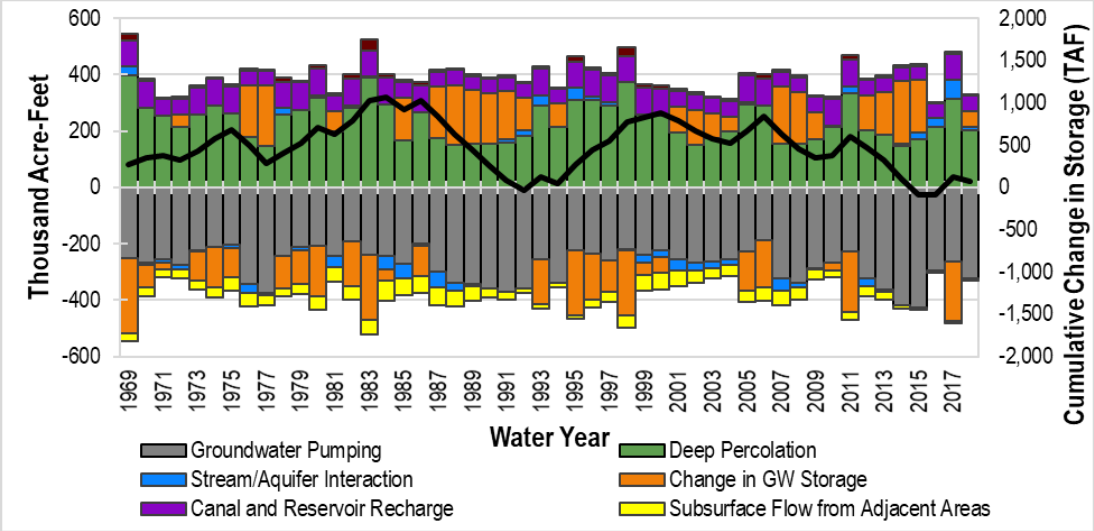


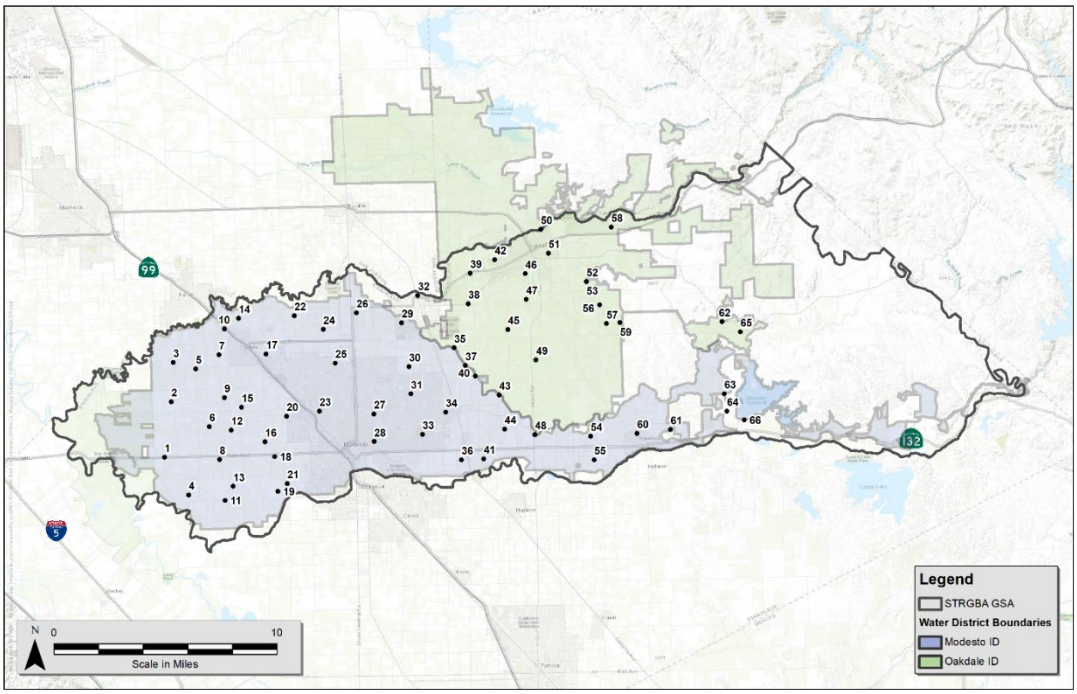
Table 8-13: Scenarios 1-2 Groundwater Budgets

	Baseline	Scenario 1 Urban & Municipal	Scenario 2 In-lieu and Direct Recharge Projects
Deep Percolation	234,900	230,100	235,800
Canal, Res., & Direct Recharge	47,300	47,500	73,500
Net Stream Seepage	24,300	18,800	-4,100
Inflow from Foothills	9,300	9,300	9,300
Net Subsurface Flow	-5,900	-7,600	-36,500
Groundwater Pumping	321,000	307,600	276,600
Groundwater Storage Deficit	11,000	9,500	-1,400

8.5.2. Representative Hydrographs Scenarios 1-2

Figure 8-3 shows the location of the representative monitoring wells that were used in the development and calibration of the Modesto Subbasin in C2VSimTM. As representative wells of simulated conditions, these wells were used to evaluate the performance of the PMAs in each of the different scenarios.

Figure 8-3: Modesto Subbasin Representative Wells



Chapter 6: Sustainable Management Criteria describes thresholds for representative monitoring network wells that protect the Subbasin from experiencing Undesirable Results from the chronic lowering of groundwater levels (SMC1), and depletions of interconnected surface water systems (SMC6). **Chapter 6** defines Undesirable Results such that at no more than 33% of the representative monitoring wells shall exceed the 2015-low for a period longer than 3 consecutive years. Under Scenario 2, SGMA compliance was predicted to be met throughout the simulation period. As shown in the figures below, simulated groundwater levels occasionally drop below the MT, but do not exceed the combination of drought-time spatial and temporal limitations.

Note, the twelve wells listed below (**Figure 8-5** though **Figure 8-16**) are not inclusive of all monitoring locations, rather this subset was included as they are considered representative of RMS throughout the Subbasin. Locations of these example representative hydrographs are shown in **Figure 8-4** below.

Figure 8-4: SMC1 Example Hydrographs

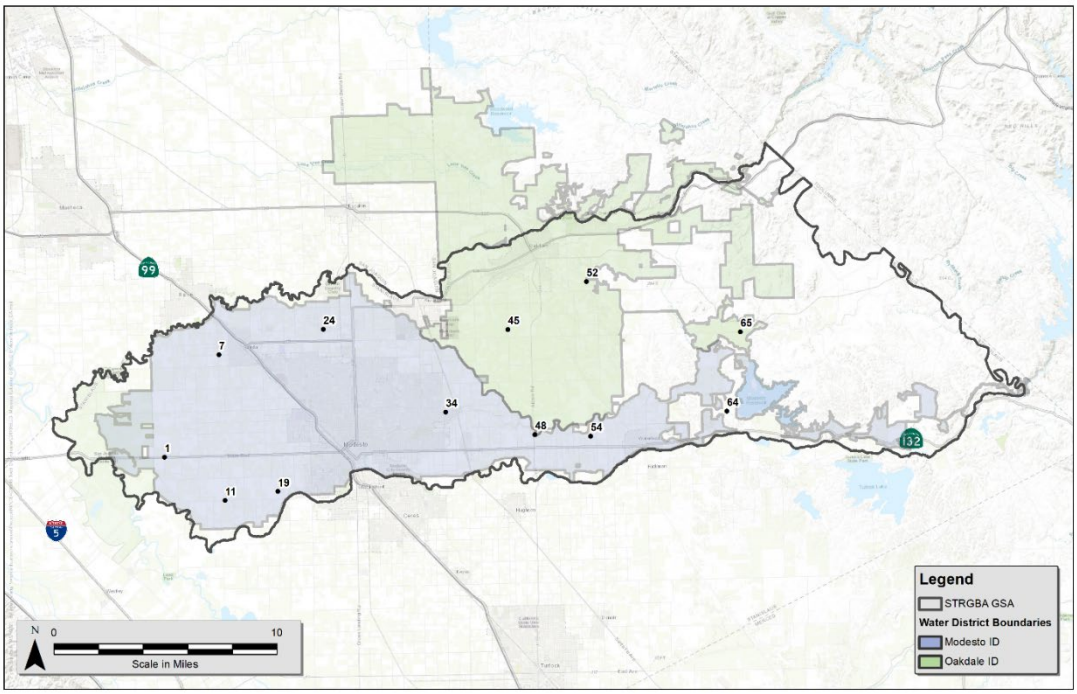


Figure 8-5: SMC1 Hydrograph C2VSimTM 01

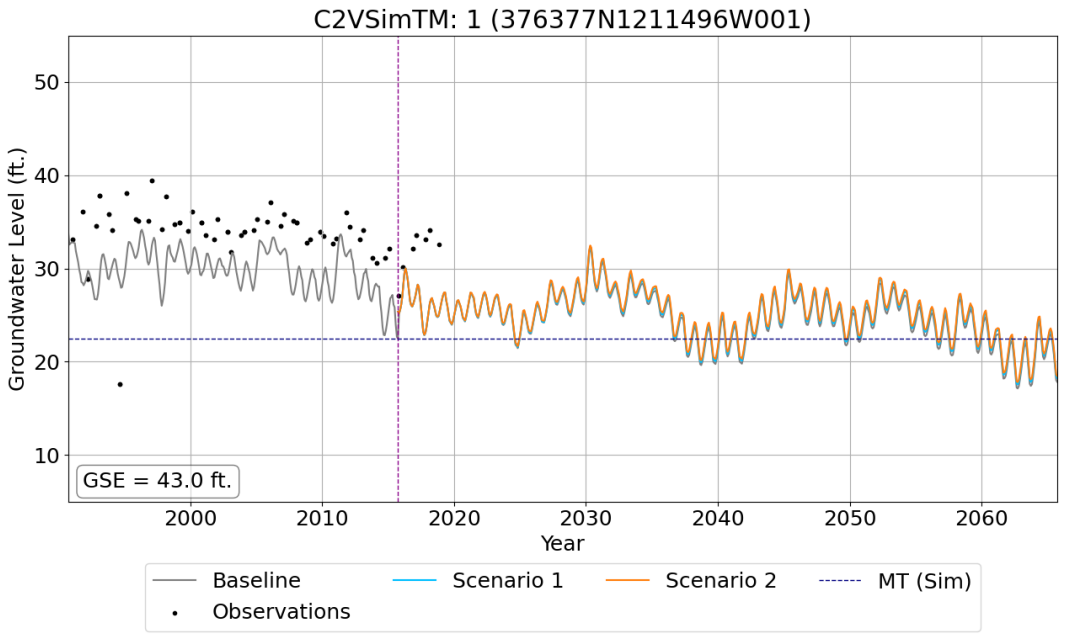


Figure 8-6: SMC1 Hydrograph C2VSimTM 07

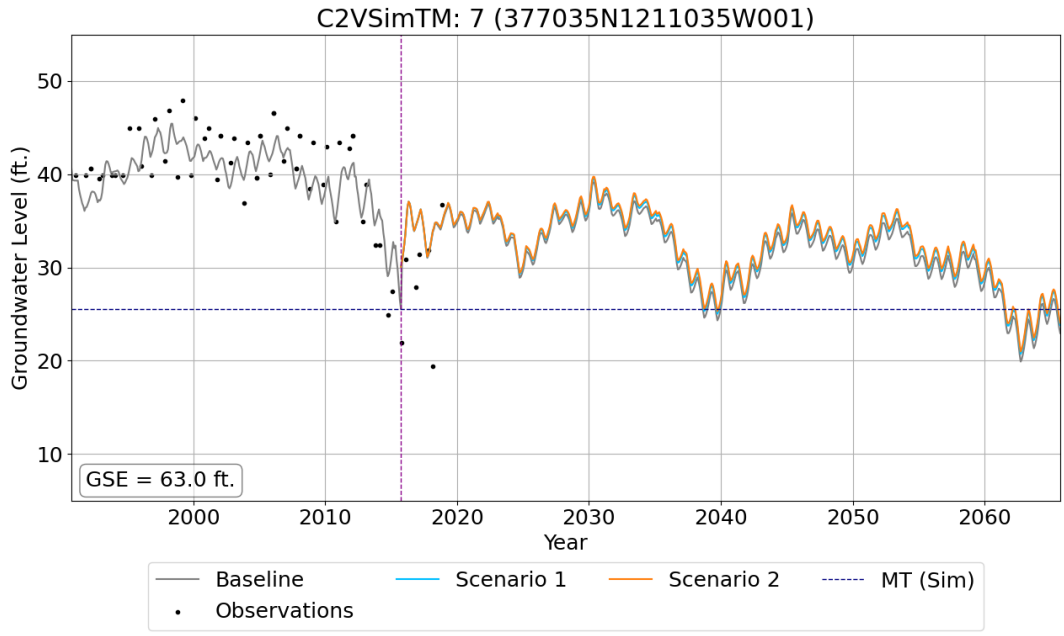


Figure 8-7: SMC1 Hydrograph C2VSimTM 11

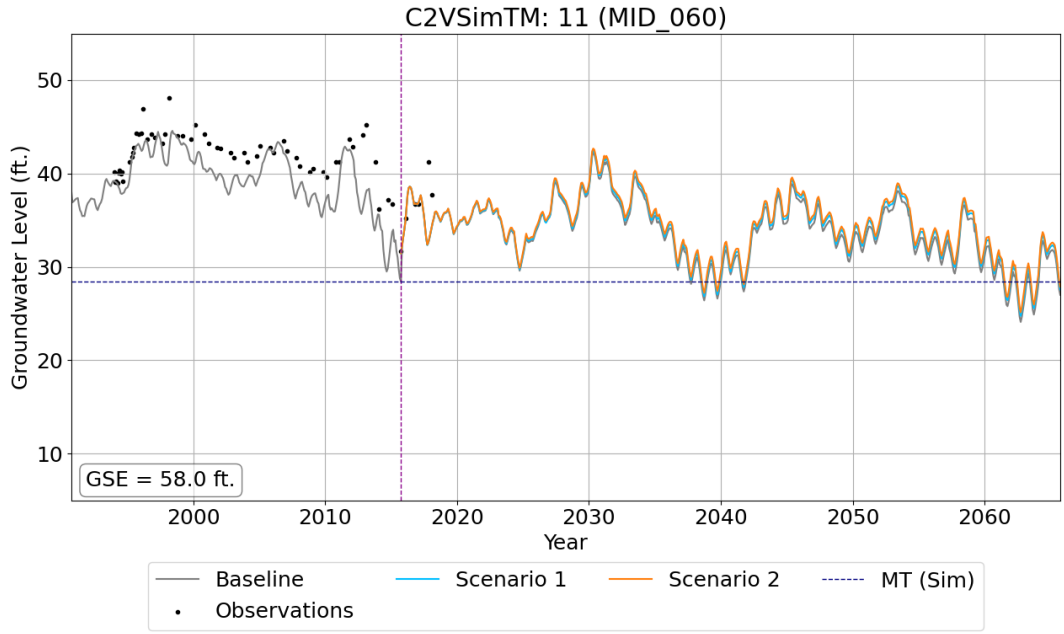


Figure 8-8: SMC1 Hydrograph C2VSimTM 19

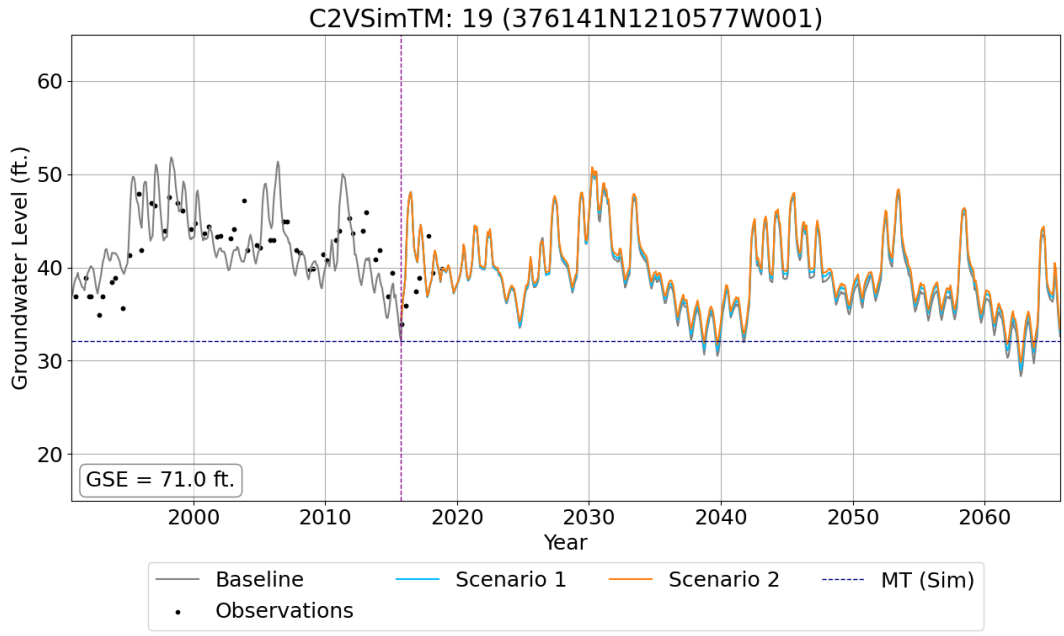


Figure 8-9: SMC1 Hydrograph C2VSimTM 24

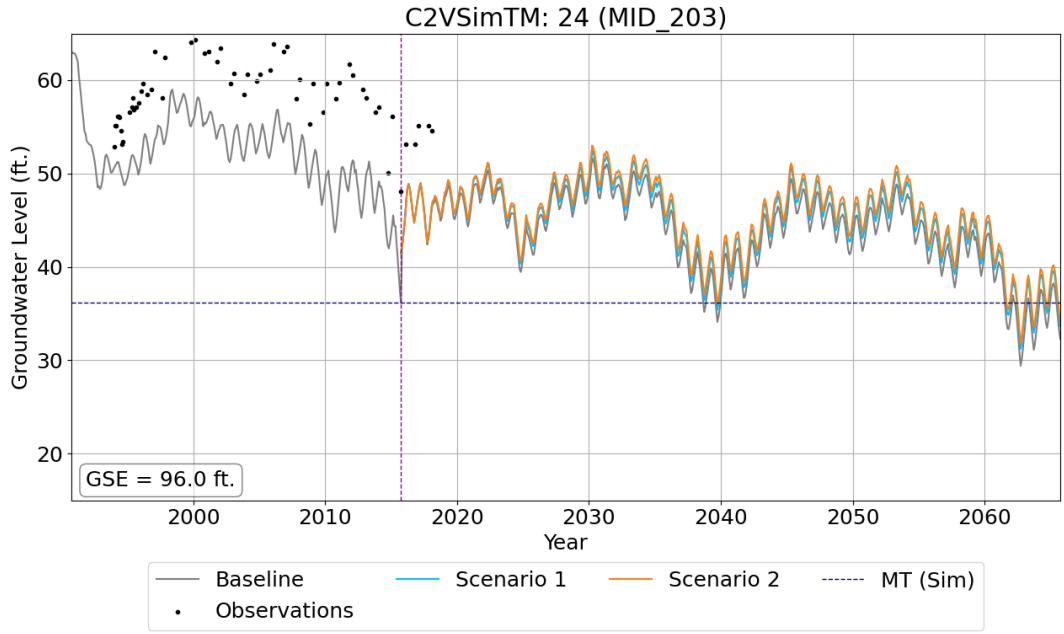


Figure 8-10: SMC1 Hydrograph C2VSimTM 34

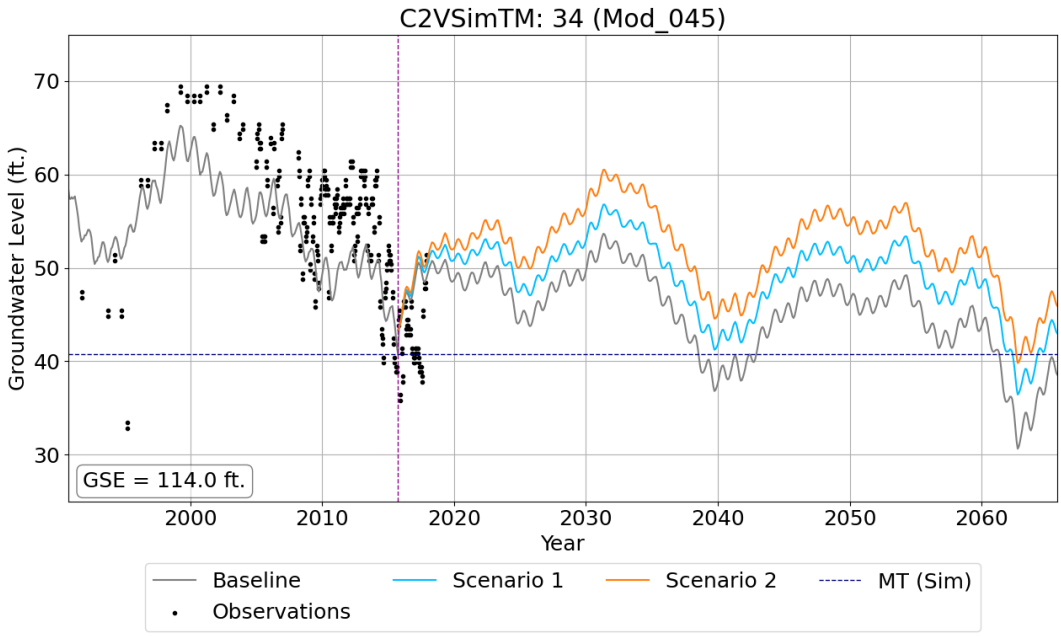


Figure 8-11: SMC1 Hydrograph C2VSimTM 45

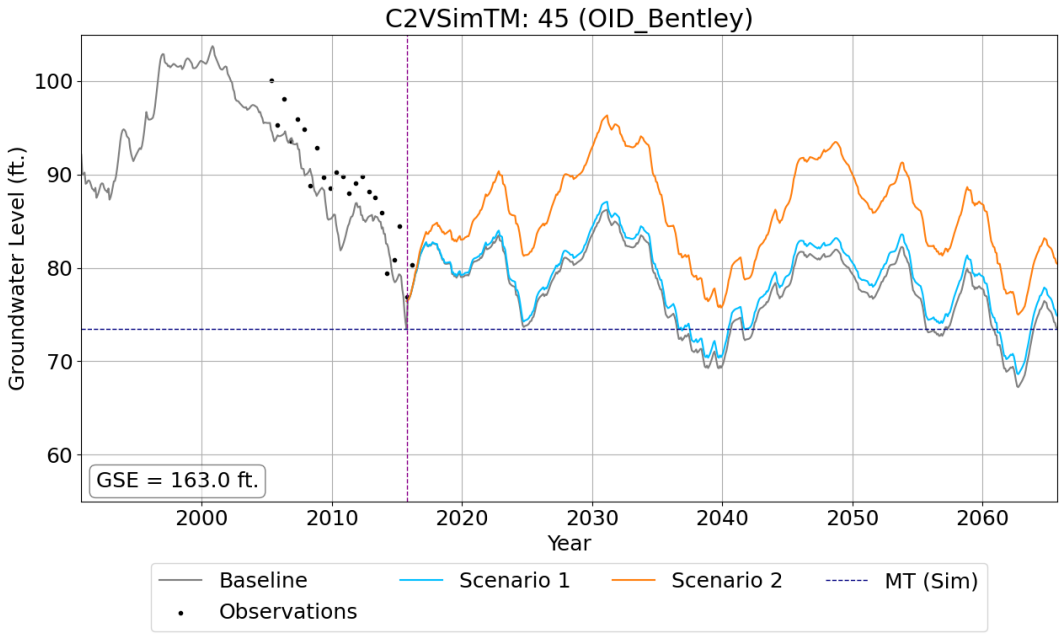


Figure 8-12: SMC1 Hydrograph C2VSimTM 48

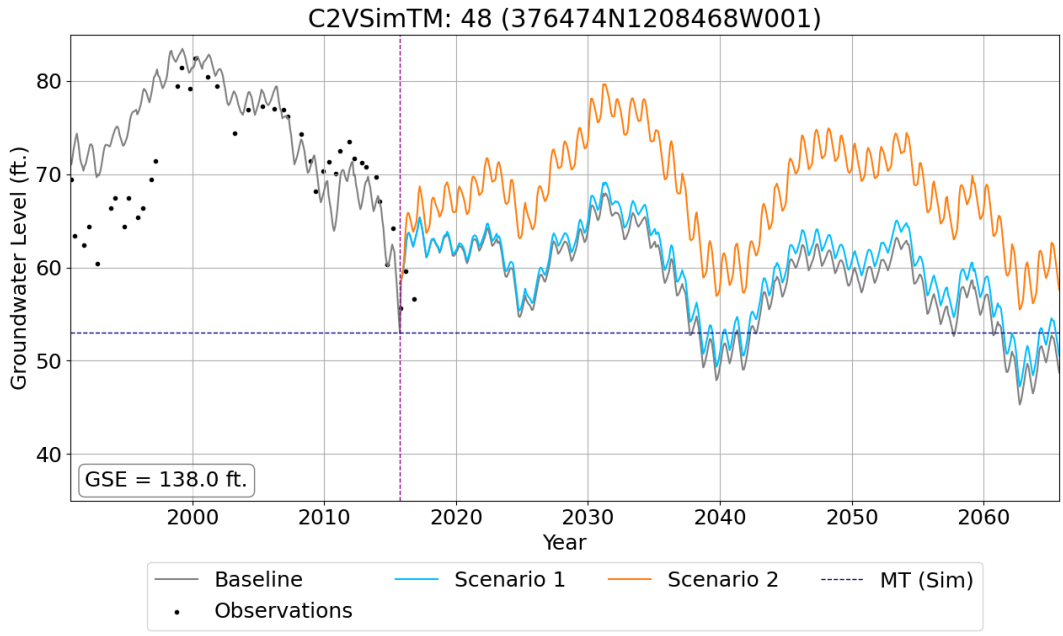


Figure 8-13: SMC1 Hydrograph C2VSimTM 52

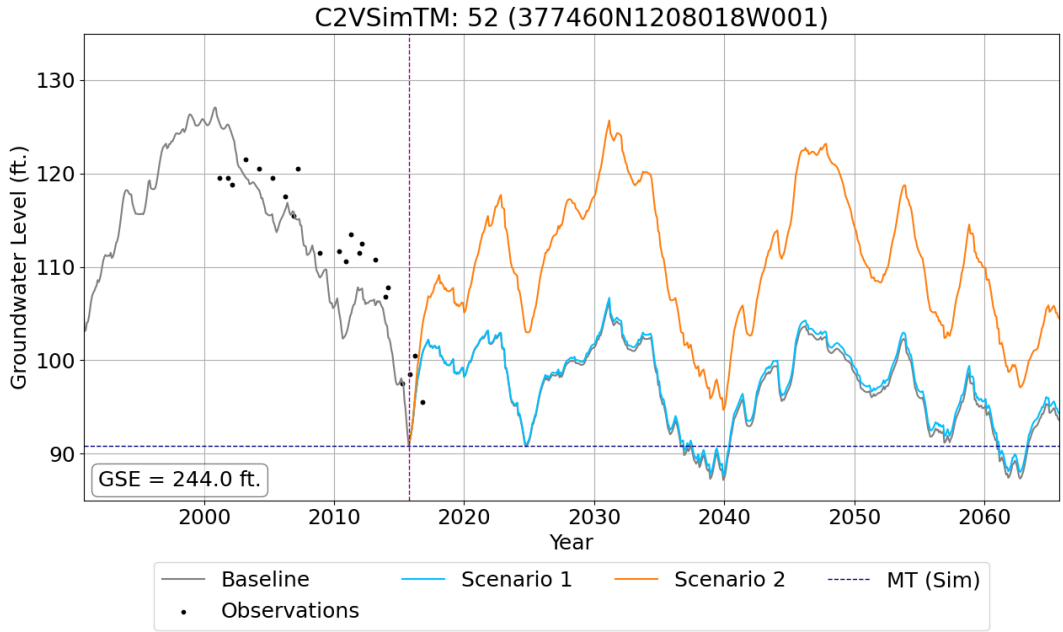


Figure 8-14: SMC1 Hydrograph C2VSimTM 54

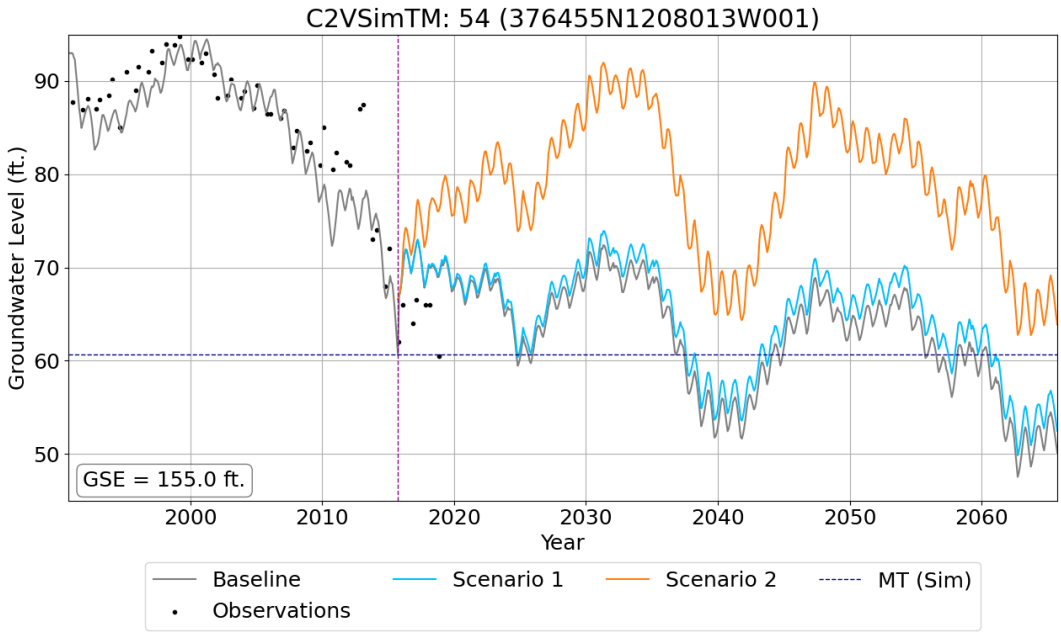


Figure 8-15: SMC1 Hydrograph C2VSimTM 64

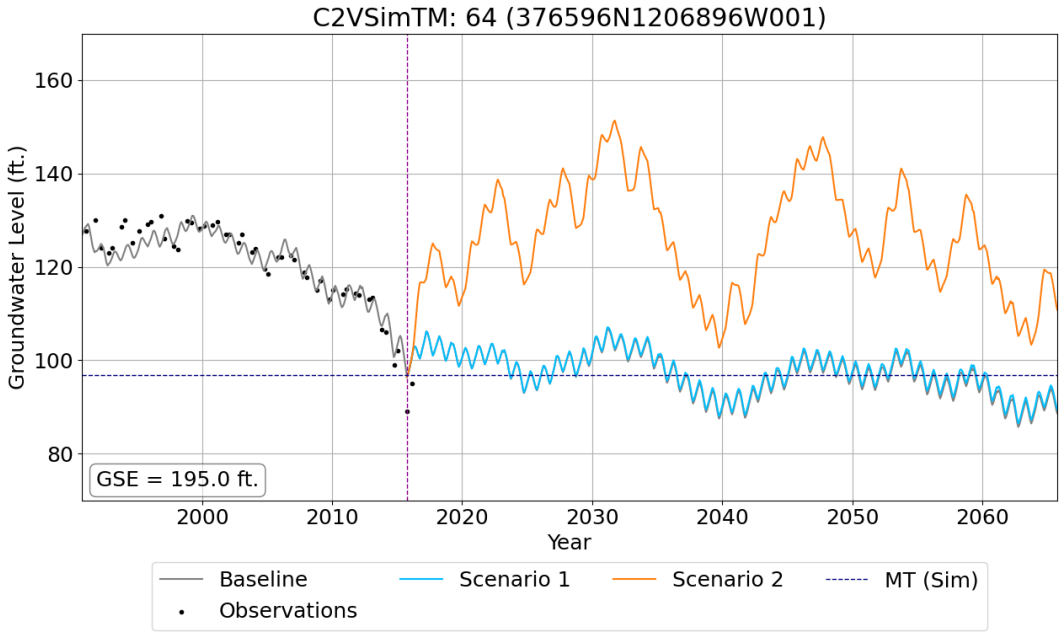
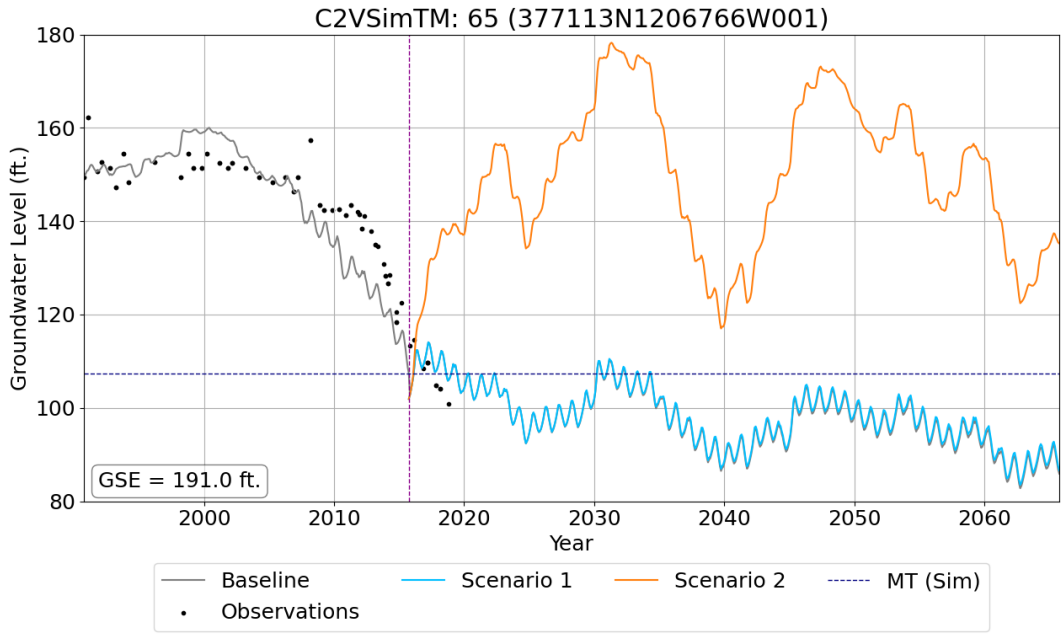


Figure 8-16: SMC1 Hydrograph C2VSimTM 65



9. IMPLEMENTATION PLAN

9.1. PLAN IMPLEMENTATION

Implementation of this GSP includes implementation of the projects and MAs included in **Chapter 8**, as well as the following:

- Modesto Subbasin GSAs administration and management
- Implementing the monitoring program
- Implementation of Projects and Management Actions
- Developing Annual Reports
- Developing Periodic Evaluations

This chapter also describes the contents of both the annual and periodic evaluations that must be provided to the California Department of Water Resources (DWR) as required by Sustainable Groundwater Management Act (SGMA) regulations.

9.1.1. Implementation Schedule

Figure 9-1 illustrates the GSP's implementation schedule. Included in the chart are activities necessary for ongoing GSP monitoring and updates, as well as tentative schedules for projects and MAs. Additional details about the activities included in the schedule are provided in these activities' respective sections of this GSP.

Figure 9-1: Implementation Estimated Schedule[1,2]

#	Project/Management Action Name	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Beyond
Urban and Municipal Projects																						
1	Growth Realization of Surface Water Treatment Plant Phase II																					
2	Advanced Metering Infrastructure (AMI) Project																					
3	Storm Drain Cross Connection Removal Project[3]																					
4	Surface Water Supply Project																					
In-Lieu & Direct Recharge Projects																						
5	MID to Out-of-District Lands In-lieu and Direct Recharge Project																					
6	OID to Out-of-District Lands In-lieu and Direct Recharge Project																					
Flood Mitigation Projects																						
7	Tuolumne River Flood Mitigation Direct Recharge Project																					
8	Dry Creek Flood Mitigation Direct Recharge Project																					
Management Actions																						
1	Groundwater Allocation and Pumping Management Program																					
2	Groundwater Extraction and Surface Water Reporting Program																					
3	Groundwater Extraction Fee																					
4	Groundwater Pumping Credit Market and Trading Program																					
5	Voluntary Conservation and/or Land Fallowing																					
6	Conservation Practices																					
7	Dry Well Mitigation Program																					

PMA development and design period Project construction PMA operation

[1] Supplemental projects (Projects 9 through 13) and are not included because they do not currently have a definite schedule.

[2] In accordance with the resolution, a schedule for management actions 1 through 6 will be developed no later than January 31, 2026, and implemented no later than January 31, 2027. The dry well mitigation program (management action 7) will be developed and implemented no later than January 31, 2026.

[3] The Storm Drain Cross Connection Removal Project has multiple phases and components that will be developed over time and therefore portions are in development/design, construction, or are completed simultaneously.

9.2. IMPLEMENTATION COSTS BUDGETS AND FUNDING SOURCES

The operation of the Modesto Subbasin GSAs and GSP implementation will incur costs, which will require funding. The five primary activities that will incur costs are listed here. **Table 9-1** summarizes these activities and their estimated costs. These estimates will be refined during GSP implementation as more information becomes available.

- Implementing the GSP
- Implementing GSP-related Projects and Management Actions
- Operations of the GSAs
- Developing Annual Reports
- Developing Periodic Evaluations

9.2.1. GSP Implementation and Funding

Costs associated with GSP implementation and operation of the GSAs could include the following:

- **Modesto Subbasin GSAs administration and legal support:** Overall program management and coordination activities, and legal services
- **Stakeholder Engagement:** GSAs board meetings, Technical Advisory (TAC) meetings, general GSA meetings, and public workshops as needed.
- **Outreach:** Email communications, newsletters, and website management
- **GSP implementation program management:** Program management and oversight of project and management action implementation, including coordination among GSAs Boards, staff and stakeholders, coordination of GSAs implementation technical activities, oversight and management of the GSAs consultants and subconsultants, budget tracking, schedule management, and quality assurance/quality control of project implementation activities, and integrating and maintaining a live projects and management actions list
- **Monitoring:** Data collection, filling data gaps, improvements and/or enhancements to DMS

Table 9-1: Modesto Subbasin GSAs and GSP Implementation Budgets

Activity	Estimated Annualized Budget [a]
GSP Implementation and GSA Management	
Administration and Legal Support for the GSAs	$35,000
Stakeholder and Board Engagement	$3,000
Outreach	$5,000
GSP Implementation Program Management	$25,000
Monitoring Program, including Data Management	$15,000
Annual Reporting	$100,000
Periodic Evaluations (total cost estimated to be $500,000, $100,000 annually)	$100,000
Data Gap Analysis	TBD
Projects and Management Actions	
Project 1: Growth Realization of Surface Water Treatment Plant Phase II	$93,190,000
Project 2: Advanced Metering Infrastructure Project (AMI)	$20,000,000
Project 3: Storm Drain Cross Connection Removal Project	$40,000,000
Project 4: Waterford/Hickman Surface Water Pump Station and Storage Tank	$8,500,000
Project 5: Modesto Irrigation District In-lieu and Direct Recharge Project	$53,340,000 - $75,000,000
Project 6: Oakdale Irrigation District In-lieu and Direct Recharge Project	$17,780,000 - $25,000,000
Project 7: Tuolumne River Flood Mitigation and Direct Recharge Project	See Project 5 above [b]
Project 8: Dry Creek Flood Mitigation and Direct Recharge Project	$4,800,600 - $6,750,000
Project 9: Stanislaus River Flood Mitigation and Direct Recharge Project	To be developed during evaluation
Project 10: Retention System Standards Specifications Update	To be developed during evaluation
Project 11: Recharge Ponds	To be developed during evaluation
Project 12: OID Irrigation and Recharge to Benefit City of Oakdale	To be developed during evaluation
Project 13: Modesto Irrigation District Flood-MAR Projects	To be developed during evaluation
MA 1: Groundwater Allocation Program	To be determined during evaluation
MA 2: Groundwater Extraction and Surface Water Accounting Reporting Program	To be determined during evaluation
MA 3: Groundwater Extraction Fee	To be determined during evaluation
MA 4: Groundwater Pumping Credit Market and Trading Program	To be determined during evaluation
MA 5: Voluntary Conservation and/or Land Fallowing	To be determined during evaluation
MA 6: Conservation Practices	To be determined during evaluation
MA 7: Dry Well Mitigation Program	Baseline fund: $300,000

[a] Estimates are rounded and based on full implementation years (FY 2023 through FY 2042). Different costs may be incurred in FY 2022 as GSP implementation begins and during each 5-year update cycle.

[b] Projects 5 and 7 use the same infrastructure for surface water conveyance.

Implementation of this GSP is projected to run between $250,000 and $350,000 per year, and projects totaling between $237,610,600 - $268,440,000. The GSAs have adopted a resolution committing to the development of MAs and a Well Mitigation Program. The GSAs anticipate having the policies and regulations, estimated future costs and funding sources for MAs and the Well Mitigation Program identified by January 31, 2026. Development of this GSP was funded through a Proposition 1 Sustainable Groundwater Planning Grant. Operation of the GSAs is fully funded through contributions from GSAs member agencies. Although ongoing operation of the GSAs is anticipated to include contributions from its member agencies, which are ultimately funded through customer fees or other public funds, additional funding may be required to implement the GSP. Of the implementation activities in the GSP, only project implementation is likely to be eligible for grant or loan funding; funding through grants or loans have varying levels of certainty. As such, the GSAs will develop a financing plan that may include one or more of the following financing approaches:

- **Pumping Fees:** Pumping fees would implement a charge for pumping that would be used to fund GSP implementation activities. In the absence of other sources of funding (i.e., grants, loans, or combined with assessments) fees could range between $10 and $100 per AF per year. To meet the funding needs of the GSP, fees would be lower when pumping is higher, such as current pumping levels, and higher when pumping is lower, such as when sustainable pumping levels are achieved. Although this funding approach would meet the financial needs of the GSP and GSAs, it may discourage pumping reductions due to cost. The financing plan developed by the GSAs would evaluate how to balance the need for funding with encouraging pumpers to commit to compliance with desired groundwater pumping reduction goals.
- **Assessments:** Assessments would charge a fee based on land areas. There are two methods for implementing an assessment based on acreage. The first option would assess a fee for all acres in the Subbasin outside of those in federal lands, which would cost approximately $5 to $10 per acre per year. This option would not distinguish between land use types. The second option would be to assess a fee only on irrigated acres. Based on current irrigated acreage, the assessment would be $10 to $50 per acre per year. Similar to the pumping fee approach, assessment based on irrigated acreage could affect agricultural operations and contribute to land use conversions, which could affect the assessment amount or ability to fully fund GSP implementation.
- **Combination of fees and assessments:** This approach would combine pumping fees and assessments to moderate the effects of either approach on the economy in the Basin. This approach would likely include an assessment that would apply to all acres in the Basin, rather than just to irrigated acreage. It would be coupled with a pumping fee to account for those properties that use more water than others.

During development of a financing plan, the GSAs would also determine whether to apply fees across the Subbasin as a whole or just within certain Management Areas. Prior to implementing any fee or assessment program, the GSAs would complete a rate assessment study and other analysis consistent with the requirements of Proposition 218.

The GSAs member agencies will pursue grants and loans to help pay for project costs to the extent possible. If grants or loans are secured for project implementation, potential pumping fees and assessments may be adjusted to align with operating costs of the GSAs and ongoing GSP implementation activities. A potential hurdle to the utilization of state grant funding is that delays in payment by the state can cause hardships for disadvantaged communities. Therefore, it would be appropriate to expedite payments associated with grant funding by DWR.

9.2.2. Projects and Management Actions

Costs for the Projects and MAs are described in **Chapter 8: Projects and Management Actions** of this GSP. Financing of the projects and MAs would vary depending on the activity. Potential financing options for projects and MAs are provided in **Table 9-2**, though other financing may be pursued as opportunities arise or as appropriate.

Table 9-2: Financing Options for Proposed Projects, Management Actions, and Adaptive Management Strategies

Project/Activity	Responsible Entity	Potential Financing Options
Projects		
Project 1: Growth Realization of Surface Water Treatment Plant Phase II	City of Modesto/MID	City of Modesto Operating Costs Grants and Loans
Project 2: Advanced Metering Infrastructure Project (AMI)	City of Modesto	City of Modesto Operating Costs Grants and Loans
Project 3: Storm Drain Cross Connection Removal Project	City of Modesto	City of Modesto Operating Costs Grants and Loans
Project 4: Waterford/Hickman Surface Water Pump Station and Storage Tank	City of Waterford	City of Waterford Operating Costs
Project 5: Modesto Irrigation District In-lieu and Direct Recharge Project	NDE Areas	Grants and Loans Participating NDE landowners
Project 6: Oakdale Irrigation District In-lieu and Direct Recharge Project	NDE Areas	Grants and Loans Participating NDE landowners
Project 7: Tuolumne River Flood Mitigation and Direct Recharge Project	NDE Areas	Grants and Loans Participating NDE landowners
Project 8: Dry Creek Flood Mitigation and Direct Recharge Project	Stanislaus County/NDE Areas	Grants and Loans Participating NDE landowners
Project 9: Stanislaus River Flood Mitigation and Direct Recharge Project	NDE Areas	Grants and Loans Participating NDE landowners
Project 10: Retention System Standards Specifications Update	City of Modesto	Grants and Loans City of Modesto Operating Costs
Project 11: Recharge Ponds	NDE Areas	Grants and Loans Participating NDE landowners
Project 12: OID Irrigation and Recharge to Benefit City of Oakdale	OID/City of Oakdale	Grants and Loans City of Oakdale Operating Costs
Project 13: Modesto Irrigation District Flood-MAR Projects	MID	Grants and Loans MID Operating Costs
Management Actions		
MA 1: Groundwater Allocation Program	GSAs	Grants and Loans GSA Operating Funds GSA Member Agencies
MA 2: Groundwater Extraction and Surface Water Accounting Reporting Program	GSAs	Grants and Loans GSA Operating Funds GSA Member Agencies
MA 3: Groundwater Extraction Fee	GSAs	Grants and Loans GSA Operating Funds GSA Member Agencies
MA 4: Groundwater Pumping Credit Market and Trading Program	GSAs	Grants and Loans GSA Operating Funds GSA Member Agencies
MA 5: Voluntary Conservation and/or Land Fallowing	GSAs	Grants and Loans GSA Operating Funds GSA Member Agencies
MA 6: Conservation Practices	GSAs	Grants and Loans GSA Operating Funds GSA Member Agencies
MA 7: Dry Well Mitigation Program	GSAs	GSA Operating Funds GSA Member Agencies

9.3. ANNUAL REPORTS

Annual reports must be submitted by April 1 of each year following GSP adoption per California Code of Regulations. Annual reports must include three key sections as follows:

- General Information
- Basin Conditions
- Plan Implementation Progress

An outline of what information will be provided in each of these sections in the annual report is included below. Annual reporting will be completed in a manner and format consistent with Section 356.2 of the SGMA regulations. As annual reporting continues, it is possible that this outline will change to reflect Subbasin conditions, priorities of the GSAs, and applicable requirements.

9.3.1. General Information

General information will include an executive summary that highlights the key content of the annual report. As part of the executive summary, this section will include a description of the sustainability goals, provide a description of GSP projects and their progress as well as an annually updated implementation schedule and map of the Subbasin. Key components as required by SGMA regulations include:

- Executive Summary
- Map of the Basin

9.3.2. Basin Conditions

Basin conditions will describe the current groundwater conditions and monitoring results. This section will include an evaluation of how conditions have changed in the Subbasin over the previous year and compare groundwater data for the year to historical groundwater data. Pumping data, effects of project implementation (e.g., recharge data, conservation, if applicable), surface water flows, total water use, and groundwater in storage will be included. Key components as required by SGMA regulations include:

- Groundwater elevation data from the monitoring network
- Hydrographs of elevation data
- Groundwater extraction data
- Surface water supply data
- Total water use data
- Change in groundwater in storage, including maps

9.3.3. Plan Implementation Progress

Progress toward successful plan implementation would be included in the annual report. This section of the annual report would describe the progress made toward achieving interim milestones as well as implementation of projects and MAs. Key components as required by SGMA regulations include:

- Plan implementation progress
- Sustainability progress

This section may include updates to the projects and management actions list, as new project ideas are presented or existing projects are phased out, completed, or found not to be feasible.

9.4. PERIODIC EVALUATION

SGMA requires evaluation GSPs regarding their progress toward meeting approved sustainability goals at least every five years. SGMA also requires developing a written assessment and submitting this assessment to DWR. An evaluation must also be made whenever the GSP is amended. A description of the information that will be included in the periodic evaluation is provided below and would be prepared in a manner consistent with Section 356.4 of the SGMA regulations.

9.4.1. Sustainability Evaluation

This section will contain a description of current groundwater conditions for each applicable sustainability indicator and will include a discussion of overall Subbasin sustainability. Progress toward achieving interim milestones and measurable objectives will be included, along with an evaluation of groundwater elevations (i.e., those being used as direct or proxy measures for the sustainability indicators) in relation to minimum thresholds. If any of the adaptative management triggers are found to be met during this evaluation, a plan for implementing adaptive management described in the GSP would be included.

9.4.2. Plan Implementation Progress

This section will describe the status of project and management action implementation, and report on whether any adaptive management action triggers had been activated since the previous periodic evaluation. An updated project implementation schedule will be included, along with any new projects that were developed to support the goals of the GSP and a description of any projects that are no longer included in the GSP. The benefits of projects that have been implemented will be included, and updates on projects and MAs that are underway at the time of the periodic evaluation will be reported.

9.4.3. Reconsideration of GSP Elements

Part of the periodic evaluation will include a reconsideration of GSP elements. As additional monitoring data are collected during GSP implementation, land uses and community characteristics change over time, and GSP projects and management actions are implemented, it may become necessary to revise the GSP. This section of the periodic evaluation will reconsider the Basin setting, management areas, undesirable results, minimum thresholds, and measurable objectives. If appropriate, the periodic evaluation will recommend revisions to the GSP. Revisions would be informed by the outcomes of the monitoring network, and changes in the Basin, including changes to groundwater uses or supplies and outcomes of project implementation.

9.4.4. Monitoring Network Description

A description of the monitoring network will be provided in the periodic evaluation. Data gaps, or areas of the Subbasin that are not monitored in a manner commensurate with the requirements of Sections 352.4 and 354.34(c) of the SGMA regulations will be identified. An assessment of the monitoring network's function will also be provided, along with an analysis of data collected to date. If data gaps are identified, the GSP will be revised to include a program for addressing these data gaps, along with an implementation schedule for addressing gaps and how the GSAs will incorporate updated data into the GSP.

9.4.5. New Information

New information that becomes available after the previous evaluation or GSP amendment would be described and evaluated. If the new information warrants a change to the GSP, this would also be included.

9.4.6. Regulations or Ordinances

The periodic evaluation will include a summary of the regulations or ordinances related to the GSP that have been implemented by DWR since the previous report, and address how these may require updates to the GSP.

9.4.7. Legal or Enforcement Actions

Enforcement or legal actions taken by the GSAs or its member agencies in relation to the GSP will be summarized in this section along with how such actions support sustainability in the Subbasin.

9.4.8. Plan Amendments

A description of amendments to the GSP will be provided in the periodic evaluation, including adopted amendments, recommended amendments for future updates, and amendments that are underway during development of the periodic evaluation.

9.4.9. Coordination

The Modesto Subbasin GSAs will continue to work collaboratively to ensure implementation of the GSP to reach sustainability in the Subbasin by 2042. The GSAs will also coordinate with neighboring Subbasins including Eastern San Joaquin, Turlock, Delta-Mendota, and Tracy as needed, or any other land use agencies or entities for project implementation. This section of the periodic evaluation will describe coordination activities between these entities, such as meetings, joint projects, or data collection efforts.

9.5. DATA GAP ANALYSIS

As documented in **Table 3-7**, data gaps have been identified that would support sustainable groundwater management. Those data gaps include improved monitoring and analysis for the Western Lower Principal Aquifer, Eastern Principal Aquifer, interconnected surface water, and GDEs. In addition, the analysis in **Section 2.3.3** identified data gaps for domestic wells. Each of these data gaps are described in the sections below.

9.5.1. Improvements to Monitoring Network

The current GSP monitoring network described in **Chapter 7** meets monitoring objectives for initial tracking and evaluation of sustainable groundwater management criteria in each principal aquifer across the Subbasin. Nonetheless, there are data and knowledge gaps that could improve local monitoring and management. Monitoring improvements targeted for early GSP implementation are summarized below. These improvements will be made over time based on priorities and funding. As mentioned above, a comprehensive assessment of the monitoring network will be conducted as part of the periodic evaluation.

9.5.1.1. Western Lower Principal Aquifer

As noted in **Table 3-7**, an insufficient number of monitoring wells are screened solely in the Western Lower Principal Aquifer to monitor groundwater levels and flow. **Figure 7-2** shows the five existing monitoring sites for this aquifer and illustrates the need for additional wells in the west. As noted on the figure, these wells support monitoring for chronic lowering of groundwater levels, reduction of groundwater in storage, and land subsidence. Additional wells would provide better coverage for development and tracking of sustainable management criteria and development of groundwater elevation contour maps. In turn, these improvements would allow better protection against future land subsidence, assist with water budgets and model calibration, and provide a better understanding of groundwater quality data in the Subbasin.

As part of this process, the GSAs will prioritize unmonitored areas of the aquifer and identify district-owned or other available lands where new monitoring wells might be sited in the future. To expedite collection of key data in the short-term, GSAs will explore the use of existing, properly screened wells from cooperative private well owners. If available, the GSAs would use grant funding for additional monitoring well installations in the future. Two of the existing five monitoring sites were recently installed with a Sustainable Groundwater Management grant funded by Proposition 68.

9.5.1.2. Eastern Principal Aquifer

As noted in **Table 3-7** and described in **Section 7.1.1**, the Eastern Principal Aquifer in the Non-District East Management Area represents a critical data gap for both historical and current data on groundwater levels and flow. As documented throughout the technical analyses in **Chapters 3**, **5**, and **6**, groundwater in this area has had the largest rates of decline and continuing overdraft – conditions that have the greatest potential to lead to undesirable results.

Proposition 68 provided an opportunity to install additional monitoring wells in this area to provide more information on local groundwater conditions. However, existing wells are insufficient for development and tracking of sustainable management criteria in key areas of the Non-District East Management Area. It is anticipated that new wells will be installed as part of project implementation by the Non-District East Management Area. Grant funding will be used for these new wells, as available.

In addition to new monitoring wells, there are data gaps with respect to the existing agricultural wells that need to be better understood. Construction and extraction data from active irrigation wells in this area are unknown. Using available well records and working directly with Non-District East Management Area landowners, the GSAs will work to fill these data gaps, providing more accurate assessments of groundwater conditions in the future. These new data will be incorporated into the water budget analyses as available, which will be provided in annual reports (see **Section 9.3**).

9.5.1.3. Interconnected Surface Water

As indicated in **Table 3-7** and illustrated on **Figure 7-5**, data gaps exist for monitoring and management of interconnected surface water along the Subbasin river boundaries. The Proposition 68 grant provided the opportunity to install five new wells along the Tuolumne and Stanislaus rivers to support GSP monitoring of interconnected surface water. However, given the long river boundaries and other priorities for monitoring, the current network is incomplete. Since the GSP was submitted in 2022, the GSAs have completed an analysis and have identified potential locations of new monitoring wells along the rivers. The GSAs may seek future grant opportunities to provide funding for the additional wells. Additional wells would also assist with monitoring GDEs.

GSAs in the neighboring subbasins, including the Eastern San Joaquin, Turlock and Delta-Mendota subbasins, are currently planning additional wells along the shared river boundaries of the Stanislaus, Tuolumne, and San Joaquin rivers. Consistent with the Modesto Subbasin Sustainability Goal, the GSAs will coordinate with neighboring GSAs to site and install wells that are capable of generating useful data for the shared surface water resources.

9.5.2. Analyses of Groundwater Dependent Ecosystems

The dataset of Natural Communities Commonly Associated with Groundwater (NCCAG) provided by DWR were published after the GSP work plan and grant application had been completed. As such, it was difficult to include anything more than a high-level screening of

potential GDEs in the initial GSP using periods of high and low groundwater elevations (**Section 3.2.8**). Following this screening, more than 70 percent of the original NCCAG polygons were retained as potential GDEs for future analyses.

As explained in **Section 3.2.8**, Moore Biological Consultants reviewed the potential GDEs within Mapes Ranch, a private property near the San Joaquin River. Using both a desktop study and field survey, Moore Biological Consultants concluded that 56 potential GDE polygons within Mapes Ranch are not GDEs. Given this, there may be more potential GDEs in the Subbasin that are not actually GDEs.

Because of the large number of potential GDE polygons, it was unreasonable to incorporate field surveys for all of these areas in the initial GSP assessment. As noted in **Section 6.8**, MTs were set at 2015 levels along the interconnected surface water to be protective of the GDEs along the rivers (where most of the potential GDE polygons occur). Monitoring data will be used to consider potential impacts on GDEs and shared publicly in annual reports.

In addition, the GSAs will continue to investigate potential GDEs and conduct additional analyses going forward. As an initial step, the GSAs will seek technical consultants with expertise to assist in developing a plan for additional GDE analyses.

9.5.3. Domestic Well Data

During the analysis of impacts to domestic wells, it was determined that significant data gaps exist. As noted in **Table 6-2** (**Section 6.3.1.1**), 159 domestic wells failed during 2015-2017 drought conditions (see also **Figures 2-15** and **6-1**). However, recent records of well permits also indicate that many of the failed wells appear to have since been replaced. Although more than 3,000 domestic wells are included in the DWR Well Completion Report database, hundreds of those lack either completion date, construction data or complete location information and there is no indication of which wells have since been destroyed or taken offline. In addition, the well use is not documented for many additional wells in the DWR database, which could represent unknown domestic wells.

The technical team worked with the GSA representative from the City of Modesto to test the DWR database in a rural neighborhood outside of the city where domestic wells are known to be located. Even in that small area, many wells could not be correlated to DWR data and/or did not have construction or other key data in the DWR dataset.

Although production from these wells is likely to be de minimis (less than 2 AFY/well) as defined by SGMA, it would be helpful to better understand the number, location, and status of domestic wells. As part of GSP implementation, GSAs will consider how best to improve domestic well datasets. Areas where domestic wells are concentrated or vulnerable to declining water levels will be prioritized (see **Figures 2-14**, **2-17**, and **6-1**). An additional resource for domestic well data includes the Nitrate Control Program (NCP), where ongoing monitoring for nitrate and other constituents is focused on domestic wells (see **Sections 2.4.4**, **6.6.2.1.1**, **6.6.2.2**, and **7.1.4**); access to well data will be coordinated through the Valley Water Collaborative, which is implementing the NCP in the Modesto Subbasin.

Outreach and well registration activities being applied in other subbasins will also be considered for the Modesto Subbasin.

9.6. CLOSING

The GSP implementation activities are designed to identify and document steps for successful implementation. Collectively, the sustainable management criteria, monitoring networks, and projects and management actions are anticipated to achieve the Modesto Subbasin sustainability goal. Although it is recognized that more information and actions will be needed over time, the GSAs will incorporate an adaptive management approach to prioritize activities based on best available information and document those activities and data through continued outreach and annual reporting.

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Modesto Subbasin

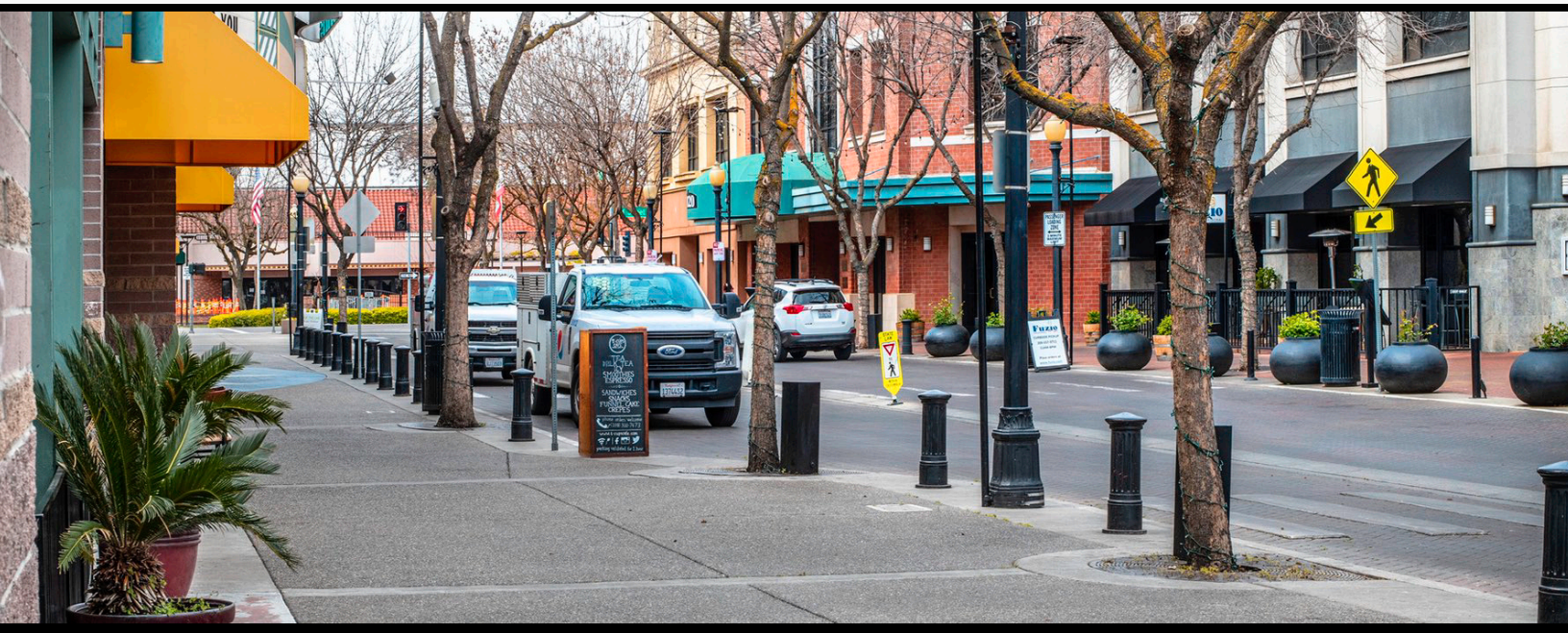
Groundwater Sustainability Plan

Appendices

Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) Groundwater Sustainability Agency

&

County of Tuolumne Groundwater Sustainability Agency



Appendix A

Notice of Intent to Prepare a GSP

Stanislaus and Tuolumne Rivers Groundwater Basin Association
Groundwater Sustainability Agency
1231 11th Street ● Modesto, CA 95354
Phone: (209) 526-7564 ● Fax: (209) 526-7352
E-mail: John.Davids@mid.org

March 14, 2018

Mr. Trevor Joseph
California Department of Water Resources
901 P Street, Room 201
P.O. Box 942836
Sacramento, CA 94236-0001

Re: Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency - Notification of Intent to Develop a Groundwater Sustainability Plan

Dear Mr. Joseph,

Pursuant to California Water Code Section 10727.8 and California Code of Regulations, Title 23, Section 353.6, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) hereby notifies the Department of Water Resources (DWR) of its intent to develop a Groundwater Sustainability Plan (GSP) for the Modesto Sub-basin (Sub-basin) in cooperation with other Groundwater Sustainability Agencies within the Sub-basin. The action of the STRGBA GSA authorizing the submission of this initial notification is attached.

The public may participate in the development of the GSP for the Sub-basin by attending the STRGBA GSA's monthly meetings held at the Modesto Irrigation District's offices – 1231 11th Street, Modesto, California 95354. A schedule of upcoming meetings, meeting agendas, meeting minutes and information on the GSP development process are available on the STRGBA GSA website at: www.strgba.org.

The STRGBA GSA looks forward to working collaboratively with the public and DWR staff to develop and implement the GSP for the Sub-basin. Should you have any questions or concerns regarding the information noted herein, please feel free to contact me at (209) 526-7564.

Sincerely,

John B. Davids, P.E.
STRGBA GSA Coordinator

Enclosure: STRGBA GSA February 14, 2018 Meeting Minutes

Stanislaus and Tuolumne Rivers Groundwater Basin Association
Groundwater Sustainability Agency
1231 11th Street ● Modesto, CA 95354
Phone: (209) 526-7564 ● Fax: (209) 526-7352
E-mail: John.Davids@mid.org

cc: Administration Files
Stanislaus County Board of Supervisors
City of Modesto City Council
City of Oakdale City Council
City of Riverbank City Council
City of Waterford City Council
Modesto Irrigation District Board of Directors
Oakdale Irrigation District Board of Directors

Attachment B

STRGBA Member Resolutions and Proofs of Publication of Notice

MODESTO CITY COUNCIL
RESOLUTION NO. 2017-30

RESOLUTION AUTHORIZING THE GROUNDWATER SUSTAINABILITY AGENCY MEMORANDUM OF UNDERSTANDING, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE MEMORANDUM OF UNDERSTANDING, AND PREPARE AND SUBMIT NOTICE OF THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY'S ELECTION TO BE THE GROUNDWATER SUSTAINABILITY AGENCY FOR THE MODESTO SUB-BASIN TO DEPARTMENT OF WATER RESOURCES

WHEREAS, in September of 2014, Governor Edmund G. Brown signed into law, the Sustainable Groundwater Management Act of 2014 (SGMA), which changed the method for groundwater management, and

WHEREAS, SGMA is a comprehensive three bill package that sets the framework for statewide sustainable groundwater management by local agencies, and

WHEREAS, SGMA requires the formation of Groundwater Sustainable Agencies (GSA) and the preparation of Groundwater Sustainability Plans (GSP) with a focus on long-term sustainability, and

WHEREAS, formation of a GSA must occur no later than June 30, 2017, and development and adoption of a GSP must be adopted no later than January 31, 2022, for high and medium priority basins not currently in critical overdraft, and

WHEREAS, the Modesto Sub-basin (designated basin number 5-22.02 in DWR's CASGEM groundwater basin system) is designated as a high-priority basin, and

WHEREAS, SGMA authorizes a local agency, or a combination of local agencies, overlying a groundwater basin to form a GSA, and

WHEREAS, multi-agency GSAs may be formed through either a Memorandum of Understanding (MOU) or other legal agreement, and

WHEREAS, the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) member agencies are all local agencies, pursuant to SGMA's definition, and

WHEREAS, the STRGBA member agencies include the cities of Oakdale, Riverbank, Modesto, and Waterford; Stanislaus County; Oakdale Irrigation District; and Modesto Irrigation District, and

WHEREAS, since its inception in 1994, STRGBA has provided a forum for local agencies to work cooperatively to provide for coordinated planning in the pursuit of effective and sustainable management of the Modesto Sub-basin, and

WHEREAS, the STRGBA member agencies believe that the sustainable management of the Modesto Sub-basin pursuant to SGMA may best be achieved through the cooperation of the Member Agencies operating through the GSA MOU, and

WHEREAS, SGMA requires formal procedures be followed to become a GSA, and

WHEREAS, each of the local agencies electing to be a GSA must hold a noticed public hearing to receive public comment on the local agency's decision to become the GSA for the Basin, and

WHEREAS, at the conclusion of this public hearing, it is anticipated that the governing board for each local agency will authorize the execution of the **attached** GSA MOU and adopt the **attached** resolution forming the GSA for the Basin,

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizing the Groundwater Sustainability Agency Memorandum of Understanding, and authorizing the City Manager, or his designee, to execute the Memorandum of Understanding, and prepare and submit notice of the Stanislaus and

Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency's election to be the Groundwater Sustainability Agency for the Modesto Sub-basin to Department of Water Resources.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute said Memorandum of Understanding on behalf of the City, and prepare and submit notice of the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency's election to be the Groundwater Sustainability Agency for the Modesto Sub-basin to Department of Water Resources.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 24th day of January, 2017, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
ADAM U. LINDGREN, City Attorney

DECLARATION OF PUBLICATION (C.C.P. S2015.5)

COUNTY OF STANISLAUS STATE OF CALIFORNIA

I am a citizen of the United States and a resident Of the County aforesaid; I am over the age of Eighteen years, and not a party to or interested In the above entitle matter. I am a printer and Principal clerk of the publisher of THE MODESTO BEE, printed in the City of MODESTO, County of STANISLAUS, State of California, daily, for which said newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of STANISLAUS, State of California, Under the date of February 25, 1951, Action No. 46453; that the notice of which the annexed is a printed copy, has been published in each issue there of on the following dates, to wit:

Jan 09, 2017, Jan 16, 2017

I certify (or declare) under penalty of perjury That the foregoing is true and correct and that This declaration was executed at

MODESTO, California on

January 16th, 2017

(By Electronic Facsimile Signature)

Cynthia A. Hamilton

PUBLIC NOTICE

Notice is hereby given that, pursuant to Water Code section 10723, City of Modesto will hold a public hearing during a regular meeting on Tuesday, January 24, 2017 at 5:30 P.M., in the City of Modesto Council Chambers, Basement Level, located at 1010 10th Street, Modesto, to determine whether the City of Modesto will authorize the execution of the MEMORANDUM OF UNDERSTANDING FORMING THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY and participate in the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) election to become a groundwater sustainability agency for the Modesto Groundwater Sub-Basin. Written comments may be submitted to City of Modesto at Attn: Miguel Alvarez, 1010 10th Street, Suite 4500, Modesto, CA 95353. During the hearing, City of Modesto will allow oral comments and will receive additional written comments until the STRGBA elects to be a groundwater sustainability agency.

Pub Dates 1/9/17 & 1/16/17

CASE NO. 10262602 key 86002

IN THE CITY COUNCIL
OF THE CITY OF OAKDALE
STATE OF CALIFORNIA
CITY COUNCIL RESOLUTION 2017-001

A RESOLUTION OF THE CITY OF OAKDALE CITY COUNCIL AUTHORIZING THE CITY MANAGER TO EXECUTE A MEMORANDUM OF UNDERSTANDING TO FORM THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY AND TO PREPARE AND SUBMIT NOTICE OF THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY'S ELECTION TO BE THE GROUNDWATER SUSTAINABILITY AGENCY FOR THE MODESTO SUB-BASIN (DESIGNATED BASIN NUMBER 5-22.02 IN THE CALIFORNIA DEPARTMENT OF WATER RESOURCES' CASGEM GROUNDWATER BASIN SYSTEM) TO THE CALIFORNIA DEPARTMENT OF WATER RESOURCES

THE CITY OF OAKDALE CITY COUNCIL DOES HEREBY RESOLVE THAT:

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 ("SGMA"), which authorizes local agencies to manage groundwater in a sustainable fashion; and,

WHEREAS, the legislative intent of SGMA is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and,

WHEREAS, SGMA requires that a GSA be formed for all basins designated by the Department of Water Resources as a high-priority basin, such as the Modesto Sub-basin (designated basin number 5-22.02 in the California Department of Water Resources' CASGEM groundwater basin system) ("Basin"), by June 30, 2017; and,

WHEREAS, SGMA permits a combination of local agencies to form a groundwater sustainability agency ("GSA") through a Memorandum of Understanding ("MOU"); and

WHEREAS, the County of Stanislaus, the Oakdale Irrigation District, the City of Oakdale, the City of Riverbank, the City of Modesto, the City of Waterford, and the Modesto Irrigation District ("MOU Agencies") are all local agencies, as SGMA defines that term; and,

WHEREAS, the MOU Agencies are committed to sustainable management of the Basin's groundwater resources as shown by, among other actions, the MOU Agencies' creation of the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRGBA") in 1994, which was created to ensure coordinated and effective management of the Basin; and,

WHEREAS, the MOU Agencies each exercise jurisdiction upon lands overlying the Basin and are all committed to the sustainable management of the Basin's groundwater resources; and,

WHEREAS, the MOU Agencies have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the MOU Agencies operating through an MOU; and,

WHEREAS, notice of a hearing on the MOU Agencies' decision to form a GSA for the Basin ("Notice") has been published in the Oakdale Leader as provided by law; and,

WHEREAS, on this day, the City Council of the City of Oakdale held a public hearing to consider whether it should enter into the Memorandum of Understanding Forming the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency ("GSA MOU") (attached hereto as Exhibit A) to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association GSA ("STRGBA GSA") for the Basin; and,

WHEREAS, it would be in the best interests of the MOU Agencies to form the GSA for the Basin, and to begin the process of preparing a groundwater sustainability plan ("Sustainability Plan"); and,

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b)(5), including organization and administrative activities of government, because there would be no direct or indirect physical change in the environment.

NOW, THEREFORE, BE IT RESOLVED by the **CITY COUNCIL** of the **CITY OF OAKDALE**:

1. All the recitals in this resolution are true and correct and the City of Oakdale so finds, determines and represents.

2. The City Clerk of the City of Oakdale is hereby authorized and directed to attest the signature of the authorized signatory, and to affix and attest the seal of the City of Oakdale, as may be required or appropriate in connection with the execution and delivery of the GSA MOU.

3. The City of Oakdale hereby elects to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin.

4. Within thirty (30) days of the date of this resolution, the City of Oakdale City Manager is directed to provide notice of the City of Oakdale to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin ("Notice of GSA Election") to the California Department of Water Resources in the manner required by law.

5. One of the elements of the Notice of GSA Election is the boundaries of the area of the Basin or the portion of the Basin that the MOU Agencies intend to manage. Until further action of the MOU Agencies, the boundaries of the GSA shall be the boundaries of the portion of the Basin within the MOU Agencies' combined jurisdiction. A copy of a map of the management area is attached as Exhibit B.

6. This resolution shall take effect immediately upon passage and adoption.

CITY OF OAKDALE
City Council Resolution 2017-001

THE FOREGOING RESOLUTION IS HEREBY ADOPTED THIS 17th DAY OF JANUARY, 2017, by the following vote:

AYES:	COUNCIL MEMBERS:	Bairos, Dunlop, McCarty, Murdoch and Paul	(5)
NOES:	COUNCIL MEMBERS:	None	(0)
ABSENT:	COUNCIL MEMBERS:	None	(0)
ABSTAINED:	COUNCIL MEMBERS:	None	(0)

SIGNED:

Pat Paul, Mayor

ATTEST:

Kathy Teixeira, CMC
City Clerk

I, KATHY TEIXEIRA, City Clerk of the City of Oakdale, DO HEREBY CERTIFY that foregoing Resolution 2017-001 was duly passed and adopted by the City Council of the City of Oakdale at a regular meeting held on the 17th day of January 2017.

IN WITNESS WHEREOF, I have hereby set my hand and affixed the seal of the City of Oakdale this 25th day of January 2017.

KATHY TEIXEIRA, CMC
CITY CLERK

PROOF OF PUBLICATION

(2015.5 C. C. P.)

STATE OF CALIFORNIA,

County of Stanislaus

I am a citizen of the United States and a resident of the county aforesaid; I am over the age of twenty-one years, and not a party to or interested in the above entitled matter. I am the principal clerk of THE OAKDALE LEADER, 122 South Third Avenue, Oakdale, California, a newspaper of general circulation, published in Oakdale, California in the City of Oakdale, County of Stanislaus, and which newspaper has been adjudged a newspaper of general circulation, by the Superior Court of the County of Stanislaus, State of California. That the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

January 4, 11, in the year 2017

I certify or declare under penalty of perjury that the foregoing is true and correct.

Dated at Oakdale,

This 11th day of January 2017.

Signature

This space is for the County Clerk's Filing Stamp

Proof of Publication of

PUBLIC HEARING (STRGBA)

PUBLIC NOTICE
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that pursuant to California Water Code section 10723 the City of Oakdale City Council will hold a public hearing during a regular meeting on Tuesday, January 17, 2017, in the Council Chambers, 277 North Second Avenue, at 7:00 p.m. or as soon thereafter to determine whether City Council will authorize the execution of the MEMORANDUM OF UNDERSTANDING FORMING THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY and participate in the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) election to become a groundwater sustainability agency for the Modesto Groundwater Sub-Basin. Written comments may be submitted to City of Oakdale, Public Services Department, Attn: Michael Renfrow, 455 South Fifth Avenue Oakdale, CA 95361 prior to the hearing. During the hearing, Oakdale City Council will accept public testimony and will receive additional written comments until the STRGBA elects to be a groundwater sustainability agency. If a challenge to the above application is made in court, persons may be limited to raising only those issues they or someone else raised at the Public Hearing described in the notice, or in written correspondence delivered to the City Council.

If you have any questions, please call the Public Services Department at 845-3600, or stop by the office at 455 South Fifth Avenue.

BY ORDER OF THE OAKDALE CITY COUNCIL
KATHY TEIXEIRA, CMC
City Clerk
DATED: December 22, 2016
January 4, 11, 2017
OL #17-001

CITY OF RIVERBANK

RESOLUTION NO. 2017-005

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVERBANK, CALIFORNIA, AUTHORIZING AND DIRECTING THE EXCUTION OF A MEMORANDUM OF UNDERSTANDING FORMING THE STANISLAUS AND TOLOUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 ("SGMA"), which authorizes local agencies to manage groundwater in a sustainable fashion; and,

WHEREAS, the legislative intent of SGMA is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and,

WHEREAS, SGMA requires that a GSA be formed for all basins designated by the Department of Water Resources as a high-priority basin, such as the Modesto Sub-basin (designated basin number 5-22.02 in the California Department of Water Resources CASGEM groundwater basin system(("Basin"), by June 30, 2017; and,

WHEREAS, SGMA permits a combination of local agencies to form a groundwater sustainability agency ("GSA") through a Memorandum of Understanding ("MOU"); and

WHEREAS, the County of Stanislaus, the Oakdale Irrigation District, City of Riverbank, the City of Oakdale, the City of Modesto, the City of Waterford, and the Modesto Irrigation District ("MOU Agencies") are all local agencies, as SGMA defines that term; and

WHEREAS, the MOU Agencies are committed to sustainable management of the Basin's groundwater resources as shown by, among other actions, the MOU Agencies creation of the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRGBA") in 1994, which was created to ensure coordinated and effective management of the Basin; and

WHEREAS, the MOU Agencies each exercise jurisdiction upon lands overlying the Basin and are all committed to the sustainable management of the Basin's groundwater resources; and

WHEREAS, the MOU Agencies have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the MOU Agencies operating through an MOU; and

WHEREAS, notice of a hearing on the MOU Agencies decision to form a GSA for the Basin ("Notice") has been published in the Riverbank News as provided by law; and

WHEREAS, on this day, the City of Riverbank City Council held a public hearing to consider whether it should enter into the Memorandum of Understanding Forming the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency ("GSA MOU") (attached here to as Exhibit A) to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association GSA ("STRGBA GSA") for the Basin; and

WHEREAS, it would be in the best interests of the MOU Agencies to form the GSA for the Basin, and to begin the process of preparing a groundwater sustainability plan; and

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b) (5), including organization and administrative activities of government, because there would be no direct or indirect physical change in the environment.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Riverbank hereby declares that:

1. All the recitals in this resolution are true and correct and the City of Riverbank City Council so finds, determines and represents.

2. The City Clerk of the City of Riverbank is hereby authorized and directed to attest the signature of the authorized signatory, and to affix and attest the seal of the City of Riverbank, as may be required or appropriate in connection with the execution and delivery of the GSA MOU.

3. The City of Riverbank hereby elects to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin.

4. Within thirty (30) days of the date of this resolution, the City of Riverbank City Manager is directed to provide notice of City of Riverbank's to enter into the GSA MOU Agencies to form the GSA for the Basin ("Notice of GSA Election") to the California Department of Water Resources in the manner required by law.

5. One of the elements of the Notice of GSA Election is the boundaries of the area of the Basin or the portion of the Basin that the MOU Agencies intend to manage. Until further action of the MOU Agencies, the boundaries of the GSA shall be the boundaries of the portion of the Basin within the MOU Agencies combined jurisdiction. A copy of a map of the management area is attached as **Exhibit B.**

6. This resolution shall take effect immediately upon passage and adoption.

PASSED AND ADOPTED by the City Council of the City of Riverbank at a regular meeting held on the 24th day of January 24, 2017; motioned by Councilmember District 4 Darlene Barber-Martinez, seconded by Vice Mayor Leanne Jones Cruz, and upon roll call was carried by the following City Council vote of *4-0:

AYES: **Barber-Martinez, Campbell, Jones Cruz, and Mayor O'Brien**
NAYS: **None**
ABSENT: **None**
ABSTAINED: **None**

ATTEST:

Annabelle H. Aguilar, CMC
City Clerk

APPROVED:

Richard D. O'Brien
Mayor

Attachments: MOU and Exhibit B - Management Area Map

*Councilmember District 2 Cindy Fosi, recused herself.

CERTIFICATION
I hereby certify the foregoing is a true and correct copy of the original document on file in the office of the City Clerk of the City of Riverbank.

CITY CLERK

DATED 02/01/2017

PROOF OF PUBLICATION

(2015.5 C. C. P.)

STATE OF CALIFORNIA,

County of Stanislaus

I am a citizen of the United States and a resident of the county aforesaid; I am over the age of twenty-one years, and not a party to or interested in the above entitled matter. I am the principal clerk of THE RIVERBANK NEWS, 122 South Third Ave, Oakdale, California, a newspaper of general circulation, published in Riverbank, California in the City of Riverbank, County of Stanislaus, and which newspaper has been adjudged a Newspaper of general circulation, by the Superior Court of the County of Stanislaus, State of California. That the Notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

January 11, in the year 2017

I certify or declare under penalty of perjury that the Foregoing is true and correct.

Dated at Riverbank, California

This 11th day of January 2017.

Signature

This space is for the County Clerk's Filing Stamp

Proof of Publication of

PUBLIC NOTICE
GSA/SGMA

PUBLIC NOTICE
NOTICE OF PUBLIC HEARING
City of Riverbank City Council

NOTICE IS HEREBY GIVEN that the City Council of the City of Riverbank will hold a public hearing on Tuesday, January 24, 2017, in the City Hall Council Chambers, 6707 Third Street, Suite B, Riverbank, California, at 6:00 p.m. or soon thereafter to consider and review the following matter: Whether the City Council of the City of Riverbank should elect to become a Groundwater Sustainability Agency (GSA) under the Sustainable Groundwater Management Act (SGMA) (California Water Code, Section 10720 et seq.) for the portion of the Modesto Sub-basin designated basin number 5-22.02 in the California Dept. of Water Resources groundwater basin system within the City of Riverbank's service area. ALL INTERESTED PARTIES are invited to attend the public hearing on January 24, 2017, at the time and place specified above to express opinions or submit evidence for or against the subject matter being considered. Written comments submitted to the City Clerk at 6707 Third Street, Suite A, Riverbank, California, 95367 or cityclerk@riverbank.org will be accepted by the City Clerk up to 5:00 p.m. on said date. Oral comments will be received by the City Council prior to the close of the Public Hearing. Any public materials of the subject matter will be made available for review at the City Clerk's office and (when technologically possible) at www.riverbank.org upon distribution to a majority of the City Council, (typically 72 hours prior to the meeting). In compliance with ADA, any person requiring special assistance to participate in the meeting should notify the Administration Dept. at (209) 863-7122 or cityclerk@riverbank.org at least 72 hours prior to the meeting. For questions regarding the proposed subject matter contact Michael Riddell, Public Works Superintendent at (209) 869-7128 or mriddle@riverbank.org, or contact the City Clerk at (209) 863-7198. Published this 11th day of January, 2017 /s/ Annabelle H. Aguilar, CMC, City Clerk, City of Riverbank

January 11, 2017
RN #17-003

WATERFORD CITY COUNCIL
RESOLUTION 2017-02

A RESOLUTION OF THE CITY COUNCIIL OF THE CITY OF WATERFORD AUTHORIZING AND DIRECTING THE EXECUTION OF A MEMORANDUM OF UNDERSTANDING FORMING THE GROUNDWATER SUSTAINABILITY AGENCY FOR THE MODESTO SUB-BASIN

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 ("SGMA"), which authorizes local agencies to manage groundwater in a sustainable fashion; and

WHEREAS, the legislative intent of SGMA is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and

WHEREAS, SGMA requires that a GSA be formed for all basins designated by the Department of Water Resources as a high-priority basin, such as the Modesto Sub-basin (designated basin number 5-22.02 in the California Department of Water Resources' CASGEM groundwater basin system) ("Basin"), by June 30, 2017; and

WHEREAS, SGMA permits a combination of local agencies to form a groundwater sustainability agency ("GSA") through a Memorandum of Understanding ("MOU"); and

WHEREAS, the County of Stanislaus, the Oakdale Irrigation District, the City of Oakdale, the City of Riverbank, the City of Modesto, the City of Waterford, and the Modesto Irrigation District ("MOU Agencies") are all local agencies, as SGMA defines that term; and

WHEREAS, the MOU Agencies are committed to sustainable management of the Basin's groundwater resources as shown by, among other actions, the MOU Agencies' creation of the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRGBA") in 1994, which was created to ensure coordinated and effective management of the Basin; and

WHEREAS, the MOU Agencies each exercise jurisdiction upon lands overlying the Basin and are all committed to the sustainable management of the Basin's groundwater resources; and

WHEREAS, the MOU Agencies have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the MOU Agencies operating through an MOU; and

WHEREAS, notice of a hearing on the MOU Agencies' decision to form a GSA for the Basin ("Notice") has been published in the Waterford News as provided by law; and

WHEREAS, a courtesy copy of the Notice was also mailed to the Tuolumne County Board of Supervisors; and

WHEREAS, on this day, the City Council of the City of Waterford held a public hearing to consider whether it should enter into the Memorandum of Understanding Forming the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency ("GSA MOU") (attached hereto as Exhibit A) to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association GSA ("STRGBA GSA") for the Basin; and

WHEREAS, it would be in the best interests of the MOU Agencies to form the GSA for the Basin, and to begin the process of preparing a groundwater sustainability plan ("Sustainability Plan"); and

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b)(5), including organization and administrative activities of government, because there would be no direct or indirect physical change in the environment.

THEREFORE, BE IT RESOLVED by the City Council of the Waterford, as follows:

1. All the recitals in this resolution are true and correct and the Waterford City Council so finds, determines and represents.

2. The City Clerk of the City of Waterford is hereby authorized and directed to attest the signature of the authorized signatory, and to affix and attest the seal of the City of Waterford, as may be required or appropriate in connection with the execution and delivery of the GSA MOU.

3. The Waterford City Council hereby elects to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin.

4. Within thirty (30) days of the date of this resolution, the Waterford City Manager is directed to provide notice of the City of Waterford's intent to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin ("Notice of GSA Election") to the California Department of Water Resources in the manner required by law.

5. One of the elements of the Notice of GSA Election is the boundaries of the area of the Basin or the portion of the Basin that the MOU Agencies intend to manage. Until further action of the MOU Agencies, the boundaries of the GSA shall be the boundaries of the portion of the Basin within the MOU Agencies' combined jurisdiction. A copy of a map of the management area is attached as Exhibit B.

6. This resolution shall take effect immediately upon passage and adoption.

WE, THE UNDERSIGNED, do hereby certify that the above and foregoing Resolution No. 2017-02 was duly adopted and passed by the City Council of the City of Waterford at a regularly scheduled meeting held on the 19th day of January, 2017, by the following vote:

AYES: 4 Van Winkle, Aldaco, Krause, Whitfield

NOES: 0

ABSENT: 1 Powell

City of Waterford

DocuSigned by:
C29072A7DE70453...
Michael Van Winkle, Mayor

ATTEST:

DocuSigned by:
Lori Martin
0E40B251B23D4F2...
Lori Martin, City Clerk

Approved as to Form:

DocuSigned by:
Corbett Browning
Corbett J. Browning, City Attorney

Affidavit of Publication

STATE OF CALIFORNIA }ss.
County of Stanislaus

Lisa Freitas

Here-un-to being first duly sworn, deposes and says that all time hereinafter mentioned he/she was a citizen of the United States over the age of twenty-one (21) years, and doing business in said county, not interested in the matter of the attached publication, and is competent to testify in said matter, that he/she was at and during all said time the principal clerk to the printer and publisher of the

WATERFORD NEWS

a legal newspaper of general circulation published weekly in Waterford in said County of Stanislaus, State of California: that said

WATERFORD NEWS

is and was at all times herein mentioned, a newspaper of general circulation as that term is defined by Section 6000 of the Government Code, and as provided by said section and so adjudicated by Decree No. 41155 by the Superior Court of Stanislaus County, State of California, is published for the dissemination of local and telegraphic news and intelligence of a general character, have a bonafide subscription list of paying subscribers, and is not devoted to the interest, or published for the entertainment or instruction of a particular class, profession, trade, calling, race of denomination: or for the entertainment and instruction of any number of such classes, professions, trades, callings, races or denominations: that at all times said newspaper has been established, in Waterford; in said County and State, at regular intervals for more than one year preceding the first publication of the notice herein mentioned, that said notice was set in type not smaller than nonpareil and was preceded with words printed in blackface type not smaller than nonpareil, describing and expressing in general terms, the purport and character of the notice intended to be given

Legal # 2381

PUBLIC HEARING NOTICE

Publish Dates: 01-03-2017 & 01-10-2017

of which named annexed is a printed copy, was published and printed in said

WATERFORD NEWS

at least 2 TIMES, commencing on the 3RD Day of JANUARY 2017 and ending on the 10TH of JANUARY 2017 the days inclusive, and as often during said time as said newspaper was regularly issued, to wit:

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.
Dated this 10TH day of JANUARY 2017

Lisa Freitas

PRINCIPAL CLERK OF THE PRINTER

Legal # 2381
PUBLIC HEARING NOTICE

Notice is hereby given that, pursuant to Water Code section 10723, the City Council of the City of Waterfod will hold a public hearing during a regular meeting on January 19, 2017, in the City Council Chambers located at 101 E Street, Waterford, CA to determine whether the City Council will authorize the execution of the MEMORANDUM OF UNDERSTANDING FORMING THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY and participate in the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) election to become a groundwater sustainability agency for the Modesto Groundwater Sub-Basin. Written comments may be submitted to City of Waterford ,Attn: Lori Martin, City Clerk, PO Box 199 / 101 E Street, Waterford, CA 95386. During the hearing, the City Council will allow oral comments and will receive additional written comments until the STRGBA elects to be a groundwater sustainability agency.
Publish dates: 01-03 & 01-10-2017

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
STATE OF CALIFORNIA

2017-69

Date: February 14, 2017

On motion of Supervisor Withrow Seconded by Supervisor Olsen
and approved by the following vote,
Ayes: Supervisors: Olsen, Withrow, Monteith, DeMartini and Chairman Chiesa
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

Item # 9:05 a.m.

THE FOLLOWING RESOLUTION WAS ADOPTED:

A RESOLUTION OF THE BOARD OF SUPERVISORS OF STANISLAUS COUNTY AUTHORIZING AND DIRECTING THE EXECUTION OF A MEMORANDUM OF UNDERSTANDING FORMING THE GROUNDWATER SUSTAINABILITY AGENCY FOR THE MODESTO GROUNDWATER SUBBASIN

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 ("SGMA"), which authorizes local agencies to manage groundwater in a sustainable fashion; and

WHEREAS, the legislative intent of SGMA is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and

WHEREAS, SGMA requires that a GSA be formed for all basins designated by the Department of Water Resources as a high-priority basin, such as the Modesto Sub-basin (designated basin number 5-22.02 in the California Department of Water Resources' CASGEM groundwater basin system) ("Basin"), by June 30, 2017; and

WHEREAS, SGMA permits a combination of local agencies to form a groundwater sustainability agency ("GSA") through a Memorandum of Understanding ("MOU"); and

WHEREAS, the County of Stanislaus, the Oakdale Irrigation District, the City of Oakdale, the City of Riverbank, the City of Modesto, the City of Waterford, and the Modesto Irrigation District ("MOU Agencies") are all local agencies, as SGMA defines that term; and

WHEREAS, the MOU Agencies are committed to sustainable management of the Basin's groundwater resources as shown by, among other actions, the MOU Agencies' creation of the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRGBA") in 1994, which was created to ensure coordinated and effective management of the Basin; and

WHEREAS, the MOU Agencies each exercise jurisdiction upon lands overlying the Basin and are all committed to the sustainable management of the Basin's groundwater resources; and

WHEREAS, the MOU Agencies have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the MOU Agencies operating through an MOU; and

WHEREAS, notice of a hearing on the MOU Agencies' decision to form a GSA for the Basin ("Notice") has been published in the Modesto Bee as provided by law; and

WHEREAS, a courtesy copy of the Notice was also mailed to the Tuolumne County Board of Supervisors; and

WHEREAS, on this day, the Board of Supervisors of Stanislaus County ("Board of Supervisors") held a public hearing to consider whether it should enter into the Memorandum of Understanding Forming the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency ("GSA MOU") to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association GSA ("STRGBA GSA") for the Basin; and

WHEREAS, it would be in the best interests of the MOU Agencies to form the GSA for the Basin, and to begin the process of preparing a groundwater sustainability plan ("Sustainability Plan"); and

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b)(5), including organization and administrative activities of government, because there would be no direct or indirect physical change in the environment.

THEREFORE, BE IT RESOLVED by the Board of Supervisors of Stanislaus County, as follows:

1. All the recitals in this resolution are true and correct and the Board of Supervisors so finds, determines and represents.

2. The Clerk of the Board of Supervisors is hereby authorized and directed to attest the signature of the authorized signatory, and to affix and attest the seal of the Board of Supervisors, as may be required or appropriate in connection with the execution and delivery of the GSA MOU.

3. The Board of Supervisors hereby elects to enter into the GSA MOU with the MOU Agencies to form the GSA for the Modesto Groundwater Subbasin.

4. Within thirty (30) days of the date of this resolution, the Board of Supervisors Chairman is directed to provide notice of the Stanislaus County Board of Supervisors intention to enter into the GSA MOU with the MOU Agencies to form the GSA for the Modesto Groundwater Subbasin ("Notice of GSA Election") to the California Department of Water Resources in the manner required by law.

5. One of the elements of the Notice of GSA Election is the boundaries of the area of the Basin or the portion of the Basin that the MOU Agencies intend to manage. Until further action of the MOU Agencies, the boundaries of the GSA shall be the boundaries of the portion of the Basin within the MOU Agencies' combined jurisdiction.

6. This resolution shall take effect immediately upon passage and adoption.

FEB 14 2017

I hereby certify that the foregoing is a full, true and correct copy of the Original entered in the Minutes of the Board of Supervisors.
ELIZABETH A. KING
Clerk of the Board of Supervisors of the County of Stanislaus, State of California
By Theresa Gonzalez

BOARD OF SUPERVISORS * STANISLAUS COUNTY CAL *

ATTEST: ELIZABETH A. KING, Clerk
Stanislaus County Board of Supervisors,
State of California
Elizabeth A. King

File No. **GSA-1-1**

DECLARATION OF PUBLICATION (C.C.P. S2015.5)

COUNTY OF STANISLAUS STATE OF CALIFORNIA

I am a citizen of the United States and a resident Of the County aforesaid; I am over the age of Eighteen years, and not a party to or interested In the above entitle matter. I am a printer and Principal clerk of the publisher of THE MODESTO BEE, printed in the City of MODESTO, County of STANISLAUS, State of California, daily, for which said newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of STANISLAUS, State of California, Under the date of February 25, 1951, Action No. 46453; that the notice of which the annexed is a printed copy, has been published in each issue there of on the following dates, to wit:

Jan 30, 2017, Feb 06, 2017

I certify (or declare) under penalty of perjury That the foregoing is true and correct and that This declaration was executed at

MODESTO, California on

February 6th, 2017

(By Electronic Facsimile Signature)

Cynthia A. Walkenhorst

STANISLAUS COUNTY
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that on Tuesday, February 14, 2017, at 9:05 a.m., or as soon thereafter as the matter may be heard, the Stanislaus County Board of Supervisors will meet in the Basement Chambers, 1010 10th Street, Modesto, CA, pursuant to California Water Code Section 10723, to consider approval of the of the "Memorandum of Understanding Forming the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) Groundwater Sustainability Agency" for the Modesto Groundwater Subbasin.

NOTICE IS FURTHER GIVEN that at the said time and place, interested persons will be given the opportunity to be heard. Written comments may be submitted to Stanislaus County at Attn: Walter Ward, Water Resources Manager, 3800 Cornucopia Way, Suite C, Modesto, CA, or at wward@envres.org.

BY ORDER OF THE BOARD OF SUPERVISORS. DATED: January 24, 2017. ATTEST: ELIZABETH A. KING, Clerk of the Board of Supervisors of the County of Stanislaus, State of California. BY: Pam Villarreal, Assistant Clerk.

Pub Dates Jan 30, Feb 6, 2017

CASE NO. 10117916 key 86102

RESOLUTION NO. 2017-04
AUTHORIZING AND DIRECTING THE EXECUTION OF A MEMORANDUM OF UNDERSTANDING FORMING THE GROUNDWATER SUSTAINABILITY AGENCY FOR THE MODESTO SUB-BASIN

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 (SGMA), which authorizes local agencies to manage groundwater in a sustainable fashion; and

WHEREAS, the legislative intent of SGMA is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and

WHEREAS, SGMA requires that a Groundwater Sustainability Agency (GSA) be formed for all basins designated by the Department of Water Resources as a high-priority basin, such as the Modesto Sub-basin (designated basin number 5-22.02 in the California Department of Water Resources' CASGEM groundwater basin system) (Basin), by June 30, 2017; and

WHEREAS, SGMA permits a combination of local agencies to form a GSA through a Memorandum of Understanding (MOU); and

WHEREAS, the County of Stanislaus, the Oakdale Irrigation District, the City of Oakdale, the City of Riverbank, the City of Modesto, the City of Waterford, and the Modesto Irrigation District (MOU Agencies) are all local agencies, as SGMA defines that term; and

WHEREAS, the MOU Agencies are committed to sustainable management of the Basin's groundwater resources as shown by, among other actions, the MOU Agencies' creation of the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) in 1994, which was created to ensure coordinated and effective management of the Basin; and

WHEREAS, the MOU Agencies each exercise jurisdiction upon lands overlying the Basin and are all committed to the sustainable management of the Basin's groundwater resources; and

WHEREAS, the MOU Agencies have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the MOU Agencies operating through an MOU; and

WHEREAS, notice of a hearing on the MOU Agencies' decision to form a GSA for the Basin (Notice) has been published in the Modesto Bee as provided by law; and

WHEREAS, on this day, the Modesto Irrigation District (MID) held a public hearing to consider whether it should enter into the Memorandum of Understanding Forming the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (GSA MOU) (attached hereto as Exhibit A) to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association GSA (STRGBA GSA) for the Basin; and

WHEREAS, it would be in the best interests of the MOU Agencies to form the GSA for the Basin, and to begin the process of preparing a groundwater sustainability plan (Sustainability Plan); and

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b)(5), including organization and administrative activities of government, because there would be no direct or indirect physical change in the environment.

THEREFORE, BE IT RESOLVED, by the Board of Directors of the Modesto Irrigation District, as follows:

1. All the recitals in this resolution are true and correct and the MID so finds, determines and represents.

2. The Board Secretary of the MID is hereby authorized and directed to attest the signature of the authorized signatory, and to affix and attest the seal of the MID, as may be required or appropriate in connection with the execution and delivery of the GSA MOU.

3. The MID hereby elects to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin.

4. Within thirty (30) days of the date of this resolution, the MID General Manager is directed to provide notice of MID's intent to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin (Notice of GSA Election) to the California Department of Water Resources in the manner required by law.

5. One of the elements of the Notice of GSA Election is the boundaries of the area of the Basin or the portion of the Basin that the MOU Agencies intend to manage. Until further action of the MOU Agencies, the boundaries of the GSA shall be the boundaries of the portion of the Basin within the MOU Agencies' combined jurisdiction. A copy of a map of the management area is attached as Exhibit B.

6. This resolution shall take effect immediately upon passage and adoption.

Moved by Director Wenger, seconded by Director Campbell, that the foregoing resolution be adopted.

The following vote was had:
Ayes: Directors Blom, Byrd, Campbell, Mensinger, Wenger
Noes: Director None
Absent: Director None
The President declared the resolution adopted.

o0o

I, Heliane Burns, Assistant Secretary to the Board of Directors of the Modesto Irrigation District, do hereby CERTIFY that the foregoing is a full, true and correct copy of a resolution duly adopted at a special meeting of said Board of Directors held the twenty fourth day of January 2017.

Assistant Secretary to the Board of
Directors of the Modesto Irrigation District

CHRISTOPHER WINTERFELDT cwinterfeldt@modbee.com

Water rushed through Dry Creek while staying within its banks in Kewin Park at the La Loma Avenue overpass on Monday in Modesto.

FROM PAGE 1A

STORM

cast shows it peaking at just under 52 feet Wednesday, then receding through Saturday. Turlock Irrigation District records showed it flowing at 5,693 cubic feet per second midmorning Monday.

Dry Creek, notorious for flooding, has stayed to its banks this season. But American Legion Post 74, located at 1001 S. Santa Cruz Ave., just north of Legion Park on the Tuolumne, is taking no chances. The threat of flooding led the veterans service organization to move most of its equipment out of the building and into storage. Consequently, its monthly dinner, scheduled for Tuesday, and monthly breakfast, scheduled for Sunday, have been canceled.

In the January 1997 flooding, "the small hall was completely submerged and the large hall was flooded all the way to the roof," said Becky Crow, Post 74 adjutant. "In light of that, we thought it was prudent to get as much out as we could, given the weather forecast by Saturday morning."

In advance of the storm that moved through the region Saturday through Monday, the weather service issued a forecast saying Modesto could get 3 to 4 inches of rain. But according to Modesto Irrigation District measurements, 0.79 inches fell downtown Saturday, 0.77 Sunday and 0.18 in the early hours Monday.

The bull's eye of the storm tracked farther north than expected, Clapp said.

This next storm will be maybe two-thirds the strength of the last, he said. The weather service forecast says Sonora can expect 2 to 3 inches of precipitation, and Yosemite 3 to 4 inches.

The service's snow forecast through Wednesday is broken down by routes. Along Highway 4, Arnold could get 6 to 8 inches, and Bear Valley 48 to 60. Along Highway 108, Twain Harte could get 3 to 4 inches, Mi-Wuk Village 8 to 12, and Strawberry, 36 to 48. And on Highway 120, the area of Big Oak Flat Road is looking at 8 to 12 inches.

Wind could be a big issue in this storm. The weather service says strong winds from the south could bring gusts of 50 mph or more in lower elevations, 65 mph or more at higher elevations. It warns the gusts could lead to falling trees and branches, downed power lines and moderate-size power failures. Again, though, Clapp said the strongest winds are likely to be felt north of Modesto, in Stockton and Sacramento.

To report a power failure to MID, call 209-526-8222, day or night. To report one to Turlock Irrigation District, call the 24-hour service line at 209-883-8301.

Tuesday will bring a 90 percent chance of rain, the weather services says, with thunderstorms also possible after 4 p.m. The high should be near 56 degrees. The chance of precipitation Tuesday night rises to 100 percent, again with up to half an inch possible.

On Wednesday, there's a 40 percent chance of showers, mainly before 4 p.m. Otherwise, the day should be partly sunny, with a high near 56. The chance of rain Wednesday night is 60 percent – mainly after 10 p.m.

There's a 50 percent chance of showers Thursday, which otherwise will be partly sunny, with a high near 53.

Deke Farrow: 209-578-2327

Flood watch vs. warning

Flood warning: Take action! A flood warning is issued when the hazardous weather event is imminent or already happening. A flood warning is issued when flooding is imminent or occurring.

Flood watch: Be prepared. A flood watch is issued when conditions are favorable for a specific hazardous weather event to occur. A flood watch is issued when conditions are favorable for flooding. It does not mean flooding will occur, but it is possible.

Source: National Weather Service

FROM PAGE 1A

SUPERVISOR

homes for foster youth," Olsen said. "Group homes are going away. We want to make sure every foster child has a nurturing, loving home."

By pushing through a 2015 bill, the former legislator played a key role in ending a tax inequity that caused the county to lose an estimated $72 million over 35 years. The county now keeps an extra $6 million a year, and Olsen wants to use some of that as seed money for projects developed by Focus on Prevention.

The county's 10-year prevention initiative aims to tackle problems with homelessness, family dysfunction, troubled youths and crime recidivism.

While serving on the Modesto council, Olsen often grilled staff members about the costs of projects and government administration. She vowed to emphasize fiscal accountability as a county leader.

Olsen raised some eyebrows when she waited until late in the filing period last year to announce she would run for District 1 supervisor. Within a half-hour of announcing her candidacy, O'Brien announced he would not run and endorsed Olsen, creating the impression of an easy transition from one Republican to another. A filing period extension left only four days for others to decide whether to challenge Olsen, a well-funded political veteran, and no one did.

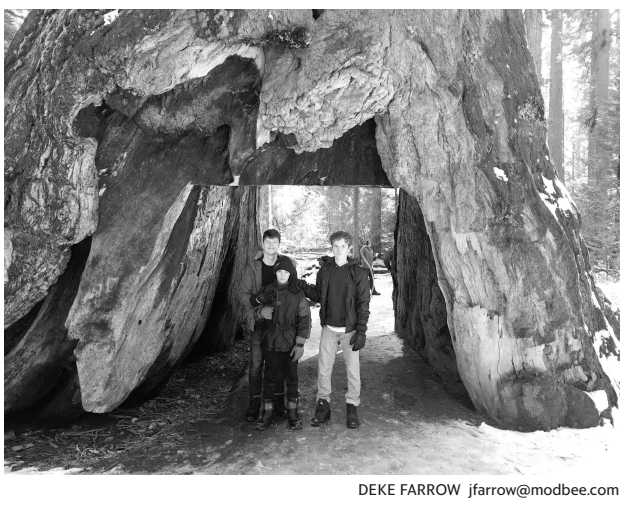
Olsen defended her timing, saying she didn't have much advance notice that O'Brien was going to step down. "When I announced I was not going to run for state Senate, I thought I was going to take a break from public service" and devote time to family life, she said.

Olsen will stay involved with state politics as the recently appointed vice chairwoman of the California Republican Party. She said her party responsibilities will require her attendance at three weekend conventions in the next two years, and "beyond that the schedule is up to me," she said.

Olsen planned to fly Monday night to San Diego to speak with Republicans there and then return to Modesto for the county's swearing-in ceremony Tuesday morning. "The goal is to elect more Republicans to improve the quality of life in California," Olsen said. "One-party dominance is not good for any state in our nation."

Ken Carlson: 209-578-2321

> "WE NEED TO OPERATE WITH GOOD DATA AND SOUND SCIENCE WHEN WE ARE MAKING DECISIONS ON WATER MANAGEMENT.
>
> ***Kristin Olsen***



DEKE FARROW jfarrow@modbee.com

Visitors to Calaveras Big Trees State Park in Arnold stand in the tunnel of the Pioneer Cabin Tree on Dec. 29.

FROM PAGE 1A

TREE

Tree in Yosemite National Park was carved, the owners of the North Grove responded by doing the same. The Pioneer Cabin Tree was chosen because of its wide base – about 22 feet in diameter. It had the widest trunk in the park's North Grove, said California State Parks Supervising Ranger Tony Tealdi. It also was chosen because its trunk already had a hole from fire damage, Tealdi said. The sequoias don't heal themselves after damage like that, they send all their nutrients to the treetop, he said.

The tree reportedly fell about 2 p.m. Sunday. Though the park was open, there were no witnesses to it, Tealdi said. People working in the visitors center didn't hear or feel a thing when the giant toppled, he said. Park docent Jim Allday of Arnold was taking a walk on the trail and made the discovery.

The tree fell onto the trail, and because the wood of sequoias easily splits, the top shattered as it hit the ground, Tealdi said. There's no estimate on how tall the roughly 2,000-year-old tree was.

The tree did not snap where the tunnel was carved, but rather uprooted. The North Grove trail is closed as environmental scientists assess the tree, Tealdi said. The trail will be rerouted because the Pioneer Cabin Tree will be left where it lies.

"You have to look at the life cycle of these trees," he said. "... At this point in time, the next part of its life cycle is on the ground, as a habitat for animals and insects. It's still a producing factor in nature – it also helps with greenhouse gases."

The park remains open with about 25 campsites available. It got nearly 8 inches of rain over the weekend, Tealdi said, and about 6 inches of snow already on the ground is melting with the rainfall. There is standing water throughout the trail.

The Pioneer Cabin Tree's shallow root system, combined with the inundation from the rain, likely contributed to its fall.

The loss of the tree has made news internationally. Tealdi said he's received calls from Russian media and the BBC. "It's a sad day, and we've seen goosebumps thinking about that tree that went down," Tealdi said, "but it is part of the life cycle."

For updates on the North Grove Trail, Tealdi suggested people check in at parks.ca.gov.

For more, visit the Facebook pages of Calaveras Big Trees State Park and the Calaveras Big Trees Association.

The Sacramento Bee and news services contributed to this report.

Deke Farrow: 209-578-2327

AROUND THE REGION

MODESTO

What: Modesto Kiwanis meeting
When: Tuesday, 11:30 a.m.
Where: Famiglia Bistro, 2501 McHenry Ave.
Info: The Modesto Kiwanis invites the public to its weekly lunch meeting. This week's special guest is Nancy Salmeron, who will discuss personnel development and entrepreneurship. Lunch is $15; reservation is needed. Seating is limited. For more information or to make a reservation, contact Anthony at 209-985-3473 or anthony.btr@gmail.com.

What: Modesto Parkinson's Support Group
When: Wednesday, 1:30 to 3:30 p.m.
Where: Trinity Presbyterian Church, 1600 Carver Road
Info: The Modesto Parkinson's Support Group will be holding its monthly meeting for caregivers and those with the Parkinson's disease.

What: Latino Emergency Council meeting
When: Friday, 8:15 to 9:15 a.m.
Where: El Concilio Community Center, 1314 H St.
Info: The El Concilio Community Center invites the public to its monthly morning meeting. The guest is Modesto Irrigation District spokeswoman Melissa Williams. She will discuss the impact the weather has had on the Modesto area. The meeting is free to attend; come early, because seating is limited. For more information, contact Dale Butler 209-613-1058.

TURLOCK

What: Turlock Chamber of Commerce mixer
When: Tuesday, 5 to 7 p.m.
Where: VaraniSmile Dentistry, 527 E. Olive Ave.
Info: Join the Turlock Chamber of Commerce and VaraniSmile Dentistry in an evening of networking with the community. The event is free to attend. For more information, call 209-632-2221 or visit www.turlockchamber.com.

Send Region items to Region, The Modesto Bee, P.O. Box 5256, Modesto 95352; call 209-578-2330; fax 209-578-2207; or email region@modbee.com.

25 YEARS AGO: Increased evening and weekend bus service was on top of the list for Stanislaus County. At a meeting where bus riders voiced their concerns, the Stanislaus Area Association of Governments also considered increased service for the disabled. The hearing was a small step in securing an estimated $8.2 million in transportation funds for the following year. The suggestions from the public included the use of international symbols to make transit signs more understandable to the illiterate and those who don't speak English.

LAW & ORDER

OLD ICE-MAKING PLANT IN RIVERBANK BURNS AGAIN

Stanislaus Consolidated Fire Protection District crews spent about an hour battling a small blaze at a one-time ice-making plant in Riverbank early Monday. "It wasn't much of a fire, just hard to access," Battalion Chief Eric DeHart said of the blaze in the 5800 block of Terminal Avenue. Because the report of the fire at the vacant site went out as a commercial structure fire, it drew a large response: five engines and two trucks. But two to three crews were released from the scene almost immediately, DeHart said. The fire was reported about 12:40 a.m. The mostly concrete building burned in the mid-'90s and a couple of times since, DeHart said. The building is attractive to transients seeking shelter. Earlier fires caused the roof to collapse, which created lean-tos, of sorts, which offer protection from the outside elements, he said. Without knowing for sure, DeHart said, this blaze likely was a warming fire that got out of control. No one was found at the scene and there are no known injuries. Crews did what they could from the ground, then put up ladders and used hoses from above. They battled the fire from outside because entering the collapsed interior would have put firefighters at risk. The building once served as an ice-making facility for the Burlington Northern Santa Fe Railway. The railroad has a switchyard adjacent to the plant.

TURLOCK MAN ARRESTED IN ROAD-RAGE INCIDENT

A Turlock man was arrested on suspicion of making criminal threats Sunday afternoon after Tuolumne County sheriff's deputies responded to a reported road-rage incident near the Dodge Ridge ski area. The road in the area was backed up and many cars were passing illegally, the Sheriff's Office said in a post on Facebook. Tony Alahverdi was trying to pass, but another motorist was in the way, the post said. Alahverdi, 36, pointed a firearm and threatened to kill the motorist, the Sheriff's Office said. The driver spotted the 2016 gray Toyota Tundra pickup near Dodge Ridge lodge and gave the Sheriff's Office its description and license plate number. The California Highway Patrol located and stopped the truck after Alahverdi left the area. Deputies arrived, searched the truck and found a handgun. Alahverdi was taken to the Tuolumne County jail.

SETTING IT STRAIGHT

We want to make sure the information in this paper is accurate. Please call mistakes to our attention, so we may correct them.

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Hackathon returns to test programmers

Bee Staff Reports

The third annual Valley Hackathon – a 24-hour competition for programmers – will be held Friday in downtown Modesto.

More than 100 programmers are expected to turn out, competing in teams of one to four participants to build a software project in just a day. Each will be judged by a panel on how complete, viable, aesthetically pleasing and technical it is.

Competitors can register right up until check-in begins at 5 p.m. Friday. As of Monday, there were 81 participants.

The top 10 teams will present their hacks in the event's finals. Prejudging will take place during the final hour of the programming time.

The event was begun to harness interest and talent in technology within the Central Valley, but has grown to draw entrants from as far away as the Bay Area, Sacramento and Fresno, organizers say. Participation in the Valley Hackathon has increased from 22 participants in 2015 to 63 last year.

"The Central Valley's economy is seeing a big shift right now," said David White, chief executive officer of Opportunity Stanislaus, one of the event's sponsoring organizations, in a news release. "We see hackathons as a sort of pipeline for talent in the technology sector and believe that events like the Valley Hackathon will be instrumental in creating connections for this community, as well as nurturing the innovative ideas such an event creates. This is a fun event in and of itself but it's also a piece in the larger puzzle that is a local revolution of sorts."

Other sponsors include Inventaweb, the Alliance Small Business Development Center, Oportun and California Community Colleges.

The free event draws some amazing talent, organizers say, but the hackathon also is for beginning programmers and designers. The minimum age to compete is 18.

"Though 24 hours is not a ton of time, we have been very impressed by the complexity of the projects," said Phillip Lan, Valley Hackathon organizer and head of business development for Hearst Digital. "We've seen everything from a program designed to sample soil moisture to software that scanned movie reviews to create viewing suggestions to users based on their current mood, so competitors will want to be sure their project is both inventive and interesting."

The winning teams will walk away with more than $5,000 in prize money

Other draws include chair massages, free meals, snacks and energy drinks and a Lego competition with its own separate kitty.

This year's hackathon has a "Star Wars" theme and a prize for the best team "Star Wars" cosplay.

The event will be at Redeemer Church, at 820 H St. Check-in is at 5 p.m., orientation at 6, and the competition begins at 6:30. To learn more, visit www.valleyhackathon.com.

More rain and snow in the forecast for Valley, foothills

Bee Staff Reports

Rain is expected to return to the Modesto area Wednesday afternoon and could stick around beyond the weekend, according to the National Weather Service.

After patchy fog in the morning, Tuesday should be mostly sunny, with a high near 54. Clouds will gather in the night.

Wednesday brings an 80 percent chance of rain, mainly after 4 p.m., and the high is expected to be near 58. The chance of rain increases to 90 percent Wednesday night.

There's a 60 percent chance of showers Thursday, which otherwise will be mostly cloudy, with a high near 57. Rain is likely Thursday night, the weather service predicts.

Weather service meteorologists say Friday also will bring rain, and a high near 54.

There's a chance of showers Saturday, and rain is likely Sunday. The high both days is expected to be near 54.

The first storm system passing through will be Wednesday and Thursday. Modesto is expected to receive 1 to 2 inches of rain, while Sonora and Yosemite National Park could get 2 to 3 inches.

Snow levels Wednesday should be at 5,000 to 6,000 feet, lowering to 3,000 to 4,000 feet Thursday. The weather service says Tioga Pass could get 18 to 24 inches of snow, while the Sonora, Ebbetts and Carson passes all could see 24 to 30 inches.

The second system should bring its heaviest precipitation Friday, with lingering showers Saturday. No estimate of amounts for Modesto and Sonora has been provided by the weather service.

Snow level will be down to 3,000 feet Friday, lowering to perhaps 2,000 feet by Saturday morning and during a third storm system expected to be here Sunday through Monday.

"None of these storms appear to be as strong or wet as last week's storms," the weather service said in a report issued Monday morning. "However, with soils still saturated and rivers and streams still running high, any additional rainfall will bring localized flooding concerns."

For updates on conditions and problems locally, follow the Stanislaus County Office of Emergency Services at StanEmergency on Facebook and Twitter.

OAKDALE IRRIGATION DISTRICT
RESOLUTION NO. 2017-08

A RESOLUTION AUTHORIZING AND DIRECTING THE EXECUTION OF A MEMORANDUM OF UNDERSTANDING FORMING THE GROUNDWATER SUSTAINABILITY AGENCY FOR THE MODESTO SUB-BASIN

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 ("SGMA"), which authorizes local agencies to manage groundwater in a sustainable fashion; and

WHEREAS, the legislative intent of SGMA is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and

WHEREAS, SGMA requires that a GSA be formed for all basins designated by the Department of Water Resources as a high-priority basin, such as the Modesto Sub-basin (designated basin number 5-22.02 in the California Department of Water Resources' CASGEM groundwater basin system) ("Basin"), by June 30, 2017; and

WHEREAS, SGMA permits a combination of local agencies to form a groundwater sustainability agency ("GSA") through a Memorandum of Understanding ("MOU"); and

WHEREAS, the County of Stanislaus, the Oakdale Irrigation District, the City of Oakdale, the City of Riverbank, the City of Modesto, the City of Waterford, and the Modesto Irrigation District ("MOU Agencies") are all local agencies, as SGMA defines that term; and

WHEREAS, the MOU Agencies are committed to sustainable management of the Basin's groundwater resources as shown by, among other actions, the MOU Agencies' creation of the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRGBA") in 1994, which was created to ensure coordinated and effective management of the Basin; and

WHEREAS, the MOU Agencies each exercise jurisdiction upon lands overlying the Basin and are all committed to the sustainable management of the Basin's groundwater resources; and

WHEREAS, the MOU Agencies have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the MOU Agencies operating through an MOU; and

WHEREAS, notice of a hearing on the MOU Agencies' decision to form a GSA for the Basin ("Notice") has been published in the Oakdale Leader as provided by law; and

WHEREAS, on this day, the OAKDALE IRRIGATION DISTRICT ("OID") held a public hearing to consider whether it should enter into the Memorandum of Understanding Forming the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency ("GSA MOU") (attached hereto as Exhibit A) to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association GSA ("STRGBA GSA") for the Basin; and

2500

WHEREAS, it would be in the best interests of the MOU Agencies to form the GSA for the Basin, and to begin the process of preparing a groundwater sustainability plan ("Sustainability Plan"); and

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b)(5), including organization and administrative activities of government, because there would be no direct or indirect physical change in the environment.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Oakdale Irrigation District as follows:

1. All the recitals in this resolution are true and correct and the OID so finds, determines and represents.

2. The Secretary of the OID is hereby authorized and directed to attest the signature of the authorized signatory, and to affix and attest the seal of the OID, as may be required or appropriate in connection with the execution and delivery of the GSA MOU.

3. The OID hereby elects to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin.

4. Within thirty (30) days of the date of this resolution, the OID General Manager is directed to provide notice of OID's intent to enter into the GSA MOU with the MOU Agencies to form the GSA for the Basin ("Notice of GSA Election") to the California Department of Water Resources in the manner required by law.

5. One of the elements of the Notice of GSA Election is the boundaries of the area of the Basin or the portion of the Basin that the MOU Agencies intend to manage. Until further action of the MOU Agencies, the boundaries of the GSA shall be the boundaries of the portion of the Basin within the MOU Agencies' combined jurisdiction. A copy of a map of the management area is attached as Exhibit B.

6. This resolution shall take effect immediately upon passage and adoption.

Upon Motion of Director Santos, seconded by Director Altieri, and duly submitted to the Board for its consideration, the above-titled Resolution was adopted this 18th day of January, 2017.

OAKDALE IRRIGATION DISTRICT

Steve Webb
President

Steve Knell, P.E.
Secretary

I HEREBY CERTIFY that the foregoing is a true and correct copy of the original on file with the Oakdale Irrigation District.

OAKDALE IRRIGATION DISTRICT

Steve Knell, P.E.
General Manager/Secretary

PROOF OF PUBLICATION

(2015.5 C. C. P.)

STATE OF CALIFORNIA,

County of Stanislaus

I am a citizen of the United States and a resident of the county aforesaid; I am over the age of twenty-one years, and not a party to or interested in the above entitled matter. I am the principal clerk of THE OAKDALE LEADER, 122 South Third Avenue, Oakdale, California, a newspaper of general circulation, published in Oakdale, California in the City of Oakdale, County of Stanislaus, and which newspaper has been adjudged a newspaper of general circulation, by the Superior Court of the County of Stanislaus, State of California. That the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

December 28, 2016 and January 4, in the year 2017

I certify or declare under penalty of perjury that the foregoing is true and correct.

Dated at Oakdale,

This 4th day of January 2017.

Signature

RECEIVED

JAN 27 2017

OAKDALE ID

This space is for the County Clerk's Filing Stamp

Proof of Publication of

PUBLIC NOTICE
(STRGBA) MEETING

OID
OAKDALE IRRIGATION DISTRICT

PUBLIC NOTICE

Notice is hereby given that, pursuant to Water Code section 10723, Oakdale Irrigation District (OID) will hold a public hearing during a regular meeting on Wednesday, January 18, 2016, at 1205 East F Street, Oakdale, CA 95361, to determine whether OID will authorize the execution of the MEMORANDUM OF UNDERSTANDING FORMING THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY and participate in the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) election to become a Groundwater Sustainability Agency under the Sustainable Groundwater Management Act (California Water Code, Section 10720 et seq.) for the Modesto Groundwater Subbasin (Groundwater Subbasin Number: 5-22.02). Written comments may be submitted to OID at Attn: Eric Thorburn, 1205 East F Street, Oakdale, CA 95361. During the hearing, OID will invite oral comments to be heard and will receive additional written comments until the STRGBA elects to be a Groundwater Sustainability Agency.

Attachment C

Filed: May 16 2017

No. 63-17

By:

Clerk of the Board of Supervisors

RESOLUTION

OF THE BOARD OF SUPERVISORS OF THE COUNTY OF TUOLUMNE ESTABLISHING THE COUNTY OF TUOLUMNE AS A GROUNDWATER SUSTAINABILTY AGENCY PURSUANT TO THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 (SGMA), which authorizes and requires local agencies to manage groundwater in a sustainable fashion; and

WHEREAS, the legislative intent of SGMA is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and

WHEREAS, SGMA requires that a Groundwater Sustainability Agency (GSA) be formed by June 30, 2017, for all basins designated by the California Department of Water Resources (DWR) CASGEM basin priority system as a high-priority or medium-priority basin; and

WHEREAS, the Modesto Sub-basin (Basin No. 5-22.02 in DWR Bulletin 118) (Basin) has been designated a high-priority basin by DWR; and

WHEREAS, Water Code Section 10724 establishes a presumption that a County shall be a GSA for areas of a high- or medium-priority basin that are not within the management area of a GSA; and

WHEREAS, Tuolumne County exercises jurisdiction upon lands overlying the portions of the Basin that are currently unmanaged, and is committed to the sustainable management of the Basin's groundwater resources and to working cooperatively with other GSAs, entities, and stakeholders within the Basin to implement SGMA; and

WHEREAS, notice of a hearing on Tuolumne County's decision to form a GSA for the Basin has been published in the Union Democrat as required by Water Code Section 10723; and

WHEREAS, each property owner in Tuolumne County within a half mile of the Basin boundary was also notified by mail of Tuolumne County's decision to form a GSA and the subsequent public hearing; and

WHEREAS, on this day, the Board of Supervisors of Tuolumne County held a public hearing to consider whether it should form the Tuolumne GSA; and

WHEREAS, SGMA requires a local agency to inform DWR within 30 days of deciding to become a GSA of its decision and intent to undertake sustainable groundwater management and to submit required documentation pursuant to Water Code Section 10723.8, and also to maintain a list of interested persons pursuant to Water Code Section 10723.4; and

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b)(5) because it involves organizational and administrative activities of government that will not result in direct or indirect physical change in the environment.

NOW, THEREFORE BE IT RESOLVED by the Board of Supervisors of Tuolumne County, as follows:

1. The Board of Supervisors herby elects to form the Tuolumne Groundwater Sustainability Agency for the portions of the Modesto Groundwater Sub-basin (Bulletin 118 No. 5-22.02) underlying Tuolumne County's jurisdiction.

2. Within thirty (30) days of the date of this resolution, the Board of Supervisors Chair or her designee is directed to provide to DWR a copy of this resolution, information about the boundaries of the GSA and Basin areas to be managed, and all other notification documentation required to become a GSA and to otherwise comply with the requirements of Water Code Section 10723.8.

3. The County Administrator or his designee shall maintain a list of interested parties pursuant to Water Code Section 10723.4.

4. This resolution shall take effect immediately upon passage and adoption.

ADOPTED BY THE BOARD OF SUPERVISORS OF THE COUNTY OF TUOLUMNE ON MAY 16, 2017

AYES: 1st Dist. Brennan
2nd Dist. Hunvelt
3rd Dist. Royce
4th Dist. absent
5th Dist. Rodgers

NOES: ____ Dist. ____
____ Dist. ____
ABSENT: 4th Dist. Gray
____ Dist. ____
ABSTAIN: ____ Dist. ____

Steve Brennan
CHAIR OF THE BOARD OF SUPERVISORS

ATTEST: _____
Clerk of the Board of Supervisors

No. 63-17

I hereby certify that according to the provisions of Government Code Section 25103, delivery of this document has been made.

ALICIA L. JAMAR
Clerk of the Board

By: _____

COOPERATION AGREEMENT

BETWEEN COUNTY OF STANISLAUS AND COUNTY OF TUOLUMNE

This Cooperation Agreement ("Agreement") is entered into as of May 8, 2018, by and between the County of Stanislaus ("Stanislaus") and the County of Tuolumne ("Tuolumne") (each a "Party" and collectively, the "Parties"), both of which are political subdivisions of California, for the purpose of ensuring compliance with the Sustainable Groundwater Management Act within the Modesto Sub-basin (Basin No. 5-022.02) ("Basin").

RECITALS

A. In 2014, California enacted the Sustainable Groundwater Management Act ("Act"). The Act requires the formation of groundwater sustainability agencies ("GSA") and the adoption of groundwater sustainability plans ("GSP"), or an alternative that complies with the Act, for all groundwater basins designated as medium-priority or high-priority by the Department of Water Resources ("DWR").

B. The Act further provides that groundwater basins designated as medium-priority or high-priority, but which are not in critical overdraft, must be managed under a GSP by January 31, 2022.

C. DWR has designated the Basin as a high-priority groundwater basin that is not in critical overdraft.

D. Stanislaus overlies the portion of the Basin in Stanislaus County. Stanislaus has executed a memorandum of understanding with Oakdale Irrigation District, the City of Oakdale, the City of Riverbank, the City of Modesto, the City of Waterford and Modesto Irrigation District to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency ("STRGBA GSA"). The STRGBA GSA's purpose is ensuring compliance with the Act for the portion of the Basin within the member agencies' collective jurisdiction – more generally, the portion of the Basin in Stanislaus County.

E. Tuolumne overlies the portion of the Basin in Tuolumne County. Tuolumne formed the Tuolumne Groundwater Sustainability Agency ("Tuolumne GSA") to ensure compliance with the Act for the portion of the Basin in Tuolumne County.

F. Collectively, the STRGBA GSA and the Tuolumne GSA cover the entirety of the Basin.

G. The Act provides that where multiple GSAs cover a basin, the GSAs may choose to adopt a single GSP for the entirety of the basin, which is implemented by each of the basin's GSAs. (Wat. Code § 10727(b)(2).)

H. GSAs must comply with all applicable provisions contained in the GSP Emergency Regulations adopted by the California Water Commission on May 18, 2016 ("GSP Regulations") (23 Cal. Code Regs., § 350 et seq.).

I. Tuolumne has expressed its desire to work collaboratively with the STRGBA in GSP development, avoiding standalone GSPs for the same Basin. Tuolumne and Stanislaus intend that any GSP adopted by the STRGBA GSA encompass the entirety of the Basin, including the portion governed by the Tuolumne GSA. As such, Tuolumne will take the

necessary actions and provide the required information to Stanislaus to ensure a GSP developed, adopted and implemented by the STRGBA GSA encompasses the Tuolumne GSA portion of the Basin and thereby covers the entirety of the Basin.

J. In exchange, Stanislaus has agreed to provide Tuolumne with the support and services needed to adopt the GSP prepared by the STRGBA GSA and satisfy its ongoing obligations under the Act.

K. The Parties seek to memorialize this Agreement and manage their cooperation pursuant to the terms below.

ARTICLE 1

RIGHTS AND RESPONSIBILITIES

1.1 Tuolumne's Responsibilities. Tuolumne, acting as the Tuolumne GSA, shall exercise its good faith and best efforts to take all necessary actions to help to effect the timely adoption of a GSP for the entire Basin and satisfy its ongoing obligations under the Act, including the implementation and enforcement of the GSP. Tuolumne shall cooperate to the fullest extent practical with Stanislaus' efforts, through the STRGBA GSA, to develop and implement the GSP for the entire Basin. Such cooperation shall include, but not be limited to, the prompt delivery of all necessary data and information to prepare the GSP and the taking of all necessary actions to review, adopt and implement the GSP. Tuolumne shall further ensure the timely filing of annual reports and documents as required by the Act.

1.2 Stanislaus' Responsibilities. Stanislaus shall provide the necessary support to Tuolumne in order for the Tuolumne GSA to adopt the GSP for the entire Basin, and satisfy Stanislaus' ongoing obligations under the Act, including the implementation and enforcement of the GSP. Stanislaus shall support Tuolumne by:

a. ensuring, to the maximum extent possible, that the interests of the Tuolumne County portion of the Basin are included in any GSP developed by the STRGBA GSA;

b. ensuring that DWR receives the necessary initial notification indicating the intent to develop a GSP for the Basin, pursuant to Water Code, section 10727.8 and Title 23 of the California Code of Regulations, section 353.6;

c. assisting the STRGBA GSA in drafting the GSP in compliance with the Act and with the GSP Regulations and drafting all necessary documents for the adoption of the GSP, which shall include the Tuolumne GSA area;

d. complying with all public notification and stakeholder participation requirements in the Act, including, but not limited to, Water Code sections 10723.2, 10723.4, 10727.8 and 10728.4 and all relevant provisions in the GSP Regulations and assisting the Tuolumne GSA in all such public notification and stakeholder participation requirements, including noticing and holding a public hearing regarding the adoption of the GSP; and

e. assisting the Tuolumne GSA in satisfying any other ongoing obligations under the Act and the GSP Regulations, including implementation of the GSP and annual reporting requirements.

1.3 Cooperation. The Parties shall, whenever and as often as reasonably requested to do so by the other Party, execute, acknowledge, and deliver or cause to be executed, acknowledged, and delivered any and all documents and instruments as may be necessary, expedient, or proper in the reasonable opinion of the requesting Party to carry out the intent and purposes of this Agreement.

1.4 Relationship of Parties. Except as otherwise provided in this Agreement, neither Party shall have any authority to bind or obligate the other Party to any agreements or undertakings. In their performance of their respective responsibilities arising out of this Agreement, the Parties are in no way forming an agency or employee relationship. Each Party retains the right to exercise full supervision and control of the manner and method in which it performs its responsibilities arising out of this Agreement, including full supervision and control over the employment, direction, compensation, and discharge of all persons assisting in the performance of responsibilities under this Agreement. With respect to each Party's employees, if any, and consultants, each Party shall be solely responsible for payment of wages, benefits, and other compensation, compliance with all occupational safety, welfare, and civil rights laws, tax withholding, and payment of employee taxes, whether federal, state, or local, and compliance with any and all other laws regulating employment. The Parties acknowledge that nothing in SGMA shall be construed as authorizing a local agency to make a binding determination of the water rights of any person or entity, and that nothing in SGMA or a GSP shall be interpreted as superseding the land use authority of cities and counties. The Parties intend that this Agreement shall not limit or interfere with either Party's rights or authority over its own jurisdiction and internal matters, including, but not limited to, a Party's police powers, land use powers, other powers, or legal rights to surface water supplies, groundwater supplies, and any other water management facilities and operations.

1.5 GSP Review. The Parties agree that it is desirable for all entities responsible for approving and implementing the GSP within the Basin to fully support the adopted GSP. Accordingly, the Parties agree that Stanislaus shall strive to ensure that Tuolumne be given ample opportunity to provide input on provisions relevant to Tuolumne within the draft GSP developed by the STRGBA GSA prior the STRGBA GSA's adoption of the GSP. To the extent reasonably feasible, Stanislaus shall assist in incorporating into the draft GSP any recommended changes or additions made by Tuolumne prior to its adoption by the STRGBA GSA. To the extent any Tuolumne recommendations for changes or additions are not included in the draft GSP, Stanislaus shall provide to Tuolumne a written explanation documenting the reason or reasons why the recommendations were not included.

1.6 Cost-Sharing and Contracting. If the Parties determine that cost-sharing is required for any contract or expenditure made pursuant to this Agreement, any cost-sharing allocations shall be agreed to in writing by the Parties in advance of executing any contracts with consultants, vendors or other contractors. Such written approval for cost-sharing shall be subject to any necessary approvals required by a Party's governing Board or designee pursuant to that Party's contract approval procedures. Any such contracts shall be drafted in a manner that reflects that consultants, vendors or contractors hired to perform work under this Agreement are working on behalf of both Parties and will be expected to work with the Parties on a collective basis and with each Party on an individual basis as needed. Such contracts shall be made to be enforceable by both Parties. Additionally, the contracts shall include appropriate indemnity and insurance provisions as required in Section 3.2.

In the event a Party to this Agreement acts as the official contracting agency and executes a contract on behalf of both Parties (the "Contracting Party"), the Contracting Party:

a. shall comply with all applicable local, state and federal laws including, without limitation, the California Public Contract Code and the California Labor Code;

b. shall provide to the other Party a reasonable opportunity to review any bids received and to review and provide input on any draft contract prior to its execution;

c. shall not approve any change orders that increase the cost of the original contract by more than 10 percent without prior consultation and written consent of the other Party;

d. shall, in advance of executing a contract involving cost-sharing by the Parties, establish a mutually agreeable understanding with the other Party about invoicing and payment procedures related to such a contract;

e. shall provide diligent oversight of the work conducted by any contractor, vendor or consultant under a contract executed pursuant to this Agreement; and

f. shall maintain complete, accurate, and clearly identifiable records with respect to all contracts executed and provide to the other Party access to all records, documents, reports, conclusions and other information related in any way to any contract executed on behalf of both Parties pursuant to this Agreement.

1.7 . Dispute Resolution. The Parties desire to informally resolve all disputes and controversies related to this Agreement, whenever possible, at the least possible level of formality and cost. If informal resolution of a dispute or controversy cannot be achieved, the Parties agree to neutral facilitation or mediation of the dispute as a next step prior to commencement of legal action. The cost of mediation shall be shared equally between the Parties. The choice of the mediator shall be voluntarily agreed upon by the Parties, or if such agreement cannot be reached, appointed by the Superior Court of Stanislaus or Tuolumne Counties upon motion for appointment of a neutral mediator. If the mediation process fails to provide a final resolution to the raised controversy, either Party may pursue any judicial or administrative remedies otherwise available. However, notwithstanding this Section 1.5, a Party may seek injunctive or other interlocutory judicial relief prior to completion of the mediation if necessary to avoid irreparable damage or to preserve the status quo.

ARTICLE 2

TERM

2.1 Term. This Agreement shall commence on May 8, 2018 ("Effective Date") and remain in full force and effect until it is terminated by either Party.

2.2 Termination of Agreement. In its sole discretion and upon ninety (90) days' written notice, either Party may terminate this Agreement at any time the Party deems necessary. Termination shall not relieve the terminating Party from its obligations that accrued prior to termination.

ARTICLE 3

INDEMNITY AND INSURANCE

3.1 Mutual Indemnification and Protection. Except as otherwise described herein, each Party (the "Indemnifying Party") covenants and agrees to indemnify and to hold harmless the other Party and its successors and assigns (the "Indemnified Party") for, from and against any and all third party claims, liabilities and expenses (including, but not limited to, reasonable attorneys' fees, court costs, expert witness fees and other litigation-related expenses) which may be claimed or asserted against the Indemnified Party on account of the exercise by the Indemnifying Party of the rights granted to it under this Agreement; provided, however, in no event shall the Indemnifying Party be responsible to the Indemnified Party for any claims, liabilities or expenses that may be claimed or asserted against the Indemnified Party relating to the gross negligent or willful misconduct of the Indemnified Party or any of its employees, directors, officers, trustors, trustees, agents, affiliates, personal representatives, successors or assigns. This indemnification provision shall apply to "active" as well as "passive" negligence but does not apply to either Party's "sole negligence" or "willful misconduct" within the meaning of Civil Code Section 2782. The provisions of this Section 3.1 will survive termination of this Agreement and shall not be restricted to insurance proceeds, if any, received by the Parties or their directors, officials, officers, employees, agents or volunteers.

3.2 Third-Party Agreements. Each Party shall include within any third party contract entered into in furtherance of this Agreement, provisions requiring the contractor, consultant or vendor to (a) indemnify, defend and hold harmless the other non-contracting Party and its officials, officers, employees and agents to the same extent as the contracting Party is indemnified, and (b) provide insurance coverage to the other non-contracting Party and its officials, officers, employees and agents equivalent to the coverage provided to the contracting Party. Without limiting the foregoing and to the extent the following policies are required by the contract, the non-contracting Party and its officials, officers, employees and agents shall: (1) be named as additional insureds and provided coverage on a primary and non-contributory basis on the contractor, consultant or vendor's policies of commercial general liability and business automobile liability insurance and (2) be included in any waiver of subrogation endorsements issued on the commercial general liability, business liability and workers' compensation/employer's liability policies.

ARTICLE 4

GENERAL PROVISIONS.

4.1 Notices. Any notice under this Agreement shall be deemed sufficient if given by one Party to the other in writing and: delivered in person; transmitted by electronic mail or facsimile (with acknowledgement of receipt provided by the receiving Party); or, by mailing the same by United States mail (postage prepaid, registered or certified, return receipt requested) or by Federal Express or other similar overnight delivery service, to the Party to whom the notice is directed at the address of such Party as follows:

If to Stanislaus:

County of Stanislaus
Attn: Department of Environmental Resources
3800 Cornucopia Way, Suite C

Modesto, CA 95358

If to Tuolumne:

County of Tuolumne
Attn: County Administrator's Office
2 S. Green St.
Sonora, CA 95370

Any communication given by mail shall be deemed delivered two (2) business days after such mailing date, and any written communication given by overnight delivery service shall be deemed delivered one (1) business day after the dispatch date. Either Party may change its address by giving the other Party notice of its new address pursuant to this Section 4.1.

4.2 Assignability. The Parties may not assign all or any part of this Agreement without advance written consent of each Party's governing board.

4.3 Waiver. No waiver by any Party of any of the provisions shall be effective unless explicitly stated in writing and executed by the Party so waiving. Except as provided in the preceding sentence, no action taken pursuant to this Agreement, including, without limitation, any investigation by or on behalf of any Party, shall be deemed to constitute a waiver by the Party taking such action of compliance with any representations, warranties, covenants, or agreements contained in this Agreement, and in any documents delivered or to be delivered pursuant to this Agreement. The waiver by any Party of a breach of any provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach. No waiver of any of the provisions of this Agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver.

4.4 Headings. The section headings contained in this Agreement are for convenience and reference only and shall not affect the meaning or interpretation of this Agreement.

4.5 Severability. If any term, provision, covenant or condition of this Agreement shall be or become illegal, null, void or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect, and shall not be affected, impaired or invalidated. The term, provision, covenant or condition that is so invalidated, voided or held to be unenforceable, shall be modified or changed by the Parties to the extent possible to carry out the intentions and directives set forth in this Agreement.

4.6 Governing Law. This Agreement shall be governed by, and interpreted in accordance with, the laws of the State of California.

4.7 Parties in Interest. Nothing in this Agreement, whether expressed or implied, is intended to confer any rights or remedies under or by reason of this Agreement on any persons other than the Parties to it and their respective successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligation or liability of any third persons to any party to this Agreement, nor shall any provision give any third persons any right of subrogation or action against any party to this Agreement.

4.8 Attorney Fees. Each Party shall bear its own legal costs, fees and expenses in any dispute between the Parties arising out of this Agreement.

4.9 Good Faith. The Parties agree to exercise their best efforts and utmost good faith to effectuate all the terms and conditions of this Agreement and to execute such further instruments or documents as are necessary or appropriate to effectuate all of the terms and conditions of this Agreement.

4.10 Construction. The provisions of this Agreement should be liberally construed to effectuate its purposes. The language of all parts of this Agreement shall be construed simply according to its plain meaning and shall not be construed for or against either Party, as each Party has participated in the drafting of this document and had the opportunity to have their counsel review it. Whenever the context and construction so requires, all words used in the singular shall be deemed to be used in the plural, all masculine shall include the feminine and neuter, and vice versa.

4.11 Entire Agreement. This Agreement contains the entire understanding and agreement of the Parties, and supersedes all prior agreements and understandings, oral and written, between the Parties concerning the subject matter of this Agreement. There have been no binding promises, representations, agreements, warranties or undertakings by any of the Parties, either oral or written, of any character or nature, except as stated in this Agreement. This Agreement may only be altered, amended or modified, in whole or in part, by a written agreement executed by the Parties to this Agreement and by no other means. Each Party waives its future right to claim, contest or assert that this Agreement was modified, canceled, superseded or changed by any oral agreement, course of conduct, waiver or estoppels.

4.12 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year and at the place first written above.

COUNTY OF TUOLUMNE 4/17/18 Evan Royce for By: John Gray, Chair Board of Supervisors	COUNTY OF STANISLAUS By: Jim DeMartini, Chair, Board of Supervisors
APPROVED AS TO LEGAL FORM: Sarah Carrillo By: Sarah Carrillo, County Counsel	APPROVED AS TO LEGAL FORM: By: Thomas E. Boze, Assistant County Counsel
ATTEST: By: Alicia Jamar, Chief Deputy Clerk of the Board	ATTEST: Elizabeth A. King By: Elizabeth A. King, Clerk of the Board

Appendix B

Adoption of GSP

D R A F T

RESOLUTION NO. 2022-03

RESOLUTION ADOPTING THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN (GSP) AND AUTHORIZING THE STRGBA GSA PLAN MANAGER TO SUBMIT THE GSP TO DWR BY JANUARY 31, 2022.

WHEREAS, in April 1994, the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and County of Stanislaus executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRBGA) for the purpose of coordinating planning and groundwater management activities in the Modesto Subbasin;; and

WHEREAS, in July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA; and

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (SGMA) "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727); and

WHEREAS, SGMA requires a GSA to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02); and

WHEREAS, the STRGBA GSA was formed on February 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA; and

WHEREAS, the STRGBA GSA has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 et seq.); and

WHEREAS, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin on February 28, 2017; and

WHEREAS, the STRGBA GSA has coordinated with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin; and

WHEREAS, on August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code section 10728.4

WHEREAS, the STRGBA GSA and Tuolumne County GSA developed the draft Modesto Subbasin GSP and released the draft Modesto Subbasin GSP chapters for public review and comment; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA reviewed and responded to comments on the Modesto Subbasin GSP; and

WHEREAS, all seven STRGBA GSA member agencies have held public hearings, adopted the draft GSP and authorized the Plan Manager to submit the final GSP to DWR; and

WHEREAS, the final Modesto Subbasin GSP is incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, THE GOVERNING BODY OF THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY DOES HEREBY ADOPT THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND AUTHORIZES THE STRGBA GSA PLAN MANAGER TO SUBMIT THE MODESTO SUBBASIN GSP TO DWR BY JANUARY 31, 2022.

AGENDA REPORT

GSA Meeting Date: January 31, 2022

Subject:	Modesto Subbasin Groundwater Sustainability Plan
Recommended Action:	Resolution adopting the Modesto Subbasin Groundwater Sustainability Plan (GSP) and authorizing the STRGBA GSA Plan Manager to submit the GSP to DWR by January 31, 2022.
Background and Discussion:	In April 1994, the Modesto Irrigation District along with Oakdale Irrigation District, Stanislaus County and the Cities of Modesto, Oakdale, and Riverbank executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRBGA) for the purpose of coordinating planning and groundwater management activities in the Modesto Subbasin. In July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA. In August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (SGMA) "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)). SGMA requires sustainable management through the development of groundwater sustainability plans (GSP), which can be a single plan developed by one or more groundwater sustainability agency (GSA) or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727). SGMA also requires a GSA to manage groundwater in all basins designated by the Department of Water Resources (DWR) as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02). The STRGBA GSA was formed on February 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA. The STRGBA GSA also has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 et seq.). On February 28, 2017, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin along with Tuolumne County GSA. The STRGBA GSA has since then worked with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin. On August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code section 10728.4. On November 15, 2021, the STRGBA GSA and Tuolumne County GSA released the completed draft of the Modesto Subbasin GSP for public review and comment. The STRGBA GSA and Tuolumne County GSA have subsequently

	received, reviewed, and incorporated public comments into the final document where appropriate. All seven STRGBA GSA member agencies (MID, OID, Stanislaus County, Cities of Modesto, Oakdale, Riverbank, and Waterford) have held public hearings, adopted the draft GSP and authorized the Plan Manager to submit the final GSP to DWR by January 31, 2022. The final Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.
Alternatives, Pros and Cons of Each Alternative:	1. Do Nothing – Cons: Does not comply with State law, not eligible for DWR grant funding, liable for costs associated with DWR engagement of 3rd party to prepare plan; Pros: No staff time or consultant costs. 2. Approve GSP – Cons: Staff time and consultant costs; Pros: Complies with State law, eligible for DWR grant funding, demonstrates unified long-term water resource planning with other STRGBA GSA member agencies..
Concurrence:	The GSP has been prepared in accordance with the requirements of the Sustainable Groundwater Management Act of 2014, and Water Code, § 10727. All seven STRGBA GSA member agencies have adopted the final draft of the GSP.
Fiscal Impact:	In July 2018, the STRGBA GSA member agencies entered into a cost share agreement for the preparation of the GSP for the Modesto Subbasin. In August 2017, City awarded a contract to Todd Groundwater to prepare the GSP for a total cost of $1,616,226 inclusive of a 10% contingency. Subsequently, the City of Modesto applied for and was awarded a $1,000,000 grant from DWR to help defray the plan preparation costs. The seven STRGBA GSA member agencies along with the Tuolumne County GSA agreed to each pay approximately 12.5% (1/8) of the unfunded balance, or $77,028, to cover their share of the GSP development.
Recommendation:	Resolution adopting the Modesto Subbasin Groundwater Sustainability Plan (GSP) and authorizing the STRGBA GSA Plan Manager to submit the GSP to DWR by January 31, 2022.

AGENDA REPORT

Attachments: Supporting documents attached:

☒ Resolution ☐ Presentation ☐ Other supporting docs ☐ None attached

Note: Original contracts and agreements are housed in the GSA Secretary's Office, phone (209) 526-7360.

Presenter	GSA Chairman
Gordon J. Enas	Eric Thorburn
Gordon Enas, P.E.	Eric Thorburn, P.E.
1/25/22	1/25/22
Date Signed	Date Signed

MODESTO CITY COUNCIL
RESOLUTION NO. 2021-512

RESOLUTION APPROVING THE ADOPTION OF THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND AUTHORIZING THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER SUSTAINABILITY ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY TO SUBMIT THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN TO THE DEPARTMENT OF WATER RESOURCES

WHEREAS, in September of 2014, Governor Edmund G. Brown signed into law the Sustainable Groundwater Management Act of 2014 (SGMA), which changed groundwater management in California. SGMA is a comprehensive package of legislation that sets the framework for statewide sustainable groundwater management and declares that such authority be given to local public agencies that have either water supply, land use authority, or both, and

WHEREAS, SGMA requires the formation of Groundwater Sustainability Agencies (GSAs) made up of local public agencies, and

WHEREAS, GSAs are the local agencies responsible for the development and implementation of the Groundwater Sustainability Plans (GSPs), ultimately aimed at ensuring groundwater sustainability over a 20-year implementation period, and

WHEREAS, the City of Modesto overlies the Modesto Subbasin and the Turlock Subbasin, which are designated as high priority, non-critically overdrafted groundwater basins by the State. The regulatory deadline for the completion of the GSPs for the Modesto Subbasin and Turlock Subbasin is January 31, 2022, and

WHEREAS, on January 24, 2017, by Resolution No. 2017-30, Council authorized a Groundwater Sustainability Agency Memorandum of Understanding with the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA) member agencies and approved the formation of the Stanislaus and Tuolumne Rivers

Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA). The STRGBA GSA was officially formed on February 16, 2017. The STRGBA GSA is a partnership consisting of the cities of Modesto, Oakdale, Riverbank and Waterford; the Oakdale Irrigation District, Modesto Irrigation District and Stanislaus County, and

WHEREAS, due to the structure of the Memorandum of Understanding governing the administration of the STRGBA GSA, all member agencies must approve and adopt the Modesto Subbasin GSP by their respective governing bodies. All member agencies of the STRGBA GSA and the Tuolumne County GSA, will be taking action to approve and adopt the Modesto Subbasin GSP, and

WHEREAS, this proposed action is in compliance with State legislation known as the "Sustainable Groundwater Management Act" which mandates the adoption of a Groundwater Sustainability Plan for groundwater basins categorized as high priority, but not in a condition of critical overdraft, by January 31, 2022, and

WHEREAS, failure to adopt such GSP would result in the groundwater resources of the basin being subject to regulation by the State of California Water Resources Control Board.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the adoption of the Modesto Subbasin Groundwater Sustainability Plan and authorizes the Stanislaus and Tuolumne Rivers Groundwater Sustainability Association Groundwater Sustainability Agency to submit the Modesto Subbasin Groundwater Sustainability Plan to the Department of Water Resources.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of December, 2021, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Wright, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Escutia-Braaton, Kenoyer, Madrigal, Ricci, Wright, Zoslocki, Mayor Zwahlen
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
DANA SANCHEZ, Interim City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

CITY OF RIVERBANK

RESOLUTION NO. 2021-114

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVERBANK, CALIFORNIA, ADOPTING THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN

WHEREAS, in April 1994, the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and County of Stanislaus executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRBGA") for the purpose of coordinating planning and management activities in the Modesto Subbasin; and

WHEREAS, in July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA; and

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinate plans within a basin or subbasin (Wat. Code, § 10727); and

WHEREAS, SGMA requires a GSA to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02); and

WHEREAS, the STRGBA GSA was formed on February 16, 2017 for the purposes of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA; and

WHEREAS, the STRGBA GSA has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 *et seq.*); and

WHEREAS, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin on February 28, 2017; and

WHEREAS, the STRGBA GSA has coordinated with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin; and

WHEREAS, on August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code Section 10728.4; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA developed the draft Modesto Subbasin GSP and released the draft Modesto Subbasin GSP chapters for public review and comment;

WHEREAS, the STRGBA GSA and Tuolumne County GSA reviewed and responded to comments on the Modesto Subbasin GSP; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA released the final Modesto Subbasin GSP which is incorporated in its entirety by reference hereto this resolution as **Exhibit A**; and

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Riverbank declares as follows:

1. The City of Riverbank hereby approves and adopts the final Modesto Subbasin GSP as drafted.
2. The City of Riverbank authorizes the Modesto Sub basin Plan Manager and consultants to take such other actions as may be reasonably necessary to submit the Modesto Subbasin GSP to DWR by January 31, 2022, and implement the purpose of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Riverbank at a regular meeting held on the 14th day of December, 2021; motioned by Councilmember District 3 Cal Campbell, seconded by Vice Mayor (CM-D1) Luis Uribe, and upon roll call was carried by the following City Council vote of 5-0:

AYES: **Barber-Martinez, Campbell, Hernandez, Uribe, and Mayor O'Brien**
NAYS: **None**
ABSENT: **None**
ABSTAINED: **None**

ATTEST:

Annabelle H. Aguilar, CMC
City Clerk

APPROVED:

Richard D. O'Brien
Mayor

Attachment: https://www.strgba.org/Home/GSP

IN THE CITY COUNCIL
OF THE CITY OF OAKDALE
STATE OF CALIFORNIA
CITY COUNCIL RESOLUTION 2022-004

RESOLUTION OF THE CITY OF OAKDALE CITY COUNCIL ADOPTING THE FINAL STAFF VERSION OF THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN (GSP) AND AUTHORIZING THE STANISLAUS & TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY (STRGBA GSP) TO SUBMIT THE FINAL MODESTO SUBBASIN GSP TO DEPARTMENT OF WATER RESOURCES (DWR) BY JANUARY 31, 2022

THE CITY OF OAKDALE CITY COUNCIL DOES HEREBY RESOLVE THAT:

WHEREAS, in April 1994, the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and County of Stanislaus executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRBGA") for the purpose of coordinating planning and management activities in the Modesto Subbasin; and

WHEREAS, in July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA; and

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinate plans within a basin or subbasin (Wat. Code, § 10727); and

WHEREAS, SGMA requires a GSA to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02); and

WHEREAS, the STRGBA GSA was formed on February 16, 2017 for the purposes of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA; and

WHEREAS, the STRGBA GSA has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 et seq.); and

WHEREAS, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin on February 28, 2017; and

WHEREAS, the STRGBA GSA has coordinated with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin; and

WHEREAS, on August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code Section 10728.4; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA developed the draft Modesto Subbasin GSP and released the draft Modesto Subbasin GSP chapters for public review and comment; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA reviewed and responded to comments on the Modesto Subbasin GSP; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA released the final Modesto Subbasin GSP on November 15, 2021, which is attached to this resolution as Exhibit A; and

WHEREAS, there is no fiscal impact associated with the adoption of the Modesto Subbasin Groundwater Sustainability Plan. However, there will be costs associated with implementing the GSP over the coming decades. These costs, once determined, will be subject to future City budget considerations and City Council approval; and

WHEREAS, in the course of Department of Water Resources (DWR) review, it may be required to edit the final version presented to the Oakdale City Council at the January 18, 2022 meeting. City of Oakdale Staff, the STRGBA GSA and consultant team will finalize the GSP by making non-substantive revisions to the final Modesto Subbasin GSP presented on January 18, 2022; and

WHEREAS, the final Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution as Attachment B: https://www.strgba.org/Home/GSP; and

WHEREAS, Staff recommends that the City Council adopt the Resolution adopting the final staff version of the Modesto Subbasin Groundwater Sustainability Plan (GSP) and authorizing the Stanislaus & Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) to submit the final Modesto Subbasin GSP to Department of Water Resources (DWR) by January 31, 2022.

NOW, THEREFORE, BE IT RESOLVED that the **CITY COUNCIL** hereby adopts the final staff version of the Modesto Subbasin Groundwater Sustainability Plan (GSP) and authorizes the Stanislaus & Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) to submit the final Modesto Subbasin GSP to Department of Water Resources (DWR) by January 31, 2022.

THE FOREGOING RESOLUTION IS HEREBY ADOPTED THIS 18th DAY OF JANUARY, 2022, by the following vote:

AYES:	COUNCIL MEMBERS:	C. Smith, Haney, Bairos	(3)
NOES:	COUNCIL MEMBERS:	None	(0)
ABSENT:	COUNCIL MEMBERS:	F. Smith	(1)
ABSTAINED:	COUNCIL MEMBERS:	None	(0)

SIGNED:

Cherilyn Bairos, Mayor

ATTEST:

Rouzé Roberts, City Clerk

WATERFORD CITY COUNCIL
RESOLUTION #2021-64

RESOLUTION ADOPTING THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND AUTHORIZING THE SUBMISSION TO THE DEPARTMENT OF WATER RESOURCES

WHEREAS, in April 1994, the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and County of Stanislaus executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRBGA") for the purpose of coordinating planning and groundwater management activities in the Modesto Subbasin; and

WHEREAS, in July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA; and

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727); and

WHEREAS, SGMA requires a GSA to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02); and

WHEREAS, the STRGBA GSA was formed on February 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA; and

WHEREAS, the STRGBA GSA has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 *et seq*.); and

WHEREAS, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin on February 28, 2017; and

WHEREAS, the STRGBA GSA has coordinated with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin; and

WHEREAS, on August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code section 10728.4; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA developed the draft Modesto Subbasin GSP and released the draft Modesto Subbasin GSP chapters for public review and comment; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA reviewed and will respond to comments on the Modesto Subbasin GSP; and

WHEREAS, the final staff version of the Modesto Subbasin GSP was presented to the Waterford City Council on December 16, 2021; and

WHEREAS, the City of Waterford understands its staff and consultant team will finalize the GSP by making non-substantive revisions to the final Modesto Subbasin GSP presented on December 16, 2021; and

WHEREAS, the final Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Waterford hereby finds as follows:

1. The City of Waterford hereby approves and adopts the final staff version of the Modesto Subbasin GSP.

2. The City of Waterford authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

   a. finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document;

   b. submit the final Modesto Subbasin GSP to DWR by January 31, 2022; or

   c. implement the purpose of this Resolution.

The foregoing Resolution was passed and adopted by the City Council of the City of Waterford, County of Stanislaus, State of California, at a regular meeting thereof held on December 16, 2021, by the following vote:

AYES: Aldaco, Kitchens, Talbott
NOES: None
ABSTAIN: None
ABSENT: Ewing, Hilton

City of Waterford,

DocuSigned by:
Jose M Aldaco
6504969EAF3E4B2...

Jose Aldaco, Mayor

ATTEST:

DocuSigned by:
Patricia Krause
0E40B251B23D4F2...

Patricia Krause, CMC, City Clerk

APPROVED AS TO FORM:

DocuSigned by:
Corbett Browning
F2D1FA69CB4B4A7...

Corbett J. Browning, City Attorney

RESOLUTION 2021-68

ADOPTING THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND AUTHORIZING THE SUBMISSION TO THE DEPARTMENT OF WATER RESOURCES

WHEREAS, in April 1994, the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and County of Stanislaus executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRBGA) for the purpose of coordinating planning and groundwater management activities in the Modesto Subbasin; and

WHEREAS, in July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA; and

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (SGMA) "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727); and

WHEREAS, SGMA requires a GSA to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02); and

WHEREAS, the STRGBA GSA was formed on February 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA; and

WHEREAS, the STRGBA GSA has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 et seq.); and

WHEREAS, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin on February 28, 2017; and

WHEREAS, the STRGBA GSA has coordinated with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin; and

WHEREAS, on August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code section 10728.4; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA developed the draft Modesto Subbasin GSP and released the draft Modesto Subbasin GSP chapters for public review and comment; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA reviewed and will respond to comments on the Modesto Subbasin GSP; and

WHEREAS, the Modesto Irrigation District understands its staff and consultant team will finalize the GSP by making non-substantive revisions to the final Modesto Subbasin GSP presented on December 14, 2021; and

WHEREAS, the final Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

BE IT RESOLVED, That the Board of Directors of the Modesto Irrigation District hereby approves and adopts the final staff version of the Modesto Subbasin GSP and authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document, and submit the final Modesto Subbasin GSP to DWR by January 31, 2022.

Moved by Director Blom, seconded by Director Byrd, that the foregoing resolution be adopted.

The following roll call vote was had:
Ayes: Directors Blom, Byrd, Campbell, Gilman and Mensinger
Noes: Director None
Absent: Director None
The President declared the resolution adopted.

o0o

I, Angela Cartisano, Board Secretary of the Modesto Irrigation District, do hereby CERTIFY that the foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of said Board of Directors held the fourteenth day of December 2021.

Board Secretary of the
Modesto Irrigation District

OAKDALE IRRIGATION DISTRICT
RESOLUTION NO. 2021-29

RESOLUTION ADOPTING THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND AUTHORIZING THE SUBMISSION TO THE DEPARTMENT OF WATER RESOURCES

A. **WHEREAS**, in April 1994 the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and County of Stanislaus executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRBGA") for the purpose of coordinating planning and groundwater management activities in the Modesto Subbasin;

B. **WHEREAS**, in July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA;

C. **WHEREAS,** in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d));

D. **WHEREAS**, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727);

E. **WHEREAS**, SGMA requires a GSA to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02);

F. **WHEREAS**, the STRGBA GSA was formed on February 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA;

G. **WHEREAS**, the STRGBA GSA has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 *et seq.*);

H. **WHEREAS**, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin on February 28, 2017;

I. **WHEREAS**, the STRGBA GSA has coordinated with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin;

J. **WHEREAS**, on August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code section 10728.4;

K. **WHEREAS,** the STRGBA GSA and Tuolumne County GSA developed the draft Modesto Subbasin GSP and released the draft Modesto Subbasin GSP chapters for public review and comment;

L. **WHEREAS**, the STRGBA GSA and Tuolumne County GSA reviewed and will respond to comments on the Modesto Subbasin GSP;

M. **WHEREAS**, the final staff version of the Modesto Subbasin GSP was presented to the Board of Directors on December 14, 2021;

N. **WHEREAS**, the Oakdale Irrigation District understands its staff and consultant team will finalize the GSP by making non-substantive revisions to the final Modesto Subbasin GSP presented on December 14, 2021;

O. **WHEREAS**, the final Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Oakdale Irrigation District finds as follows:

1. Oakdale Irrigation District hereby approves and adopts the final staff version of the Modesto Subbasin GSP.

2. Oakdale Irrigation District authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

   a. finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document;

   b. submit the final Modesto Subbasin GSP to DWR by January 31, 2022; or

   c. implement the purpose of this Resolution.

Upon motion of Director Doornenbal, seconded by Director Tobias, and duly submitted to the Board for its consideration, the above-titled Resolution was adopted this 14th day of December, 2021.

OAKDALE IRRIGATION DISTRICT

Thomas D. Orvis, President
Board of Directors

Steve Knell, P.E.
General Manager/Secretary

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
BOARD ACTION SUMMARY

DEPT: Environmental Resources

BOARD AGENDA:6.B.2
AGENDA DATE: August 31, 2021

SUBJECT:
Approval to Set a Public Hearing on December 7, 2021, at the 9:00 a.m. Meeting to Consider Adoption of the Modesto Groundwater Subbasin Groundwater Sustainability Plan

BOARD ACTION AS FOLLOWS: **RESOLUTION NO. 2021-0400**

On motion of Supervisor Grewal **Seconded by Supervisor** B. Condit
and approved by the following vote,
Ayes: Supervisors: B. Condit, Withrow, Grewal, C. Condit, and Chairman Chiesa
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) X **Approved as recommended**
2) _____ **Denied**
3) _____ **Approved as amended**
4) _____ **Other:**

MOTION:

ATTEST: KELLY RODRIGUEZ, Assistant Clerk of the Board of Supervisors

File No.

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
AGENDA ITEM

DEPT: Environmental Resources BOARD AGENDA:6.B.2
AGENDA DATE: August 31, 2021

CONSENT: ☑

CEO CONCURRENCE: YES 4/5 Vote Required: No

SUBJECT:

Approval to Set a Public Hearing on December 7, 2021, at the 9:00 a.m. Meeting to Consider Adoption of the Modesto Groundwater Subbasin Groundwater Sustainability Plan

STAFF RECOMMENDATION:

1. Set a public hearing on December 7, 2021, at the 9:00 a.m. meeting for consideration of adoption of the Modesto Groundwater Subbasin Groundwater Sustainability Plan.

DISCUSSION:

In September of 2014, Governor Edmund G. Brown signed into law the Sustainable Groundwater Management Act of 2014 (SGMA), which changed the landscape of groundwater management in California. SGMA is a comprehensive package of legislation that sets the framework for statewide sustainable groundwater management and declares that such authority be given to local public agencies that have either water supply or land use authority, or both.

SGMA requires, among many other items, the formation of Groundwater Sustainability Agency‘s (GSAs) made up of local public agencies. SGMA empowers these GSAs to use a number of management tools to achieve “sustainability” in the affected groundwater basins, including authorities required in order to manage groundwater in a sustainable manner. GSAs are the local agencies responsible for the development and implementation of the Groundwater Sustainability Plans (GSPs), ultimately aimed at ensuring groundwater sustainability over a 20 year implementation period. GSPs are focused on the development and implementation of long-term groundwater sustainability programs, plans and practices over a 50 year planning horizon.

There are four groundwater subbasins underlying Stanislaus County, in whole or in part. These basins include the following:

1. Eastern San Joaquin Groundwater Subbasin
2. Modesto Groundwater Subbasin
3. Turlock Groundwater Subbasin
4. Delta-Mendota Groundwater Subbasin

The Delta-Mendota Groundwater Subbasin and the Eastern San Joaquin Groundwater Subbasin have been designated by the California Department of Water Resources to be in a condition of "critical overdraft." Pursuant to SGMA, groundwater subbasins in this category were required to develop and adopt GSPs by January 31, 2020. The Stanislaus County Board of Supervisors adopted both of these GSPs on December 10, 2019. The regulatory deadline for the completion of the GSPs for the Modesto Groundwater Subbasin and the Turlock Groundwater Subbasin, categorized as high priority, is January 31, 2022.

The formation deadline for creating the GSAs was June 30, 2017. On February 14, 2017, the Board of Supervisors approved the adoption of a Memorandum of Understanding creating the Stanislaus & Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA); a partnership consisting of the cities of Modesto, Oakdale, Riverbank and Waterford; Oakdale Irrigation District, Modesto Irrigation District and Stanislaus County.

Additionally, in May 2017, the Tuolumne County Board of Supervisors elected to become a Groundwater Sustainability Agency (GSA) for that area of the Modesto Groundwater Subbasin that falls within Tuolumne County's political jurisdiction. The remainder of the Modesto Groundwater Subbasin lies wholly within Stanislaus County. Furthermore, Tuolumne County and Stanislaus County entered into a Cooperation Agreement on May 8, 2018 regarding preparation of the GSP. This agreement recognized the status of Tuolumne County as an independent GSA with jurisdiction over specific lands lying within the Modesto Groundwater Subbasin and yet allowed for these lands to be integrated into a single, basin-wide GSP in full compliance with SGMA regulations.

The GSP that has been developed for the Modesto Groundwater Subbasin includes the following main chapters:

1. Administrative Information
2. Plan Area
3. Notice and Communication
4. Basin Setting
5. Water Budgets
6. Sustainable Management Criteria
7. Monitoring Networks
8. Projects and Management Actions
9. References

In addition to the regularly scheduled and publically noticed meetings of the committee groups preparing the draft Modesto Groundwater Subbasin GSP, "Office Hours" or public working sessions have been conducted on: March 25, 2021, May 28, 2021 and August 9, 2021.

As the formal adoption date of the GSP approaches into the fall months, additional public outreach meetings pertaining to the elements of the plan will be held.

Todd Groundwater, the name of the consultant firm preparing the Modesto Groundwater Subbasin GSP, will also be making a presentation regarding the GSP to the Stanislaus County Water Advisory Committee on September 29, 2021. This is a meeting that is open to the public.

Pursuant to California Water Code Section 10728.4, Adoption or Amendment of a Plan following Public Hearing, a GSA must take the following action:

"A groundwater sustainability agency may adopt or amend a groundwater sustainability plan after a public hearing, held at least 90 days after providing notice to a city or county within the area of the proposed plan or amendment. The groundwater sustainability agency shall review and consider comments from any city or county that receives notice pursuant to this section and shall consult with a city or county that requests consultation within 30 days of receipt of the notice. Nothing in this section is intended to preclude an agency and a city or county from otherwise consulting or commenting regarding the adoption or amendment of a plan."

This notice has been prepared and delivered to all of the principal parties involved in this matter. In the case of the STRGBA GSA, this requirement is routine in that all of the cities within the footprint of the GSP are member agencies of the STRGBA GSA, including Stanislaus County.

Furthermore, pursuant to California Water Code Section 10728.6, Division 13 (commencing with Section 21000) of the Public Resources Code, the provisions of the California Environmental Quality Act do not apply to the preparation and adoption of plans pursuant to SGMA.

Due to the structure of the MOU governing the administration of the STRGBA GSA, all member agencies must approve and adopt the Modesto Groundwater Subbasin GSP by their respective governing bodies. All member agencies, including Tuolumne County, will be taking action to approve and adopt the Modesto Groundwater Subbasin GSP.

A hard copy of the Public Draft of the Modesto Groundwater Sustainability Plan may be reviewed at the Stanislaus County Department of Environmental Resources, 3800 Cornucopia Way, Suite C, in Modesto. All documents pertaining to the Modesto Groundwater Subbasin GSP may also be found at the following electronic address: https://www.strgba.org/.

POLICY ISSUE:

This proposed action is in compliance with State legislation known as the "Sustainable Groundwater Management Act" which mandates the adoption of a Groundwater Sustainability Plan (GSP) for groundwater basins categorized as high priority, but not in a condition of critical overdraft, by January 31, 2022. Failure to adopt such GSP would result in the groundwater resources of the basin being subject to regulation by the State of California Water Resources Control Board.

FISCAL IMPACT:

There is no fiscal impact associated with the adoption of the Modesto Subbasin Groundwater Sustainability Plan. However, there will be costs associated with implementing the GSP over the coming decades. These costs, once determined, will be subject to future County budget considerations and Board approval.

BOARD OF SUPERVISORS' PRIORITY:

Approval of these actions are consistent with the Board's *priority of Supporting Strong and Safe Neighborhoods, Supporting Community Health, Developing a Healthy Economy and Delivering Community Infrastructure* by ensuring a coordinated approach towards regional groundwater resources management.

STAFFING IMPACT:

Existing Department of Environmental Resources staff will continue to oversee the work associated with this item.

CONTACT PERSON:

Patrick Cavanah, Interim Director, DER	209-525-6818
Walter Ward, Water Resources Manager	209-525-6710

ATTACHMENT(S):

1. Notice of Public Hearing Modesto Groundwater Subbasin

STANISLAUS COUNTY
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that on Tuesday, December 7, 2021, at 9:00 a.m., or as soon thereafter as the matter may be heard, the Stanislaus County Board of Supervisors will meet in the Basement Chambers, 1010 10th Street, Modesto, CA, pursuant to California Water Code Section 10728.4, to consider approval and adoption of the Modesto Groundwater Subbasin Groundwater Sustainability Plan.

NOTICE IS FURTHER GIVEN that at the said time and place, interested persons will be given the opportunity to be heard. Written comments may be submitted to Stanislaus County at Attn: Walter Ward, Water Resources Manager, 3800 Cornucopia Way, Suite C, Modesto, CA, or at wward@envres.org.

BY ORDER OF THE BOARD OF SUPERVISORS

DATED: August 31, 2021

ATTEST: ELIZABETH A. KING, Clerk
of the Board of Supervisors
of the County of Stanislaus,
State of California

BY: Kelly Rodriguez
Kelly Rodriguez, Assistant Clerk

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
BOARD ACTION SUMMARY

DEPT: Environmental Resources BOARD AGENDA:7.1
AGENDA DATE: December 7, 2021

SUBJECT:
Public Hearing to Consider Adoption of the Modesto Groundwater Sustainability Plan

BOARD ACTION AS FOLLOWS: **RESOLUTION NO. 2021-0592**

On motion of Supervisor Withrow **Seconded by Supervisor** C. Condit
and approved by the following vote,
Ayes: Supervisors: B. Condit, Withrow, Grewal, C. Condit, and Chairman Chiesa
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) **X** **Approved as recommended**
2) _____ **Denied**
3) _____ **Approved as amended**
4) _____ **Other:**

MOTION:

ATTEST: **ELIZABETH A. KING, Clerk of the Board of Supervisors** **File No.**

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
AGENDA ITEM

DEPT: Environmental Resources BOARD AGENDA:7.1
AGENDA DATE: December 7, 2021

CONSENT ☐

CEO CONCURRENCE: YES 4/5 Vote Required: No

SUBJECT:

Public Hearing to Consider Adoption of the Modesto Groundwater Sustainability Plan

STAFF RECOMMENDATION:

1. Conduct a public hearing to consider approval and adoption of the Modesto Groundwater Sustainability Plan.
2. Approve and adopt the resolution regading the Modesto Groundwater Sustainability Plan.
3. Authorize the Modesto Groundwater Sustainability Agency's, it's consultants, and the Plan Manager to take such other actions as may be reasonably necessary to submit the Modesto Groundwater Sustainability Plan to the California Department of Water Resources by January 31, 2022, and implement the purpose of this resolution.

DISCUSSION:

In September of 2014, Governor Edmund G. Brown signed into law the Sustainable Groundwater Management Act of 2014 (SGMA), which changed the landscape of groundwater management in California. SGMA is a comprehensive package of legislation that sets the framework for statewide sustainable groundwater management and declares that such authority be given to local public agencies that have either water supply or land use authority, or both.

SGMA requires, among many other items, the formation of Groundwater Sustainability Agency‘s (GSAs) made up of local public agencies. SGMA empowers these GSAs to use a number of management tools to achieve “sustainability” in the affected groundwater basins, including authorities required in order to manage groundwater in a sustainable manner. GSAs are the local agencies responsible for the development and implementation of the Groundwater Sustainability Plans (GSPs), ultimately aimed at ensuring groundwater sustainability over a 20 year implementation period. GSPs are focused on the development and implementation of long-term groundwater sustainability programs, plans and practices over a 50 year planning horizon.

There are four groundwater subbasins underlying Stanislaus County, in whole or in part. These basins include the following:

1. Eastern San Joaquin Groundwater Subbasin
2. Modesto Groundwater Subbasin

3. Turlock Groundwater Subbasin
4. Delta-Mendota Groundwater Subbasin

The Delta-Mendota Groundwater Subbasin and the Eastern San Joaquin Groundwater Subbasin are designated by the California Department of Water Resources as being in a condition of "critical overdraft." Pursuant to SGMA, groundwater subbasins in this category are required to develop and adopt GSPs by January 31, 2020. The Stanislaus County Board of Supervisors adopted both of these GSPs in December, 2019. The regulatory deadline for the completion of the GSPs for the Modesto Groundwater Subbasin and the Turlock Groundwater Subbasin is January 31, 2022.

The formation deadline for creating the GSAs was June 30, 2017. On February 28, 2017, the Board of Supervisors approved the adoption of a Memorandum of Understanding creating the Stanislaus & Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA); a partnership consisting of the cities of Modesto, Oakdale, Riverbank and Waterford; Oakdale Irrigation District, Modesto Irrigation District and Stanislaus County.

Additionally, in May 2017, the Tuolumne County Board of Supervisors elected to become a Groundwater Sustainability Agency (GSA) for that area of the Modesto Groundwater Subbasin that falls within Tuolumne County's political jurisdiction. The remainder of the Modesto Groundwater Subbasin lies wholly within Stanislaus County. Furthermore, Tuolumne County and Stanislaus County entered into a Cooperation Agreement on May 8, 2018 regarding preparation of the GSP. This agreement recognized the status of Tuolumne County as an independent GSA with jurisdiction over specific lands lying within the Modesto Groundwater Subbasin and yet allowed for these lands to be integrated into a single, basin-wide GSP (avoiding the need for a formal Coordination Agreement) in full compliance with SGMA regulations.

The GSP developed for the Modesto Groundwater Subbasin includes the following main chapters.

1. Administrative Information
2. Plan Area
3. Basin Setting
4. Notice and Communication
5. Water Budgets
6. Sustainable Management Criteria
7. Monitoring Networks
8. Projects and Management Actions
9. References

In addition to the regularly scheduled and publically noticed meetings of the committee groups preparing the draft Modesto Subbasin GSP, the following "Office Hours" or public working sessions have been conducted:

- March 25, 2021
- May 28, 2021
- August 9, 2021

Todd Groundwater, the principal consultant firm preparing the Modesto Groundwater Subbasin GSP, also made a presentation regarding the GSP to the Stanislaus County Water Advisory Committee on September 29, 2021. This presentation is located here:

http://www.stancounty.com/er/groundwater/pdf/wac/StanislausCountyWaterAdvisory092921.pdf

Pursuant to California Water Code Section 10728.4, Adoption or Amendment of Plan following Public Hearing, a GSA must take the following action:

"A groundwater sustainability agency may adopt or amend a groundwater sustainability plan after a public hearing, held at least 90 days after providing notice to a city or county within the area of the proposed plan or amendment. The groundwater sustainability agency shall review and consider comments from any city or county that receives notice pursuant to this section and shall consult with a city or county that requests consultation within 30 days of receipt of the notice. Nothing in this section is intended to preclude an agency and a city or county from otherwise consulting or commenting regarding the adoption or amendment of a plan."

This notice has been prepared and delivered to all of the principal parties involved in this matter. In the case of the STRGBA this requirement is routine in that all of the cities within the footprint of the GSP are member agencies of the STRGBA GSA, including Stanislaus County.

Furthermore, pursuant to California Water Code Section 10728.6, Division 13 (commencing with Section 21000) of the Public Resources Code, the provisions of the California Environmental Quality Act do not apply to the preparation and adoption of plans pursuant to SGMA.

Due to the structure of the MOU governing the administration of the STRGBA GSA, all member agencies must approve and adopt the Modesto Groundwater Subbasin GSP by their respective governing bodies. All member agencies, including Tuolumne County, will be taking action to approve and adopt the Modesto Groundwater Subbasin GSP.

A hard copy of the Public Draft of the Modesto Subbasin Groundwater Sustainability Plan may be reviewed at the Stanislaus County Department of Environmental Resources, 3800 Cornucopia Way, Suite C, in Modesto. All documents pertaining to the Modesto Groundwater Subbasin GSP may also be found at the following electronic address:

https://www.strgba.org/

POLICY ISSUE:

This proposed action is in compliance with State legislation known as the "Sustainable Groundwater Management Act" which mandates the adoption of a Groundwater Sustainability Plan (GSP) for groundwater basins categorized as high priority, but not in a condition of critical overdraft, by January 31, 2022. Failure to adopt such GSP would result in the groundwater resources of the basin being subject to regulation by the State of California Water Resources Control Board.

FISCAL IMPACT:

There is no fiscal impact associated with the adoption of the Modesto Subbasin Groundwater Sustainability Plan. However, there will be costs associated with implementing the GSP over the coming decades. These costs, once determined, will be subject to future County budget considerations and Board approval.

BOARD OF SUPERVISORS' PRIORITY:

Approval of these actions are consistent with the Board's priorities of *Supporting Strong and Safe Neighborhoods, Supporting Community Health, Developing a Healthy Economy, and Delivering Community Infrastructure* by ensuring a coordinated approach towards regional groundwater resources management.

STAFFING IMPACT:

Existing staff from the Department of Environmental Resources and other relevant County departments will continue to oversee the work associated with this item.

CONTACT PERSON:

Robert Kostlivy, Director, DER	209-525-6818
Walter Ward, Water Resources Manager	209-525-6710

ATTACHMENT(S):

1. Resolution

ORACLE ACCOUNT CODING STRIP
Single Supplier - Multiple Invoices

Shaded areas for A/P only

BATCH NAME	PREPARED Fay Tamez	DEPT: ENVIRONMENTAL RESOURCES
KEYED BY	DATE: 12/13/2021	PHONE: 525-6795
DATE		

SUPPLIER: MCCLATCHY **INVOICE DATE: VARIOUS** **TOTAL:** $101.64

SITE: 74253 - MI **TERMS: IMMED**

PAY ALONE
Y / N

LINE	PO #		INVOICE #	DATE	AMOUNT	FUND	ORG	ACCT	GL PROJ	LOCATION	MISC	OTHER	DESCRIPTION
1		P/F	82582	11/30/2021	$101.64	100	34301	62630	0	0	0	0	30440 - GW
2		P/F											
3		P/F											
4		P/F											
5		P/F											
6		P/F											
7		P/F											
8		P/F											

12/13/21 [signature]
DATE AUTHORIZED DEPARTMENTAL SIGNATURE

OK TO PAY OVERAGE

BUYER SIGNATURE

DATE AUDITOR APPROVING SIGNATURE (Exceeding $75,000)

REPORTABLE: Y or N **BOX #** **SITE NAME:** 74253

McClatchy

Beaufort Gazette
Belleville News-Democrat
Bellingham Herald
Bradenton Herald
Centre Daily Times
Charlotte Observer
Columbus Ledger-Enquirer
Fresno Bee
The Herald - Rock Hill
Herald Sun - Durham
Idaho Statesman
Island Packet
Kansas City Star
Lexington Herald-Leader
Merced Sun-Star
Miami Herald
el Nuevo Herald - Miami
Modesto Bee
Raleigh News & Observer
The Olympian
Sacramento Bee
Fort Worth Star-Telegram
The State - Columbia
Sun Herald - Biloxi
Sun News - Myrtle Beach
The News Tribune Tacoma
The Telegraph - Macon
San Luis Obispo Tribune
Tri-City Herald
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CO STAN ENVIRONMENTAL RESOURCE
Attn: Accounts Payable
3800 CORNUCOPIA WAY STE C
MODESTO, CA 95358

RECEIVED
STANISLAUS CO.
DEC 10 2021
ENVIRONMENTAL RESOURCES

INVOICE	
Invoice No.:	82582
Invoice Date:	11/30/2021
Due Date:	12/30/2021
Bill-To Account:	30440
Sales Rep:	Jane Durand

Dates	Order No.	Description	Product	Size	Billed Units	Times Run	Net Amount
11/21/2021 - 11/28/2021	153686	Print Legal Ad IPL0045135	MOD-The Modesto Bee Legal | Legals & Public Notices CLS	1 x 32 L	32 L	2	$101.64

Summary	
Amount Due:	$101.64

OK to Pay
UPW
12/10/21

Please Return This Portion With Your Payment (Thank You)

McClatchy Company LLC
PO Box 510150
Livonia MI 48151

INVOICE	
Invoice No.:	82582
Account No.:	30440
Account Name:	CO STAN ENVIRONMENTAL RESOURCE
Amount Due:	$101.64

Email questions to ssccreditandcollections@mcclatchy.com

3006000066 PRESORT PBPS001 <B>

CO STAN ENVIRONMENTAL RESOURCE
ATTN: ACCOUNTS PAYABLE
3800 CORNUCOPIA WAY STE C
MODESTO CA 95358-9494

McClatchy Company LLC
PO Box 510150
Livonia MI 48151

0000030440 0000082582 000010164 1

McClatchy

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AFFIDAVIT OF PUBLICATION

Account #	Order Number	Identification	Order PO	Amount	Cols	Depth
30440	153686	Print Legal Ad - IPL0045135		$101.64	1	32 L

Attention: Julie Mendoza

CO STAN ENVIRONMENTAL RESOURCE
3800 CORNUCOPIA WAY STE C
MODESTO, CA 95358

STANISLAUS COUNTY NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that on Tuesday, December 7, 2021, at 9:00 a.m., or as soon thereafter as the matter may be heard, the Stanislaus County Board of Supervisors will meet in the Basement Chambers, 1010 10th Street, Modesto, CA, pursuant to California Water Code Section 10728.4, to consider approval and adoption of the Modesto Groundwater Subbasin Groundwater Sustainability Plan.

NOTICE IS FURTHER GIVEN that at the said time and place, interested persons will be given the opportunity to be heard. Written comments may be submitted to Stanislaus County at Attn: Walter Ward, Water Resources Manager, 3800 Cornucopia Way, Suite C, Modesto, CA, or at wward@envres.org.

BY ORDER OF THE BOARD OF SUPERVISORS
DATED: August 31, 2021
ATTEST:
ELIZABETH A. KING, Clerk of the Board of Supervisors of the County of Stanislaus, State of California
BY: /s/Kelly Rodriguez, Assistant Clerk
IPL0045135
Nov 21,28 2021

Declaration of Publication C.C.P. S2015.5

STATE OF CALIFORNIA)
) ss.
County of Stanislaus)

I am a citizen of the United States; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the printer of the Modesto Bee, a newspaper of general circulation, printed and published in the city of Modesto, County of Stanislaus, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Stanislaus, State of California, under the date of February 25, 1951 Action No. 46453 that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

No. of Insertions: 2

Beginning Issue of: 11/21/2021

Ending Issue of: 11/28/2021

I certify (or declare) under penalty of perjury that the foregoing is true and correct and that this declaration was executed at Dallas, Texas on:

Date: 29th, day of November, 2021

Notary Public in and for the state of Texas, residing in Dallas County

AMANDA DAWN GRISHAM
My Notary ID # 132031326
Expires May 30, 2023

Extra charge for lost or duplicate affidavits.
Legal document please do not destroy!

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
STATE OF CALIFORNIA

2021-0592

Date: December 7, 2021

On motion of Supervisor Withrow Seconded by Supervisor C. Condit
and approved by the following vote,
Ayes: Supervisors: B. Condit, Withrow, Grewal, C. Condit, and Chairman Chiesa
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

THE FOLLOWING RESOLUTION WAS ADOPTED: Item # 7.1

THE MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND AUTHORIZING THE SUBMISSION TO THE DEPARTMENT OF WATER RESOURCES

A. WHEREAS, in April 1994, the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and County of Stanislaus executed a Memorandum of Understanding to form the Stanislaus and Tuolumne Rivers Groundwater Basin Association ("STRBGA") for the purpose of coordinating planning and groundwater management activities in the Modesto Subbasin;

B. WHEREAS, in July 2015, the Memorandum of Understanding was amended to include the City of Waterford as a member agency of STRGBA;

C. WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d));

D. WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727);

E. WHEREAS, SGMA requires a GSA to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Modesto Subbasin (designated basin number 5-022.02);

F. WHEREAS, the STRGBA GSA was formed on February 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of SGMA;

G. WHEREAS, the STRGBA GSA has the authority to draft, adopt, and implement a GSP (Wat. Code, § 10725 et seq.);

H. WHEREAS, the STRGBA GSA submitted an Initial Notification to DWR to jointly develop a GSP for the Modesto Subbasin on February 28, 2017;

I. WHEREAS, the STRGBA GSA has coordinated with the Tuolumne County GSA to develop a single, coordinated GSP for the Modesto Subbasin;

J. WHEREAS, on August 10, 2021 the STRGBA GSA released the Notice of Intent to Adopt the GSP to cities and counties in the plan area pursuant to Water Code section 10728.4;

K. WHEREAS, the STRGBA GSA and Tuolumne County GSA developed the draft Modesto Subbasin GSP and released the draft Modesto Subbasin GSP chapters for public review and comment;

L. WHEREAS, the STRGBA GSA and Tuolumne County GSA reviewed and will respond to comments on the Modesto Subbasin GSP;

M. WHEREAS, the final staff version of the Modesto Subbasin GSP was presented to Stanislaus County on December 7, 2021;

N. WHEREAS, the Stanislaus County understands its staff and consultant team will finalize the GSP by making non-substantive revisions to the final Modesto Subbasin GSP presented on December 7, 2021;

O. WHEREAS, the final Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the Stanislaus County finds as follows:

1. Stanislaus County hereby approves and adopts the final staff version of the Modesto Subbasin GSP.

2. Stanislaus County authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as many be reasonably necessary to:

   a. finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document;

   b. submit the final Modesto Subbasin GSP to DWR by January 31, 2022; or

   c. implement the purpose of this Resolution.

ATTEST: **ELIZABETH A. KING, Clerk**
Stanislaus County Board of Supervisors,
State of California

Elizabeth A King

File No.

Appendix C

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

STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY
RESOLUTION NO. 2024-01

RESOLUTION ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

A. **WHEREAS**, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA), consisting of the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, City of Waterford and County of Stanislaus was formed on February 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA); and

B. **WHEREAS**, the STRGBA GSA coordinated with the County of Tuolumne GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both the STRGBA GSA and County of Tuolumne GSA; and

C. **WHEREAS**, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

D. **WHEREAS,** Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

E. **WHEREAS**, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

F. **WHEREAS**, the STRGBA GSA acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

G. **WHEREAS**, it is acknowledged that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period, and

H. **WHEREAS**, the STRGBA GSA acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

I. **WHEREAS**, it is acknowledged that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions, and

J. **WHEREAS**, the STRGBA GSA acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions, and

K. **WHEREAS,** on January 18, 2024, DWR provided notification to the STRGBA GSA and County of Tuolumne GSA that the GSP was considered incomplete and two deficiencies were identified; and

L. **WHEREAS**, a revised GSP to address the deficiencies identified by DWR must be submitted to DWR by July 16, 2024 to avoid the state intervention process provided for in SGMA; and

M. **WHEREAS**, on March 29, 2024 the STRGBA GSA and County of Tuolumne GSA released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4;

N. **WHEREAS**, the STRGBA GSA and County of Tuolumne GSA have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

O. **WHEREAS**, the STRGBA GSA and County of Tuolumne GSA have reviewed and responded to comments on the revised Modesto Subbasin GSP; and

P. **WHEREAS**, all seven STRGBA GSA member agencies have held public hearings, adopted the draft GSP and authorized the Modesto Subbasin Plan Manager to submit the final GSP to DWR; and

Q. **WHEREAS**, the STRGBA GSA recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the STRGBA GSA and County of Tuolumne GSA to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

R. **WHEREAS**, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

S. **WHEREAS,** the STRGBA GSA acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make STRGBA GSA and County of Tuolumne GSA responsible for injury caused by overdraft; and

T. **WHEREAS**, the STRGBA GSA acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

U. **WHEREAS**, the STRGBA GSA commits to develop a well mitigation program and management actions along with the County of Tuolumne GSA; and

V. **WHEREAS**, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding; and

NOW, THEREFORE, BE IT RESOLVED that the STRGBA GSA finds as follows:

1. STRGBA GSA hereby adopts this resolution approving the revised Modesto Subbasin GSP and committing to develop a well mitigation plan and management actions in the Modesto Subbasin to ensure long-term groundwater sustainability.

2. STRGBA GSA authorizes its member agencies to collaborate with consultants, stakeholders and the County of Tuolumne GSA to take such actions as may be reasonably necessary to:

   a. Develop and implement a well mitigation program inclusive of the procurement of baseline funding amounting to $300,000 no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

   b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027 and, upon implementation, shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

3. The STRGBA GSA authorizes the Modesto Subbasin Plan Manager to submit the revised GSP to DWR by July 16, 2024.

Upon motion of Barahona, seconded by Pitcock, and duly submitted to the STRGBA GSA for its consideration, the above-titled Resolution was adopted this 10th day of July, 2024.

STRGBA GSA

Eric C. Thorburn
STRGBA GSA Chair

Jesse Franco
STRGBA GSA Vice-Chair

Filed JUNE 18th, 2024

No. 49-24

By HEATHER RYAN
Clerk of the Board of Supervisors

RESOLUTION

OF THE BOARD OF SUPERVISORS OF THE COUNTY OF TUOLUMNE

RESOLUTION ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS WITHIN THE TUOLUMNE COUNTY GROUNDWATER SUSTAINABILITY AGENCY JURISDICTION IN THE MODESTO SUBBASIN

WHEREAS, the Tuolumne County Groundwater Sustainability Agency (GSA) was formed on May 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA);

WHEREAS, the Tuolumne County GSA coordinated with the STRGBA GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both the STRGBA GSA and Tuolumne County GSA; and

WHEREAS, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

WHEREAS, Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

WHEREAS, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

WHEREAS, the Tuolumne County GSA acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

WHEREAS, it is acknowledged that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period, and

WHEREAS, the Tuolumne County GSA acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

WHEREAS, it is acknowledged that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions, and

WHEREAS, the Tuolumne County GSA acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions, and

WHEREAS, on January 18, 2024, DWR provided notification to the STRGBA GSA and Tuolumne County GSA that the GSP was considered incomplete and two deficiencies were identified; and

WHEREAS, a revised GSP to address the deficiencies identified by DWR must be submitted to DWR by July 16, 2024 to avoid the state intervention process provided for in SGMA; and

WHEREAS, on March 29, 2024 the STRGBA GSA and Tuolumne County GSA released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4;

WHEREAS, the STRGBA GSA and Tuolumne County GSA have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

WHEREAS, the STRGBA GSA and Tuolumne County GSA have reviewed and responded to comments on the revised Modesto Subbasin GSP; and

WHEREAS, the Tuolumne County GSA recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the STRGBA GSA and Tuolumne County GSA to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

WHEREAS, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

WHEREAS, the Tuolumne County GSA acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make STRGBA GSA and Tuolumne County GSA responsible for injury caused by overdraft; and

WHEREAS, the Tuolumne County GSA acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

WHEREAS, the Tuolumne County GSA commits to develop a well mitigation program and management actions along with the STRGBA GSA; and

WHEREAS, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding;

THEREFORE, BE IT RESOLVED THAT that the Tuolumne County GSA finds as follows:

1. Tuolumne County GSA hereby adopts this resolution approving the revised Modesto Subbasin GSP and committing to develop a well mitigation plan and management actions in the Modesto Subbasin to ensure long-term groundwater sustainability.

2. Tuolumne County GSA authorizes collaboration with consultants, stakeholders, the STRGBA GSA and its member agencies to take such actions as may be reasonably necessary to:

   a. Develop and implement a well mitigation program for all wells within the TCGSA jurisdiction (if any) inclusive of the procurement and funding commensurate with the unique conditions of the Tuolumne County GSA no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the Tuolumne County GSA.

   b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027, and upon implementation, shall continue into perpetuity unless otherwise directed by the Tuolumne County GSA.

3. The Tuolumne County GSA authorizes the Modesto Subbasin Plan Manager to submit the revised GSP to DWR by July 16, 2024.

ADOPTED BY THE BOARD OF SUPERVISORS OF THE COUNTY OF TUOLUMNE ON JUNE 18th, 2024

AYES: 1st Dist.	DAVID GOLDEMBERG	NOES: ____ Dist.	
2nd Dist.	RYAN CAMPBELL	____ Dist.	
3rd Dist.	DANIEL ANAIAH KIRK	ABSENT: ____ Dist.	
4th Dist.	KATHLEEN HAFF	____ Dist.	
5th Dist.	JARON BRANDON	ABSTAIN: ____ Dist.	

CHAIR OF THE BOARD OF SUPERVISORS

ATTEST: _____

No. 49-24

Sr. Board Clerk of the Board of Supervisors

I hereby certify that according to the provisions of Government Code Section 25103, delivery of this document has been made.

HEATHER D. RYAN
Board Clerk

By: _____

TUOLUMNE COUNTY
GROUNDWATER SUSTAINABILITY AGENCY
RESOLUTION NO. 2024-49

RESOLUTION ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS WITHIN THE TUOLUMNE COUNTY GROUNDWATER SUSTAINABILITY AGENCY JURISDICTION IN THE MODESTO SUBBASIN

A. **WHEREAS**, the Tuolumne County Groundwater Sustainability Agency (GSA) was formed on May 16, 2017, for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA);

B. **WHEREAS**, the Tuolumne County GSA coordinated with the STRGBA GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both the STRGBA GSA and Tuolumne County GSA; and

C. **WHEREAS**, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

D. **WHEREAS,** Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

E. **WHEREAS**, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

F. **WHEREAS**, the Tuolumne County GSA acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

G. **WHEREAS**, it is acknowledged that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period, and

H. **WHEREAS**, the Tuolumne County GSA acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

I. **WHEREAS**, it is acknowledged that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions, and

J. **WHEREAS**, the Tuolumne County GSA acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions, and

K. **WHEREAS,** on January 18, 2024, DWR provided notification to the STRGBA GSA and Tuolumne County GSA that the GSP was considered incomplete and two deficiencies were identified; and

L. **WHEREAS**, a revised GSP to address the deficiencies identified by DWR must be submitted to DWR by July 16, 2024 to avoid the state intervention process provided for in SGMA; and

M. **WHEREAS**, on March 29, 2024 the STRGBA GSA and Tuolumne County GSA released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4;

N. **WHEREAS**, the STRGBA GSA and Tuolumne County GSA have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

O. **WHEREAS**, the STRGBA GSA and Tuolumne County GSA have reviewed and responded to comments on the revised Modesto Subbasin GSP; and

P. **WHEREAS**, the Tuolumne County GSA recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the STRGBA GSA and Tuolumne County GSA to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

Q. **WHEREAS**, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

R. **WHEREAS,** the Tuolumne County GSA acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make STRGBA GSA and Tuolumne County GSA responsible for injury caused by overdraft; and

S. **WHEREAS**, the Tuolumne County GSA acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

T. **WHEREAS**, the Tuolumne County GSA commits to develop a well mitigation program and management actions along with the STRGBA GSA; and

U. **WHEREAS**, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding;

NOW, THEREFORE, BE IT RESOLVED that the Tuolumne County GSA finds as follows:

1. Tuolumne County GSA hereby adopts this resolution approving the revised Modesto Subbasin GSP and committing to develop a well mitigation plan and management actions in the Modesto Subbasin to ensure long-term groundwater sustainability.

2. Tuolumne County GSA authorizes collaboration with consultants, stakeholders, the STRGBA GSA and its member agencies to take such actions as may be reasonably necessary to:

   a. Develop and implement a well mitigation program for all wells within the TCGSA jurisdiction (if any) inclusive of the procurement and funding commensurate with the unique conditions of the Tuolumne County GSA no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the Tuolumne County GSA.

   b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027, and upon implementation, shall continue into perpetuity unless otherwise directed by the Tuolumne County GSA.

3. The Tuolumne County GSA authorizes the Modesto Subbasin Plan Manager to submit the revised GSP to DWR by July 16, 2024.

Upon motion of BRANDON, seconded by CAMPBELL, and duly submitted to the Tuolumne County GSA for its consideration, the above-titled Resolution was adopted this 18 day of JUNE, 2024.

Tuolumne County GSA

CHAIR OF THE BOARD OF SUPERVISORS

ATTEST:

BK. BOARD CLERK OF THE BOARD OF SUPERVISORS

I hereby certify that according to the provisions of Government Code Section 25103, delivery of this document has been made.

HEATHER D. RYAN
Board Clerk

By: _____

OAKDALE IRRIGATION DISTRICT
RESOLUTION NO. 2024-10

RESOLUTION ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

A. **WHEREAS**, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) consists of the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, City of Waterford and County of Stanislaus, and was formed on February 16, 2017 for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA); and

B. **WHEREAS**, the STRGBA GSA coordinated with the County of Tuolumne GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both GSAs; and

C. **WHEREAS**, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

D. **WHEREAS,** Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

E. **WHEREAS**, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

F. **WHEREAS**, the Oakdale Irrigation District acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

G. **WHEREAS**, the Oakdale Irrigation District acknowledges that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period; and

H. **WHEREAS**, the Oakdale Irrigation District acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

I. **WHEREAS**, the Oakdale Irrigation District acknowledges that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions; and

J. **WHEREAS**, the Oakdale Irrigation District acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions; and

K. **WHEREAS,** on January 18, 2024, DWR provided notification to the GSAs that the GSP was considered incomplete and two deficiencies were identified; and

L. **WHEREAS**, the GSAs are required to correct the deficiencies and submit a revised or otherwise amended GSP by July 16, 2024; and

M. **WHEREAS**, on March 29, 2024 the GSAs released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4; and

N. **WHEREAS**, the GSAs have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

O. **WHEREAS**, the Oakdale Irrigation District recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the GSAs to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

P. **WHEREAS**, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

Q. **WHEREAS,** the Oakdale Irrigation District acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make GSAs responsible for injury caused by overdraft; and

R. **WHEREAS**, the Oakdale Irrigation District acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

S. **WHEREAS**, the STRGBA GSA revised GSP adoption resolution will also document the STRGBA GSA's commitment to develop and implement a well mitigation program and management actions along with the County of Tuolumne GSA; and

T. **WHEREAS**, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding; and

U. **WHEREAS**, the final staff version of the revised GSP for the Modesto Subbasin was presented by reference to the Board of Directors on July 2, 2024; and

V. **WHEREAS**, the Oakdale Irrigation District understands its staff and consultant team may finalize the amended GSP by making non-substantive revisions to the final revised Modesto Subbasin GSP presented on July 2, 2024; and

W. **WHEREAS**, the final revised Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Oakdale Irrigation District finds as follows:

1. Oakdale Irrigation District hereby approves and adopts the final staff version of the revised Modesto Subbasin GSP.

2. The Oakdale Irrigation District authorizes collaboration with the STRGBA GSA, its member agencies, consultants, stakeholders and the County of Tuolumne GSA to take such actions as may be reasonably necessary to:

    a. Develop and implement a well mitigation program inclusive of the procurement of baseline funding amounting to $300,000 no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

    b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027 and, upon implementation, shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

3. Oakdale Irrigation District authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

    a. Finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document;

b. Submit the final revised Modesto Subbasin GSP to DWR by July 16, 2024;

Upon motion of Director Tobias, seconded by Director Santos, and duly submitted to the Board for its consideration, the above-titled Resolution was adopted this 2nd day of July, 2024.

OAKDALE IRRIGATION DISTRICT

Thomas D. Orvis, President
Board of Directors

Scot A. Moody
General Manager/Secretary

RESOLUTION 2024-49

ADOPTING A REVISED MODESTO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

A. WHEREAS, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) consists of the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, City of Waterford and County of Stanislaus, and was formed on February 16, 2017 for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA); and

B. WHEREAS, the STRGBA GSA coordinated with the County of Tuolumne GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both GSAs; and

C. WHEREAS, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

D. WHEREAS, Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

E. WHEREAS, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge that groundwater levels may continue to decline temporarily during the initial years of GSP implementation while projects are brought online; and

F. WHEREAS, the Modesto Irrigation District acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasin by or before 2042; and

G. WHEREAS, the Modesto Irrigation District acknowledges that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period; and

H. WHEREAS, the Modesto Irrigation District acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin during the 20-year GSP implementation period; and

I. WHEREAS, the Modesto Irrigation District acknowledges that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions; and

J. WHEREAS, the Modesto Irrigation District acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions; and

K. WHEREAS, on January 18, 2024, DWR provided notification to the GSAs that the GSP was considered incomplete and two deficiencies were identified; and

L. WHEREAS, the GSAs are required to correct the deficiencies and submit a revised or otherwise amended GSP by July 16, 2024; and

M. WHEREAS, on March 29, 2024, the GSAs released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4; and

N. WHEREAS, the GSAs have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

O. WHEREAS, the Modesto Irrigation District recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the GSAs to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur if water levels drop below the MTs defined in the Modesto Subbasin GSP; and

P. WHEREAS, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

Q. WHEREAS, the Modesto Irrigation District acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make GSAs responsible for injury caused by overdraft; and

R. WHEREAS, the Modesto Irrigation District acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

S. WHEREAS, the STRGBA GSA revised GSP adoption resolution will also document the STRGBA GSA's commitment to develop and implement a well mitigation program and management actions along with the County of Tuolumne GSA; and

T. WHEREAS, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding; and

U. WHEREAS, the final staff version of the revised GSP for the Modesto Subbasin was presented by reference to the Board of Directors on July 9, 2024; and

V. WHEREAS, the Modesto Irrigation District understands its staff and consultant team may finalize the amended GSP by making non-substantive revisions to the final revised Modesto Subbasin GSP presented on July 9, 2024; and

W. WHEREAS, the final revised Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

THEREFORE, BE IT RESOLVED That the Board of Directors of the Modesto Irrigation District approves and adopts the final staff version of the revised Modesto Subbasin GSP.

THEREFORE, BE IT FURTHER RESOLVED, That the Board of Directors of the Modesto Irrigation District does hereby:

1. Authorize collaboration with the STRGBA GSA, its member agencies, consultants, stakeholders and the County of Tuolumne GSA to take such actions as may be reasonably necessary to:

    a. Develop and implement a well mitigation program inclusive of the procurement of baseline funding amounting to $300,000 no later than January 31, 2026. Upon implementation, the well mitigation program and baseline funding shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

    b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027, and, upon implementation, shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

THEREFORE, BE IT FURTHER RESOLVED, That the Board of Directors of the Modesto Irrigation District authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

a. Finalize the staff draft version of the revised Modesto Subbasin GSP, barring any substantive changes to the document.

b. Submit the final revised Modesto Subbasin GSP to DWR by July 16, 2024.

Moved by Director Frobose, seconded by Director Keating, that the foregoing resolution be adopted.

The following vote was had:
Ayes: Directors Blom, Boer, Byrd, Frobose and Keating
Noes: Director None
Absent: Director None
President Byrd declared the resolution adopted.

o0o

I, Angela Cartisano, Board Secretary of the Modesto Irrigation District, do hereby CERTIFY that the foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of said Board of Directors held the ninth day of July 2024.

Board Secretary of the
Modesto Irrigation District

MODESTO CITY COUNCIL
RESOLUTION NO. 2024-270

RESOLUTION ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

WHEREAS, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) consists of the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, City of Waterford and County of Stanislaus, and was formed on February 16, 2017 for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA); and

WHEREAS, the STRGBA GSA coordinated with the County of Tuolumne to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by all parties; and

WHEREAS, the final Modesto Subbasin GSP was submitted to the California Department of Water Resources (DWR) on January 31, 2022; and

WHEREAS, Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

WHEREAS, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

WHEREAS, the City of Modesto acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management

actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

WHEREAS, the City of Modesto acknowledges that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period, and

WHEREAS, the City of Modesto acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

WHEREAS, the City of Modesto acknowledges that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions, and

WHEREAS, the City of Modesto acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions, and

WHEREAS, on January 18, 2024, DWR provided notification to the GSA that the GSP was considered incomplete and two deficiencies were identified; and

WHEREAS, the GSA is required to correct the deficiencies and submit a revised or otherwise amended GSP by July 16, 2024; and

WHEREAS, on March 29, 2024 the GSA released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4; and

WHEREAS, the GSA has addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

WHEREAS, the City of Modesto recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the GSA to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

WHEREAS, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

WHEREAS, the City of Modesto acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make GSAs responsible for injury caused by overdraft; and

WHEREAS, the City of Modesto acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

WHEREAS, the STRGBA GSA revised GSP adoption resolution will also document the STRGBA GSA's commitment to develop and implement a well mitigation program and management actions along with the County of Tuolumne; and

WHEREAS, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding; and

WHEREAS, the final staff version of the revised GSP for the Modesto Subbasin was presented by reference to the Council of the City of Modesto on July 9, 2024; and

WHEREAS, the City of Modesto understands its staff and consultant team may finalize the amended GSP by making non-substantive revisions to the final revised Modesto Subbasin GSP presented on July 9, 2024;

WHEREAS, the final revised Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Modesto finds as follows:

1. The City of Modesto hereby approves and adopts the final staff version of the revised Modesto Subbasin GSP.
2. The City of Modesto authorizes collaboration with the STRGBA GSA, its member agencies, consultants, stakeholders and the County of Tuolumne to take such actions as may be reasonably necessary to:

a. Develop and implement a well mitigation program inclusive of the procurement of baseline funding amounting to $300,000 no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027 and, upon implementation, shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

3. The City of Modesto authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

a. finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document:

b. submit the final revised Modesto Subbasin GSP to DWR by July 16, 2024;

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of July, 2024, by Councilmember Escutia-Braaton, who moved its adoption, which motion being duly seconded by Councilmember Williams, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Alvarez, Bavaro, Escutia-Braaton, Ricci, Williams, Wright, Mayor Zwahlen
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
DIANE NAYARES-PEREZ, CMC,
City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

THIS IS TO CERTIFY THAT THIS
IS A TRUE COPY OF THE DOCUMENT ON
FILE WITH THIS OFFICE.
DATE 7/10/2024
SIGNATURE
CITY CLERK
CITY OF MODESTO, CA

IN THE CITY COUNCIL
OF THE CITY OF OAKDALE
STATE OF CALIFORNIA

CITY COUNCIL RESOLUTION 2024-071

A RESOLUTION AUTHORIZING THE ADOPTION OF A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT BY THE STRGBA TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

WHEREAS, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) consists of the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, City of Waterford and County of Stanislaus, and was formed on February 16, 2017 for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA);

WHEREAS, the STRGBA GSA coordinated with the County of Tuolumne GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both GSA's; and

WHEREAS, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

WHEREAS, Minimum Thresholds (MT's) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

WHEREAS, 2027 Interim Milestones (IM's) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

WHEREAS, the CITY OF OAKDALE acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

WHEREAS, the CITY OF OAKDALE acknowledges that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period, and

WHEREAS, the CITY OF OAKDALE acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

WHEREAS, the CITY OF OAKDALE acknowledges that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions, and

WHEREAS, the CITY OF OAKDALE acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions, and

WHEREAS, on January 18, 2024, DWR provided notification to the GSAs that the GSP was considered incomplete and two deficiencies were identified; and

WHEREAS, the GSAs are required to correct the deficiencies and submit a revised or otherwise amended GSP by July 16, 2024; and

WHEREAS, on March 29, 2024 the GSAs released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4;

WHEREAS, the GSAs have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

WHEREAS, the CITY OF OAKDALE recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the GSAs to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

WHEREAS, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

WHEREAS, the CITY OF OAKDALE acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make GSAs responsible for injury caused by overdraft; and

WHEREAS, the CITY OF OAKDALE acknowledges that they cannot control changes in groundwater conditions not caused by actions of the GSA; and

WHEREAS, the STRGBA GSA revised GSP adoption resolution will also document the STRGBA GSA's commitment to develop and implement a well mitigation program and management actions along with the County of Tuolumne GSA; and

WHEREAS, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding; and

WHEREAS, the final staff version of the revised GSP for the Modesto Subbasin was presented by reference to the City of Oakdale City Council on July 1, 2024;

WHEREAS, the CITY OF OAKDALE understands its staff and consultant team may finalize the amended GSP by making non-substantive revisions to the final revised Modesto Subbasin GSP presented on July 1, 2024;

WHEREAS, the final revised Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the **City Council** of the **CITY OF OAKDALE** finds as follows:

1. The CITY OF OAKDALE hereby approves and adopts the final staff version of the revised Modesto Subbasin GSP.

2. The CITY OF OAKDALE authorizes collaboration with the STRGBA GSA, its member agencies, consultants, stakeholders and the County of Tuolumne GSA to take such actions as may be reasonably necessary to:

    a. Develop and implement a well mitigation program no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

    b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027 and, upon implementation, shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

3. The CITY OF OAKDALE authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

    a. Finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document;

    b. Submit the final revised Modesto Subbasin GSP to DWR by July 16, 2024;

CITY OF OAKDALE
City Council Resolution 2024-071

THE FOREGOING RESOLUTION IS HEREBY ADOPTED THIS 1ST DAY OF JULY, 2024, by the following vote:

AYES:	COUNCIL MEMBERS: Gilbert, F. Smith, Amaral, Bairos	(4)
NOES:	COUNCIL MEMBERS: None	(0)
ABSENT:	COUNCIL MEMBERS: C. Smith	(1)
ABSTAINED:	COUNCIL MEMBERS: None	(0)

SIGNED:

Cherilyn Bairos, Mayor

ATTEST:

Rouzé Roberts, City Clerk

CITY OF RIVERBANK

RESOLUTION 2024-067

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVERBANK ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

THE CITY OF RIVERBANK CITY COUNCIL (HEREAFTER REFERRED TO AS THE "CITY COUNCIL") DOES HEREBY RESOLVE THAT:

WHEREAS, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) consists of the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, City of Waterford and County of Stanislaus, and was formed on February 16, 2017 for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA);

WHEREAS, the STRGBA GSA coordinated with the County of Tuolumne GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both GSAs; and

WHEREAS, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

WHEREAS, Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

WHEREAS, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

WHEREAS, the City of Riverbank acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

WHEREAS, the City of Riverbank acknowledges that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period, and

WHEREAS, the City of Riverbank acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

WHEREAS, the City of Riverbank acknowledges that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions, and

WHEREAS, the City of Riverbank acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions, and

WHEREAS, on January 18, 2024, DWR provided notification to the GSAs that the GSP was considered incomplete, and two deficiencies were identified; and

WHEREAS, the GSAs are required to correct the deficiencies and submit a revised or otherwise amended GSP by July 16, 2024; and

WHEREAS, on March 29, 2024 the GSAs released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4; and

WHEREAS, the GSAs have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies, made publicly available at https://www.strgba.org/ and presented at public meetings; and

WHEREAS, the City of Riverbank recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the GSAs to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

WHEREAS, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing

- Conservation practices; and

WHEREAS, the City of Riverbank acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make GSAs responsible for injury caused by overdraft; and

WHEREAS, the City of Riverbank acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

WHEREAS, the STRGBA GSA revised GSP adoption resolution will also document the STRGBA GSA's commitment to develop and implement a well mitigation program and management actions along with the County of Tuolumne GSA; and

WHEREAS, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding; and

WHEREAS, the final staff version of the revised GSP for the Modesto Subbasin will be presented by reference to the Board of Directors on July 2, 2024; and

WHEREAS, the City of Riverbank understands its staff and consultant team may finalize the amended GSP by making non-substantive revisions to the final revised Modesto Subbasin GSP presented on July 2, 2024; and

WHEREAS, the final revised Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Riverbank finds as follows:

1. City of Riverbank hereby approves and adopts the final staff version of the revised Modesto Subbasin GSP.

2. The City of Riverbank authorizes collaboration with the STRGBA GSA, its member agencies, consultants, stakeholders and the County of Tuolumne GSA to take such actions as may be reasonably necessary to:

   a. Develop and implement a well mitigation program inclusive of the procurement of baseline funding amounting to $300,000 no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

   b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027 and, upon

implementation, shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

3. City of Riverbank authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

   a. finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document; and

   b. submit the final revised Modesto Subbasin GSP to DWR by July 16, 2024.

PASSED AND ADOPTED by the City Council of the City of Riverbank at a regular meeting held on the 25th day of June, 2024; motioned by Vice Mayor Jones Cruz, seconded by Councilmember Luis Uribe, and upon roll call was carried by the following City Council vote of 5/0:

AYES: **Councilmember, District 1 Luis Uribe**
Councilmember, District 2 Rachel Hernandez
Councilmember, District 4 Darlene Barber-Martinez
Vice Mayor, (CM-D3) Leanne Jones Cruz
Mayor, Richard D. O'Brien

NAYS: **None**

ABSENT: **None**

ABSTAINED: **None**

ATTEST:
Gabriela Hernandez, CMC
City Clerk

APPROVED:
Richard D. O'Brien
Mayor

WATERFORD CITY COUNCIL
RESOLUTION NO. 2024-35

RESOLUTION ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

A. **WHEREAS**, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) consists of the City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, City of Waterford and County of Stanislaus, and was formed on February 16, 2017 for the purpose of sustainably managing groundwater in the Modesto Subbasin, within its jurisdictional boundaries, pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA);

B. **WHEREAS**, the STRGBA GSA coordinated with the County of Tuolumne GSA to develop a single, coordinated groundwater sustainability plan (GSP) for the Modesto Subbasin which was approved by both GSAs; and

C. **WHEREAS**, the final Modesto Subbasin GSP was submitted to DWR on January 31, 2022; and

D. **WHEREAS,** Minimum Thresholds (MTs) were established in the Modesto Subbasin GSP as a basis of where long-term Undesirable Results would start to occur; and

E. **WHEREAS**, 2027 Interim Milestones (IMs) were established in the Modesto Subbasin GSP to acknowledge the continued groundwater level decline anticipated to occur temporarily during the initial years of GSP implementation; and

F. **WHEREAS**, the City of Waterford acknowledges that during the 20-year GSP implementation period it will be necessary to implement projects and management actions to achieve and maintain sustainable groundwater conditions in the Subbasins by or before 2042; and

G. **WHEREAS**, the City of Waterford acknowledges that successful implementation of planned GSP projects to achieve their intended recharge benefits during the 20-year GSP implementation period (prior to 2042) is dependent in part on uncertainties related to hydrologic conditions, including precipitation and snowpack, and available water supply during that time period, and

H. **WHEREAS**, the City of Waterford acknowledges that implementation of management actions will be necessary to offset these uncertainties related to project implementation and project benefits to ensure that sustainable groundwater conditions are achieved in the subbasin by or before 2042; and

I. **WHEREAS**, the City of Waterford acknowledges that wet hydrologic conditions and faster implementation of projects may result in diminished need for management actions, and

J. **WHEREAS**, the City of Waterford acknowledges that dry hydrological conditions, prolonged drought, and delayed implementation of projects may result in an accelerated need for management actions, and

K. **WHEREAS,** on January 18, 2024, DWR provided notification to the GSAs that the GSP was considered incomplete and two deficiencies were identified; and

L. **WHEREAS**, the GSAs are required to correct the deficiencies and submit a revised or otherwise amended GSP by July 16, 2024; and

M. **WHEREAS**, on March 29, 2024 the GSAs released the Notice of Intent to Adopt the Revised GSP to cities and counties in the plan area pursuant to Water Code section 10728.4;

N. **WHEREAS**, the GSAs have addressed the deficiencies through the development of a revised GSP which has been reviewed by the GSA member agencies and presented at public meetings; and

O. **WHEREAS**, the City of Waterford recognizes that in order to obtain a determination that the GSP is complete, DWR is seeking a firm commitment from the GSAs to develop a well mitigation program and management actions to address and mitigate impacts from groundwater level declines that may occur when water levels drop below the MTs defined in the Modesto Subbasin GSP; and

P. **WHEREAS**, such management actions to be considered as outlined in the GSP include, but are not limited to:

- A groundwater allocation and pumping management program
- A groundwater extraction and surface water reporting program
- Groundwater extraction fees
- A groundwater pumping credit market and trading program
- Voluntary conservation/land fallowing
- Conservation practices; and

Q. **WHEREAS,** the City of Waterford acknowledges that SGMA requires sustainable groundwater management based on a 2015 baseline but does not make GSAs responsible for injury caused by overdraft; and

R. **WHEREAS**, the City of Waterford acknowledges that they cannot control groundwater conditions not caused by actions taken by the GSA; and

S. **WHEREAS**, the STRGBA GSA revised GSP adoption resolution will also document the STRGBA GSA's commitment to develop and implement a well mitigation program and management actions along with the County of Tuolumne GSA; and

T. **WHEREAS**, funding sources may be subject to the Proposition 218 process and may include GSA fees and assessments, landowner groundwater pumping fees and penalties, agency funds, and grant funding; and

U. **WHEREAS**, the final staff version of the revised GSP for the Modesto Subbasin was presented by reference to the Board of Directors on July 2, 2024;

V. **WHEREAS**, the City of Waterford understands its staff and consultant team may finalize the amended GSP by making non-substantive revisions to the final revised Modesto Subbasin GSP presented on July 2, 2024;

W. **WHEREAS**, the final revised Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Waterford finds as follows:

1. The City of Waterford hereby approves and adopts the final staff version of the revised Modesto Subbasin GSP.

2. The City of Waterford authorizes collaboration with the STRGBA GSA, its member agencies, consultants, stakeholders and the County of Tuolumne GSA to take such actions as may be reasonably necessary to:

   a. Develop and implement a well mitigation program inclusive of the procurement of baseline funding amounting to $300,000 no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

   b. Develop management actions, inclusive of a fee structure and/or identified sources of funding, no later than January 31, 2026. Such management actions shall be implemented no later than January 31, 2027 and, upon implementation, shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

3. The City of Waterford authorizes the Modesto Subbasin Plan Manager and consultants to take such actions as may be reasonably necessary to:

   a. finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document;

   b. submit the final revised Modesto Subbasin GSP to DWR by July 16, 2024;

The foregoing resolution was passed and adopted by the City Council of the City of Waterford, County of Stanislaus, State of California, at a regular meeting thereof held on the 20th day of June, 2024 by the following vote:

AYES: Goeken, Harris, Hilton, Kitchens, Talbott

NOES: None

ABSTAIN: None

ABSENT: None

City of Waterford,

DocuSigned by:
Charlie Goeken
6D7A8A7DC0154CF...

Charlie Goeken, Mayor

ATTEST:

DocuSigned by:
Patricia Krause
0E40B251B23D4F2...

Patricia Krause, CMC, City Clerk

APPROVED AS TO FORM:

DocuSigned by:
Darin S. DuPont
F692613937ED4B5...

Darin S. DuPont, Deputy City Attorney

CITY OF WATERFORD
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN THAT THE WATERFORD CITY COUNCIL will hold a public hearing in the Council Chambers at 101 E Street Waterford, Ca. 95386, on JUNE 20, 2024, at 6:30p.m., to consider approval and adoption of the Modesto Groundwater Subbasin Groundwater Sustainability Plan.

ALL INTERESTED PARTIES are invited to attend said hearing and express opinions or submit evidence for or against the Plan as outlined above.

FURTHER INFORMATION on the above documents may be obtained or viewed at the Waterford City Hall, located at 101 E Street or by telephone (209) 874-2328.

The facility is accessible to the disabled and hearing impaired. If special assistance is required, please call (209) 874-2328 so accommodations can be arranged. While not required, 48 hours notice is appreciated.

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
STATE OF CALIFORNIA

Date: June 25, 2024 2024-0362

On motion of Supervisor Chiesa Seconded by Supervisor Withrow
and approved by the following vote,
Ayes: Supervisors: B. Condit, Chiesa, Withrow, C. Condit, and Chairman Grewal
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

Item # 6.2

THE FOLLOWING RESOLUTION WAS ADOPTED:

RESOLUTION ADOPTING A REVISED GROUNDWATER SUSTAINABILITY PLAN AND DOCUMENTING THE COMMITMENT TO DEVELOP AND IMPLEMENT A WELL MITIGATION PROGRAM AND MANAGEMENT ACTIONS IN THE MODESTO GROUNDWATER SUBBASIN

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V. WHEREAS, Stanislaus County understands its staff and consultant team may finalize the amended GSP by making non-substantive revisions to the final revised Modesto Subbasin GSP presented on July 2, 2024;

W. WHEREAS, the final revised Modesto Subbasin GSP will be incorporated in its entirety by reference hereto this resolution.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Stanislaus County finds as follows:

1. Stanislaus County hereby approves and adopts the final staff version of the revised Modesto Subbasin GSP.

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a. Develop and implement a well mitigation program inclusive of the procurement of baseline funding amounting to $300,000 no later than January 31, 2026. Upon implementation, the well mitigation program shall continue into perpetuity unless otherwise directed by the STRGBA GSA.

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a. finalize the staff version of the Modesto Subbasin GSP, barring any substantive changes to the document;

b. submit the final revised Modesto Subbasin GSP to DWR by July 16, 2024;

ATTEST: **ELIZABETH A. KING, Clerk**
Stanislaus County Board of Supervisors,
State of California

Elizabeth A. King

File No.

Appendix D

C2VSimTM

The Turlock-Modesto Integrated Water Resources Model

Modesto Subbasin Documentation

C2VSimTM

The Turlock-Modesto Integrated Water Resources Model

A Refined Version of C2VSimFG for the Turlock & Modesto Subbasins

Modesto Subbasin Documentation

JANUARY 2022

C2VSIMTM

THE TURLOCK-MODESTO INTEGRATED WATER RESOURCES MODEL

A REFINED VERSION OF C2VSIMFG FOR THE TURLOCK & MODESTO SUBBASINS

MODESTO SUBBASIN DOCUMENTATION

JANUARY 2022

Stanislaus & Tuolumne Rivers Groundwater Basin Association
GROUNDWATER SUSTAINABILITY AGENCY

County of Tuolumne
Groundwater Sustainability Agency

Prepared by: Woodard & Curran, Inc.
In Association with: Todd Groundwater

Table of Contents

List of Tables

List of Figures

List of Abbreviations

ASCE	American Society of Civil Engineers
EWRI	Environmental & Water Resources Institute
AWMP	Agriculture Water Management Plan
C2VSimFG	California Central Valley Simulation Model – Fine Grid
C2VSimTM	California Central Valley Simulation Model – Turlock & Modesto
Cal-SIMETAW	California Simulation of Evapotranspiration of Applied Water
CASGEM	California Statewide Groundwater Elevation Monitoring
CDEC	California Data Exchange Center
CIMIS	California Irrigation Management Information System
DWR	Department of Water Resources
eWRIMS	Electronic Water Rights Information Management System
ITRC	Irrigation Training and Research Center at Cal Poly, San Luis Obispo
METRIC	Mapping Evapotranspiration at High Resolution and Internalized Calibration
MID	Modesto Irrigation District
NDE	Non-District East
NDW	Non-District West
NASS	National Agricultural Statistics Service
NRCS	Natural Resource Conservation Service
OID	Oakdale Irrigation District
OSWCR	Online System for Well Completion Reports
SCS-CN	Soil Conservation Service Curve Number Method
SSURGO	Soil Survey Geographic Database
TID	Turlock Irrigation District
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UWMP	Urban Water Management Plan

1. INTRODUCTION

Water is a precious resource in the San Joaquin Valley, providing the underlying needs for cities and residents, agriculture, and ecosystems. However, water supply can fluctuate dramatically between drought and floods in the San Joaquin Valley due to variable hydrology. In years of little precipitation and snowmelt that results in reduced surface water supply, agricultural water users often turn to groundwater to meet their crop demands.

Due to an overreliance on groundwater in California, the Sustainable Groundwater Management Act (SGMA) was passed in 2014. SGMA requires that local agencies develop and implement plans to achieve sustainable groundwater management over the course of twenty years. As part of SGMA, Groundwater Sustainability Agencies (GSAs) need to quantify conditions in the subbasin under historical, current, and projected conditions.

The Turlock-Modesto Water Resources Model (C2VSimTM) is a fully integrated surface and groundwater flow model, based on the California Central Valley Groundwater-Surface Water Simulation Model – Fine Grid (C2VSimFG). The Turlock-Modesto Model is a refined version of the state's regional model that reflects the local data including hydrology, hydrogeology, land use and cropping patterns, and water resources operations for the Turlock and Modesto Subbasins (Figure M1). These refinements are made to enable the model to support the development of groundwater sustainability plans for the respective subbasins. While the C2VSimTM model retains its Central Valley-wide simulation capabilities, the refinements are made specific to each subbasin, and, as such, the refinements to the model for each Subbasin are documented in a separate report.

This report describes the details of the refinements for the Modesto Subbasin, and describes the objectives, data refinements, calibration refinements, and results of the C2VSimTM model for the Modesto Subbasin. As this model was developed as a local refinement of C2VSimFG, the purpose of this report is to present the additional details that have gone into the refinement of the Modesto Subbasin. All details relating to the construction of the base C2VSimFG model are documented in the California Department of Water Resources (DWR) Report (DWR, 2020) and the reader is encouraged to consider this report as an addendum to the C2VSimFG documentation.

The report is outlined as follows:

- Section 1 Introduction
- Section 2 C2VSimFG in the Modesto Subbasin
- Section 3 Model Development
- Section 4 Model Calibration
- Section 5 Discussion
- Section 6 Summary & Recommendations

1.1 GOALS OF MODEL DEVELOPMENT

The objective of the Modesto Model's development and calibration is to have a robust, technically sound, publicly accepted analytical computer tool that simulates the details of the integrated land surface system; stream and river system; and groundwater hydrologic and hydrogeologic system in the model area for use in regional water management.