

Groundwater Impacts: Groundwater Storage Change In Acre-Feet and In Inches of Decrease

Adaptation of SWRCB July 2018 Bay-Delta Phase 1 Final Draft Substitute Environmental Document's Table 9-12. "Average Annual Net Change in Irrigation District Groundwater Balance Associated with the LSJR Alternatives per Subbasin Area"

Prepared by the California Farm Bureau Federation, July 24, 2018

		Decrease in Groundwater Balance Per Subbasin Area (converted from inches across entire basin to acre-feet) (positive number + recharge)						Decrease in Groundwater Balance Per Subbasin Area (as provided by SWRCB in inches of decline across entire subbasin)				
		LSJR Alternative 2 (20-30% unimpaired)		LSJR Alternative 3 (40% unimpaired)		LSJR Alternative 4 (60% unimpaired)		LSJR Alternative 2	LSJR Alternative 3	LSJR Alternative 4		
Groundwater Subbasin	Total Area (1,000 acres)	Baseline Irrigation District Groundwater Balance (TAF) (positive indicates recharge)	20 Percent Unimpaired Flow	Adaptive Implementation Method 1: 30 Percent Unimpaired Flow	40 Percent Unimpaired Flow	Estimated 50 Percent Unimpaired Flow (as a midpoint between 40 and 60 percent)	60 Percent Unimpaired Flow	Baseline Irrigation District Recharge Per Subbasin Area (inches)	20 Percent Unimpaired Flow, Change In Recharge In Inches	Adaptive Implementation Method 1: 30 Percent Unimpaired Flow, Change In Recharge In Inches	40 Percent Unimpaired Flow, Change In Recharge In Inches	60 Percent Unimpaired Flow, Change In Recharge In Inches
Results assuming maximum groundwater pumping based on 2009 infrastructure												
Eastern San Joaquin	707.00	64.81	64.81	58.92	29.46	-2.95	-35.35	1.10	0.00	0.10	0.60	1.70
Modesto	247.00	129.68	123.50	117.33	104.98	88.51	72.04	6.30	0.30	0.60	1.20	2.80
Turlock	349.00	157.05	148.33	136.69	113.43	85.80	58.17	5.40	0.30	0.70	1.50	3.40
Extended Merced	517.00	99.09	68.93	47.39	17.23	-17.23	-51.70	2.30	0.70	1.20	1.90	3.50
Results assuming maximum groundwater pumping based on 2014 infrastructure												
Eastern San Joaquin	707.00	64.81	64.81	53.03	23.57	-11.78	-47.13	1.10	0.00	0.20	0.70	1.90
Modesto	247.00	119.38	111.15	96.74	74.10	45.28	16.47	5.80	0.40	1.10	2.20	5.00
Turlock	349.00	145.42	136.69	113.43	81.43	40.72	0.00	5.00	0.30	1.10	2.20	5.00
Extended Merced	517.00	99.09	68.93	47.39	17.23	-17.23	-51.70	2.30	0.70	1.20	1.90	3.50
	Total Recharge	428.70	381.58	310.58	196.33	56.98	-82.37					
	Total Change In Recharge	0.00	47.12	118.12	232.37	371.72	511.07					