

AquAlliance Exhibit I3

Table 10. Average Annual Central Valley Basin Flows from the C2VSim model for Water Years 1922-2009.

Hydrologic Region	C2VSim Subregion	DSA	Area (mi ²)	Precipitation	Total Etopo-Transpiration	Surface Water Inflows*	Surface Water Outflows*	Agricultural Demand	Ag Surface Water Deliveries	Ag Groundwater Pumpage	M&I Surface Water Deliveries	M&I Groundwater Pumpage	Groundwater Discharge to Rivers	Small Watershed Baseflow	Groundwater Recharge	Change in Groundwater Storage	Subsidence Volume	Interbasin Groundwater Flow	
1. Sacramento Valley																			
	1	58	513	874,939	690,273	7,937,634	8,537,555	44,511	101,795	5,396	10,727	20,955	143,318	86,702	64,086	-18,871	11	-18,869	
	2	10	1,091	1,331,009	1,269,999	10,116,279	9,858,824	267,177	148,518	220,119	0	20,417	100,278	80,652	194,616	-65,304	242	-165	
	3	12	1,077	1,041,915	1,360,219	0	588,186	652,757	987,673	83,957	0	6,055	174,589	49,578	216,295	2,811	1,539	-35,537	
	4	15	549	533,818	890,121	10,447,009	8,043,984	430,668	609,662	92,538	0	2,879	168,893	0	259,636	-3,288	1,386	40,056	
	5	69	959	1,158,762	1,623,254	6,315,181	8,614,006	779,553	965,011	243,706	16,181	26,919	-53,910	17,997	174,015	-24,544	160	22,309	
	6	65	1,028	1,065,896	1,202,325	611,095	3,232,330	356,179	247,569	235,810	19,615	14,586	-86,603	50,413	99,074	-9,923	4,384	-41,649	
	7	70	547	595,540	828,973	19,299,020	17,021,251	320,748	256,308	246,359	87,461	35,876	-88,024	84,366	65,180	-44,298	367	31,303	
	TOTAL		5,763	6,601,878	7,865,165	*	*	2,851,592	3,316,537	1,127,885	133,984	127,688	358,541	369,708	1,072,902	-163,417	8,088	*	
2. Eastside Streams																			
	8	59	1,399	1,346,252	1,552,004	1,103,725	1,256,366	499,349	98,522	582,151	47,451	65,830	-231,848	113,590	166,663	-135,304	575	87,779	
3. Sacramento-San Joaquin Delta																			
	9	55	1,134	887,264	1,597,535	25,972,879	24,124,933	735,885	898,289	209,558	41,756	4,827	-97,898	15,228	76,141	-24,828	292	-21,284	
4. San Joaquin Basin																			
	10	49A	1,044	540,454	1,240,573	4,242,007	4,462,931	718,591	900,932	250,272	14,467	8,046	101,322	29,966	320,692	-1,499	35,341	-44,445	
	11	49B	645	470,683	923,415	2,269,747	1,811,651	483,928	692,687	79,140	51,434	44,475	209,785	18,069	296,765	-18,525	43	-81,309	
	12	49C	532	364,157	760,818	939,436	669,260	399,289	520,423	97,832	23,251	0	91,971	2,520	199,791	-10,732	11	4,125	
	13	49D	1,621	1,037,127	1,933,692	1,096,604	1,273,064	947,653	629,300	650,052	41,345	2,432	-178,430	13,666	351,934	-135,496	9,485	55,191	
	TOTAL		3,842	2,412,421	4,858,497	*	*	2,549,461	2,743,343	1,077,296	19,585	114,731	224,648	64,222	1,169,182	-166,251	44,880	*	
5. Tulare Basin																			
	14	60A	1,047	395,440	1,229,298	0	0	740,133	421,528	594,263	2,533	9,823	-72,971	20,845	132,271	-256,953	122,415	72,287	
	15	60B	1,413	540,238	1,932,319	823,035	710,591	1,264,772	608,941	1,133,522	26,859	25,761	-461,542	3,974	395,478	-152,787	75,255	378,722	
	16	60C	473	280,707	536,025	0	0	262,490	383,188	70,445	97,048	81,315	148,374	8,398	253,979	-35,869	1,890	-159,022	
	17	60D	583	352,466	724,098	1,643,649	410,947	417,539	323,737	271,159	28,459	27,159	102,455	4,286	319,183	-74,841	2,463	-99,984	
	18	60E	1,402	713,666	1,635,162	554,408	210,614	884,413	771,186	503,512	13,971	47,010	191,386	23,989	603,243	-53,601	61,075	-207,849	
	19	60F	1,252	417,759	1,235,782	118,878	201,474	750,425	168,414	746,918	1,578	7,701	-70,347	4,158	364,242	-250,600	65,272	106,110	
	20	60G	662	264,230	716,755	0	0	391,378	154,543	335,422	23,589	66,947	126,381	51,130	151,003	-213,264	49,073	-149,524	
	21	60H	1,020	341,117	1,405,591	715,733	118,878	931,728	330,742	894,459	67,242	60,118	-102,741	56,152	335,109	-433,369	36,746	61,753	
	TOTAL		7,852	3,305,623	9,415,029	*	*	5,642,876	3,162,279	4,549,698	113,808	261,553	-139,005	172,932	2,554,508	-1,471,284	414,188	*	
Central Valley			19,989	14,553,437	25,288,231	27,412,695	24,359,223	12,279,163	10,218,969	7,546,589	356,584	574,630	114,439	735,680	5,039,395	-1,961,084	468,023	*	

Groundwater Flows to Rivers = Stream-Aquifer + Lake-Aquifer + Tile Drains

Recharge = Net Deep Percolation + Small Watershed Baseflow + Small Watershed Percolation + Diversion Recoverable Loss + Bypass Recoverable Loss

* Surface water inflows and outflows and interbasin flows do not add up across subregions or hydrologic regions