REVISED WATER BALANCE - HIGHLAND
REVISION DATE June 2017(Rev 2)

Year						0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
						2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
PRODUCTION FLOWS																																													
Total Production Flow (gpm)						3370	2560	1710	1080	540	220	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Production Bleed (gpm)						33.7	25.6	17.1	10.8	5.4	2.2	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GWS to Disposal						10	10	10	10	10	10																																		
Control Bleed (gpm)						12	10	12	2	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTORATION FLOWS																																													
	PV With Flair (Kgal)	GWS PV to Finish	RO PV to Finish	Average flow (gpm)	Treatment time (years)																																								
SAT 2	**84,828,000**	0	303,684,240									0	0	0	0	0	0																												
MU C (gal) (RO)	84,828	0	4	144.00	4.0							232145040	160605840	89066640	17527440	0	0																												
GWS (gal)				34.20	0.0							144	144	144	144	144	144																												
Total Disposal (gal)												34	34	34	34	34	34																												
												36	36	36	36	36	36																												
SAT 2	**32,311,000**	22,617,700	137,321,750										0	14122420	56271440	0	0																												
MU D (gal) (RO)	32,311	1	4	72.00	3.6								101552150	65782550	30012950	0																												
GWS (gal)				17.10	2.5								72	72	72	72																												
Total Disposal (gal)													17	17	17	17																												
													18	18	18	18																												
SAT 2	**19,235,000**	15,388,000	81,748,750										6892720	0	0																													
MU D Ext. (gal) (RO)	19,235	1	4	72.00	2.2								45979150	10209550	0																													
GWS (gal)				17.10	1.7								72	72	72																													
Total Disposal (gal)													17	17	17																													
													18	18	18																													
SAT 2	**91,086,000**	45,543,000	582,950,400									28552440	11561880	0	0	0	0	0																											
MU E (gal) (RO)	91,086	1	6	174.86	6.3							511411200	439872000	368312800	296793600	189484800	46406400	0																											
GWS (gal)				41.53	2.1							144	144	144	144	216	288	144																											
Total Disposal (gal)												34	34	34	34	51	68	34																											
												36	36	36	36	54	72	36																											
SAT2	**90,870,000**	63,609,000	599,742,000					55113720	38123160	0	0	0																																	
MU H(gal) (RO)	90,870	1	7	244.80	4.7			56397240	492433200	277815600	63198000	0																																	
GWS (gal)				58.14	2.1			72	144	432	432	144																																	
Total Disposal (gal)								17	34	103	103	34																																	
								18	36	108	108	36																																	
SAT 2	**84,786,000**	84,786,000	678,288,000			50804880	0	0	0																																				
MU I (gal)(RO)	84,786	1	8	342.00	3.8	535209600	320592000	141744000	0																																				
GWS (gal)				81.23	2.0	288	432	360	288																																				
Total Disposal (gal)						68	103	86	68																																				
						72	108	90	72																																				
SAT3	**232,906,000**	232,906,000	1,863,248,000															198924880	147953200	96981520	29019280	0	0	0																					
MUF(gal)(RO)	232,906	1	8	555.43	6.4													1720169600	1505552000	1290934400	1004777600	647081600	289385600	0																					
GWS (gal)				131.91	3.4													288	432	432	576	720	720	720																					
Total Disposal (gal)																		68	103	103	137	171	171	171																					
																		72	108	108	144	180	180	180																					
SAT 3	**66,817,000**	66,817,000	534,536,000				49826440	32835880	0	0	0																																		
MU J (gal)(RO)	66,817	1	8	230.40	4.4		462996800	391457600	248379200	105300800	0																																		
GWS (gal)				54.72	2.3		144	144	288	288	288																																		
Total Disposal (gal)							34	34	68	68	68																																		
							36	36	72	72	72																																		
SAT 3	**84,214,000**	84,214,000	673,712,000									67223440	50232880	33242320	16251760	0	0	0	0	0	0																								
MU K (gal)(RO)	84,214	1	8	144.00	8.9							602172800	530633600	459094400	387555200	316016000	244476800	172937600	101398400	29859200	0																								
GWS (gal)				34.20	4.7							144	144	144	144	144	144	144	144	144	144																								
Total Disposal (gal)												34	34	34	34	34	34	34	34	34	34																								
												36	36	36	36	36	36	36	36	36	36																								
SAT 3	**78,568,000**	78,568,000	628,544,000									61577440	44586880	27596320	10605760	0	0	0	0	0																								
MU K North (gal)(RO)	78,568	1	8	144.00	8.3							557004800	485465600	413926400	342387200	270848000	199308800	127769600	56230400	0																								
GWS (gal)				34.20	4.4							144	144	144	144	144	144	144	144	144																								
Total Disposal (gal)												34	34	34	34	34	34	34	34	34																								
												36	36	36	36	36	36	36	36	36																								
Total Restoration Disposal (gpm)						72	144	144	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restoration Flow From Smith Ranch (gpm)						50	60	65	115	110	110	110	110	110	110	110	110	115	110	115	116	120	120	125	150	200	200	150	150	200	200	200	200	200	200	0	0	0	0	0	0	0	0	0	0

Installed RO Capacity (gpm) (feed)	**Current (gpm)**	**Feed (Future)**	
	200	160	144
	200	160	144
	0	0	0
	200	160	144
	200	160	144
	200	160	144
	1000		720

Deep Disposal Well Capacity (gpm)	**Permitted**	**Current**	**Online (95%)**																																										
Morton 1-20 (gpm)	**147**	**40**	**38**			38	37	37	36	36	35	35	34	34	33	33	32	32	31	31	30	30	29	29	29	28	28	27	27	26	26	26	25	25	25	24	24	23	23	23	22	22	22	21	21
DOW 9 (gpm)	**158**	**12**	**11.4**			11	11	11	11	11	11	10	10	10	10	10	10	10	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	6	6
Volman 33-27 (gpm)	**105**	**50**	**47.5**			48	47	46	45	45	44	43	43	42	41	41	40	40	39	38	38	37	37	36	36	35	35	34	34	33	33	32	32	31	31	30	30	29	29	28	28	28	27	27	26
PSR2 Evaporation (gpm)		**20**	**20**			20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Irrigator Circle 2 (gpm)		**130**	**130**			130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
Irrigator Circle 1 (gpm)		**0**	**0**			0	0	0	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	70	70	70	70	70	70	70	70	70	70	70	70	0	0	0	0
Total Available		**252**				247	245	244	323	321	320	318	317	316	315	313	312	311	310	308	307	306	305	304	303	302	301	299	298	287	286	285	284	283	283	282	281	280	279	278	277	206	205	205	204
Total Production Bleed (gpm)						34	26	17	11	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GWS to disposal						10	10	10	10	10	10																																		
Control Bleed (gpm)						12	10	12	2	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Restoration Disposal (gpm)						72	144	144	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Disposal Required (gpm)						128	190	183	203	195	192	185	185	185	185	185	185	185	185	185	185	185	185	185	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water from Smith Ranch (gpm)						50	60	65	115	110	110	110	110	110	110	110	110	115	110	115	116	120	120	125	150	200	200	150	150	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200