

Appendix 6.3

West Lake Balance Sheets, Balance Periods 1-50
(one sheet for each balance period).

Appendix 6.2 (East Lake) and 6.3 (West Lake) Balance Sheets

Component	Units	Details
Day & Time		Date and time of the end of each 24 hour balance 'day'
Stage	m	Lake stage (metres above Australian Height Datum)
Area	m ²	Lake area from lake stage, refer Appendix 3.8
Volume	m ³	Lake volume from lake stage, refer Appendix 3.8
ΔS	m ³	Change in lake volume ('storage') over each 4 day sub-balance
Lake	δ	Deuterium in ‰ measured at the start and end of each 4 day sub-balance
	Cl	Chloride in mg L ⁻¹ measured at the start and end of each 4 day sub-balance
Rain	mm	Rainfall in mm falling on the lake surface
	m ³	Rainfall volume
	δ	Deuterium (average for each rainfall event which may span several days)
	Cl	Chloride in rain, 12mg L ⁻¹ being the average for Floreat
Drains	m ³	Storm drain flow (total for lake)
	δ	As per rainfall
	Cl	As per rainfall
Top Up	m ³	Individual volumes for outlets 'A' and 'B'
	δ	Deuterium for each outlet sampled during most top up events
	Cl	Chloride for each outlet sampled during most top up events
Evaporation	mm	Evaporation in mm as measured by the floating evaporation pan
	m ³	Volume of lake water evaporated
	δE_{pan}	δE as measured experimentally for Perry Lakes by pan experiments
	δE^*	δE as estimated from standard equations
	δA	δA as measured or interpolated from vapour sampling
Apparent GW Flux	m ³	Residual in the mass balance
GW In	m ³	Groundwater discharged to lake as computed by integrated balance
Lake-GW	m ³	Groundwater recharged to aquifer as computed by integrated balance

The groundwater ('GW') components are the key components which could not be measured directly. They are the reason for performing an integrated balance in the first place. The 'apparent groundwater flux' is simply the residual in the mass balance alone. It is the apparent surplus or deficit in water required to balance the equation. A negative value indicates an apparent deficit in water and is indicative of water which has flowed out of the lake as recharge to the aquifer. A positive value indicates an apparent surplus and indicates additional water which has entered the lake as groundwater discharge. We use the term 'apparent' because the true groundwater flux (discharge and recharge) cannot be measured directly, only the residual gain or loss.

Groundwater discharge ('GW In') is the groundwater discharged into the lake during flow-through conditions as measured by integrated mass-solute-isotopic balances. Under recharge conditions this figure is zero. Recharge ('Lake-GW') is lake water recharged to the aquifer under both flow-through and recharge flow regimes. Under recharge regimes the mass balance residual (a negative apparent flow) and the recharge as measured by integrated balance will generally be similar. All volumetric quantities are sub-totalled for each four day sub-balance. Each sub-balance row includes ΔS , mean lake water deuterium and chloride and mean δE_{pan} mean δE^* and mean δA . All integrated results were computed using the locally derived δE_{pan} in the isotopic balance.

Balance Period No: 1

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
				δ	Cl	mm	m ³	δ	Cl	m ³	mm	δE _{pan} m ³	δE* mm			
22/4/96	8:00	2.558	410	34.7	0.3							2.3	-43.0	-103.2	-85.2	
23/4/96	8:00	2.545	353	29.8			0.1	0.0	-1.4	17		1.4	-47.9	-105.3	-85.2	-21.2
24/4/96	8:00	2.535	313	26.4								2.4	-40.9	-100.5	-85.2	-2.6
25/4/96	8:00	2.538	325	27.4			0.5	0.2	-1.4	71		1.3	-51.2	-104.8	-85.2	-69.6
26/4/96	8:00	2.542	341	28.7	4.5							1.1	-45.7	-100.7	-85.2	1.7
Balance 1A		ΔS	-6.0		2.40		0.2			88	0		-46.4	-102.8	-85.2	-91.7
27/4/96	8:00	2.548	366	30.8								2.3	-37.4	-97.0	-85.2	2.9
28/4/96	8:00	2.542	341	28.7								2.9	-36.9	-96.9	-85.2	-1.1
29/4/96	8:00	2.533	305	25.8								4.1	-32.8	-95.1	-85.2	-1.6
30/4/96	8:00	2.533	305	25.8	4.4							3.5	-31.9	-94.8	-85.2	1.1
Balance 1B		ΔS	-2.9		4.45		0.0			0	0		-34.7	-95.9	-85.2	1.3
1/5/96	8:00	2.533	305	25.8								2.2	-46.3	-102.6	-85.2	0.7
2/5/96	8:00	2.545	353	29.8							15	2.8	-36.6	-98.1	-85.2	-10.1
3/5/96	8:00	2.555	396	33.5							15	2.4	-37.5	-99.0	-85.2	-10.4
4/5/96	8:00	2.560	419	35.6	3.1						12	2.1	-43.5	-102.9	-85.2	-9.0
Balance 1C		ΔS	9.8		3.75		0.0			0	42		-41.0	-100.7	-85.2	-28.8
Totals		ΔS	0.9				0.2			88	42		9.7		-119.3	0

Balance Period No: 3

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³	
				δ	Cl	mm	m ³	δ	Cl	m ³	δ	Cl	mm				m ³
16/5/96	8:00	2.564	438	37.3		5.2						1.4	-38.1	-99.4	-85.2		
17/5/96	8:00	2.555	396	33.5								1.2	0.5	-99.4	-85.2	-348	
18/5/96	8:00	2.549	370	31.2			2.5	1.0	9.7	344		2.8	1.1	-25.7	-92.3	-1.2	
19/5/96	8:00	2.553	387	32.7								1.7	0.6	-25.7	-92.3	2.1	
20/5/96	8:00	2.556	401	33.9		6.1						1.9	0.7	-26.0	-92.3	1.9	
Balance 3A		ΔS	-3.4		1.0	5.65				344	0		3.0	-29.2	-94.2	-85.2	-345
21/5/96	8:00	2.558	410	34.7								1.7	0.7	-26.4	-92.1	-85.2	1.5
22/5/96	8:00	2.554	391	33.1								1.2	0.5	-25.6	-91.2	-85.2	-1.1
23/5/96	8:00	2.548	366	30.8								1.4	0.5	-23.9	-90.0	-85.2	-1.8
24/5/96	8:00	2.541	337	28.4		8.0						1.7	0.6	-23.1	-89.1	-85.2	-1.8
Balance 3B		ΔS	-5.5		0.0	7.05				0	0		2.3	-24.7	-90.6	-85.2	-3.2
25/5/96	8:00	2.537	322	27.1								3.0	1.0	-21.3	-88.7	-85.2	-0.3
26/5/96	8:00	2.544	349	29.4								2.8	0.9	-22.0	-89.3	-85.2	3.2
27/5/96	8:00	2.551	378	32								2.3	0.8	-22.0	-89.7	-85.2	3.4
28/5/96	8:00	2.550	374	31.6		7.1						1.3	0.5	-26.2	-92.0	-85.2	0.1
Balance 3C		ΔS	3.2		0.0	7.55				0	0		3.2	-22.9	-89.9	-85.2	6.4
Totals		ΔS	-5.7		1.0					344	0		8.5		-342	0	0

Balance Period No: 4

West Lake

Day & Time	Stage m AHD	Area m ²		Volume m ³	Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³	
					δ	Cl	mm	m ³	δ	Cl	m ³	δE [*]	δA					
28/5/96	8:00	2.550	374	31.6	7.1								1.3	-26.2	-92.0	-85.2		
29/5/96	8:00	2.548	366	30.8									1.5	-37.7	-103.8	-85.2	0	
30/5/96	8:00	2.542	341	28.7									2.7	-37.9	-106.1	-85.2	-1	
31/5/96	8:00	2.868	9554	779				25.8	246	10.7	3990		4.8	-86.1	-149.2	-85.2	-3463	
1/6/96	8:00	2.903	14060	1192	-11.2			0.6	8	18.4	84		1.7	-73.2	-139.7	-85.2	340	
Balance 4A		ΔS		1160.4	-2.05	0.00			255		4075	0		-58.7	-124.7	-85.2	-3124	
2/6/96	8:00	2.860	8672	706									0.7	-77.0	-143.1	-85.2	-478	
3/6/96	8:00	2.815	4676	409				1.0		7.7	139		1.1	-85.0	-150.1	-85.2	-428	
4/6/96	8:00	2.782	2685	291									1.5	-59.4	-127.2	-85.2	-112	
5/6/96	8:00	2.752	1798	226	-8.3								1.1	-56.1	-124.1	-85.2	-62	
Balance 4B		ΔS		-966	-9.75	0.00			0		139	0		-69.4	-136.1	-85.2	-1081	
6/6/96	8:00	2.729	1542	188									1.1	-56.4	-124.4	-85.2	-36	
7/6/96	8:00	2.707	1348	156									1.3	-54.6	-122.7	-85.2	-30	
8/6/96	8:00	2.689	1179	133									1.8	-51.7	-120.2	-85.2	-21	
9/6/96	8:00	2.674	1043	116	-6.6			0.5	1	-9.4	71		1.3	-72.5	-138.6	-85.2	-87	
Balance 4C		ΔS		-110	-7.45	0.00			1		71	0		-58.8	-126.5	-85.2	-174	
Totals		ΔS		84.4				255		4284	0	0		76.2			-4379	0

Balance Period No: 5

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
					δ	Cl	mm	δ	Cl	m ³	m ³	δ	Cl	mm	m ³	δE* δE _{pan}		
9/6/96	8:00	2.674	1043	116	-6.6		9.6	-9.4						1.3	-72.5	-138.6	-85.2	
10/6/96	8:00	2.680	1088	123			10	-9.4		1348				0.6	0.7	-140.5	-85.2	
11/6/96	8:00	2.685	1129	128			0.2	-9.4		30				0.8	0.9	-81.6	-85.2	-25
12/6/96	8:00	2.685	1129	128			1.7	-9.4		234				0.8	0.9	-73.8	-85.2	-235
13/6/96	8:00	2.676	1059	118	-5.5									0.7	0.8	-60.5	-85.2	-9
Balance 5A		ΔS	2		-6.05	0.00	13			1612	0			3.2	-89.1	-153.3	-85.2	-1620
14/6/96	8:00	2.668	1000	110										0.7	0.7	-59.1	-85.2	-7
15/6/96	8:00	2.655	929	97.7										1.0	0.9	-62.2	-85.2	-11
16/6/96	8:00	2.660	955	102			6.6	-12.1		915				1.9	1.8	-69.0	-85.2	-916
17/6/96	8:00	2.655	929	97.7	-4.6		2.2	-12.1		302				1.0	0.9	-71.1	-85.2	-308
Balance 5B		ΔS	-20.3		-5.05	0.00	8			1218	0			4.4	-65.4	-132.1	-85.2	-1242
18/6/96	8:00	2.964	21886	2281			19.8	-12.1		2939				3.1	35	-76.9	-85.2	-1154
19/6/96	8:00	3.113	36046	6655			32.5	-15.4		5293				3.6	103	-122.9	-85.2	-1987
20/6/96	8:00	3.224	45471	11203			30.1	-21.0		4809				3.0	123	-106.4	-85.2	-1507
21/6/96	8:00	3.262	48469	12988	-12.1		19.5	-21.0		2889				3.4	158	-83.9	-85.2	-1892
Balance 5C		ΔS	12890.3		-8.35	0.00	3919			15930	0			419	-97.5	-162.8	-85.2	-6540
22/6/96	8:00	3.262	48469	12988			11	-29.8		1554				1.8	85	-100.4	-85.2	-2003
23/6/96	8:00	3.228	45772	11386			1.7	-29.8		234				0.3	13	-128.2	-85.2	-1901
24/6/96	8:00	3.215	44778	10797			6	-29.8		831				0.4	19	-114.5	-85.2	-1669
25/6/96	8:00	3.182	42334	9360	-12.6									0.7	30	-72.8	-85.2	-1407
Balance 5D		ΔS	-3628		-12.35	0.00	880			2619	0			148	-104.0	-169.7	-85.2	-6979
Totals		ΔS	9244				4819			21379	0			574			-16380	0

Balance Period No: 6

West Lake

Day & Time	Stage m AHD	Area m ²		Volume m ³	Lake		Rain		Drains m ³	Cl	Summer Top Up		Evaporation m ³	δE*		δA	Apparent GW Flux	GW In m ³	Lake-GW m ³
					δ	Cl	mm	δ			δ	Cl	mm	δE _{pan}					
25/6/96	8:00	3.182	42334	9360	-12.6								0.7	-72.8	-141.0	-85.2			
26/6/96	8:00	3.154	39880	8207									1.1	-82.5	-150.0	-85.2	-1110		
27/6/96	8:00	3.187	42721	9573			15	-9.9	2164				1.2	-158.8	-220.5	-85.2	-1390		
28/6/96	8:00	3.195	43303	9917			7.5	-9.9	1044				2.0	-104.1	-170.0	-85.2	-940		
29/6/96	8:00	3.164	40865	8611	-13.8		0.4	-0.6	57				1.5	-95.1	-161.7	-85.2	-1318		
Balance 6A			ΔS	-749	-13.20	0.00		982	3265		0			-110.1	-175.6	-85.2	-4757		
30/6/96	8:00	3.200	43662	10134															
1/7/96	8:00	3.173	41615	8983			12	-0.6	1704				2.0	-116.8	-181.7	-85.2	-622		
2/7/96	8:00	3.161	40594	8489				-0.6	139				1.7	-82.6	-150.0	-85.2	-1257		
3/7/96	8:00	3.262	48469	12988	-13.8		2.6	-24.4	357				1.2	-112.2	-177.2	-85.2	-907		
Balance 6B			ΔS	4377	-13.80	0.00	26.5	-24.4	4120				3.8	-124.6	-188.6	-85.2	-735		
4/7/96	8:00	3.262	48469	12988					6320		0			-109.1	-174.4	-85.2	-3521		
5/7/96	8:00	3.244	47006	12128					1058				1.9	-90.7	-157.2	-85.2	-1334		
6/7/96	8:00	3.218	45010	10932			7.6	-24.4	412				0.6	-121.4	-185.1	-85.2	-1384		
7/7/96	8:00	3.195	43303	9917	-12.5		0.1	-26.9	17				1.2	-81.4	-148.3	-85.2	-1161		
Balance 6C			ΔS	-3071	-13.15	0.00			1487		0		2.7	-63.2	-131.5	-85.2	-896		
Totals			ΔS	557					11072		0			-89.2	-155.5	-85.2	-4775	0	0
							3451				0			913			-13053	0	0

Balance Period No: 7

West Lake

Day & Time	Stage m AHD	Area m ²		Volume m ³	Lake		Rain		Drains		Summer Top Up			Evaporation m ³	δE*		δA	Apparent GW Flux	GW In m ³	Lake-GW m ³
					δ	Cl	mm	δ	Cl	m ³	δ	m ³	Cl	mm	δE _{pan}					
7/7/96	8:00	3.195	43303	9917	-12.5		24.4	1197	-26.9					2.7	-63.2	-131.5	-85.2			
8/7/96	8:00	3.271	49046	13427						3778				2.3	-134.9	-196.7	-85.2	-1356		
9/7/96	8:00	3.244	47006	12128						45				1.8	-74.4	-141.6	-85.2	-1256		
10/7/96	8:00	3.222	45315	11113						24				1.4	-66.3	-134.2	-85.2	-975		
11/7/96	8:00	3.202	43807	10221	-13.8					27				1.7	-60.3	-128.7	-85.2	-845		
Balance 7A			ΔS	304	-13.15	0.00		1197		3874	0				-84.0	-150.3	-85.2	-4433		
12/7/96	8:00	3.182	42334	9360						22				3.2	-59.0	-127.5	-85.2	-744		
13/7/96	8:00	3.166	41039	8693			1.1	45	-18.8	106				0.4	-156.4	-215.4	-85.2	-800		
14/7/96	8:00	3.150	39438	8049						18				1.2	-97.3	-161.7	-85.2	-613		
15/7/96	8:00	3.135	37962	7468	-13.2					13				1.1	-113.0	-175.5	-85.2	-550		
Balance 7B			ΔS	-2753	-13.50	0.00		45		159	0				-106.5	-170.0	-85.2	-2708		
16/7/96	8:00	3.175	41775	9066			14.4	602	-18.8	1652				1.7	-163.2	-220.4	-85.2	-586		
17/7/96	8:00	3.220	45162	11022			16.5	745	-18.8	2171				3.8	-100.5	-164.0	-85.2	-794		
18/7/96	8:00	3.202	43807	10221			2.8	123	5.6	237				3.0	-79.9	-145.5	-85.2	-1025		
19/7/96	8:00	3.197	43447	10004	-13.8		4.0	174	5.6	470				2.0	-102.3	-165.3	-85.2	-773		
Balance 7C			ΔS	2536	-13.50	0.00		1643		4530	0				-111.5	-173.8	-85.2	-3179		
Totals			ΔS	87				2885		8563	0				1042			-10319	0	0

Balance Period No: 8

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain			Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³		
				δ	Cl	mm	m ³	δ	Cl	m ³	Cl	m ³	δ	Cl	mm	m ³				δE _{pan}	δE*
19/7/96	8:00	3.197	43447	10004	-13.8										2.0	-102.3	-165.3	-85.2			
20/7/96	8:00	3.181	42256	9318		0.6	25	5.6		140					0.9	37	-109.8	-171.5	-85.2	-814	
21/7/96	8:00	3.177	41935	9150		4.0	168	-2.6		420					1.0	40	-132.5	-190.9	-85.2	-715	
22/7/96	8:00	3.192	43085	9787		7.6	327	-2.6		1148					1.0	44	-124.5	-164.3	-89.9	-794	
23/7/96	8:00	3.187	42721	9573	-11.3	3.7	158	-2.6		519					2.5	108	-78.8	-138.8	-87.2	-783	
Balance 8A		ΔS	-431	-12.55	0.00		679			2227		0				230	-111.4	-166.4	-86.9	-3106	
24/7/96	8:00	3.235	46301	11708		16.6	769	-18.2		2711					2.9	128	-87.7	-151.8	-84.5	-1217	
25/7/96	8:00	3.249	47459	12364		8.4	399	-18.2		1321					2.0	94	-80.4	-150.9	-81.8	-970	
26/7/96	8:00	3.232	46075	11570		0.3	14	-18.2		89					1.9	90	-76.6	-152.6	-79.1	-807	
27/7/96	8:00	3.336	52489	16725	-8.9	25.8	1354	-6.8		4511					3.7	180	-78.9	-161.4	-76.4	-530	
Balance 8B		ΔS	7152	-10.10	0.00		2535			8632		0				491	-80.9	-154.2	-80.5	-3524	
28/7/96	8:00	3.338	52605	16830		7.5	395	-6.8		1338					2.3	119	-73.8	-161.1	-73.7	-1509	
29/7/96	8:00	3.317	51440	15738		0.3	15	-6.7		133					2.3	118	-67.9	-158.7	-71.0	-1123	
30/7/96	8:00	3.340	52726	16936		11.1	585	-6.7		2115					1.7	86	-142.7	-248.0	-76.0	-1416	
31/7/96	8:00	3.335	52432	16673	-5.5	4.7	246	-6.7		814					3.0	156	-52.5	-122.7	-80.9	-1168	
Balance 8C		ΔS	-52	-7.20	0.00		1242			4400		0				478	-84.2	-172.6	-75.4	-5216	
1/8/96	8:00	3.328	52041	16307		4.4	229	-6.7		646					2.8	145	-61.0	-122.3	-85.9	-1096	
2/8/96	8:00	3.316	51388	15687		1.5	77	-6.7		478					2.3	117	-72.0	-118.0	-90.8	-1058	
3/8/96	8:00	3.302	50653	14972		0.7	35	-33.3		217					2.1	107	-64.8	-104.2	-95.8	-861	
4/8/96	8:00	3.311	51129	15430	-4.9	6.2	317	-33.3		1073					2.2	111	-70.3	-92.9	-100.7	-821	
Balance 8D		ΔS	-1243	-5.20	0.00		659			2414		0				480	-67.0	-109.3	-93.3	-3836	
5/8/96	8:00	3.312	51181	15482		5.7	292	-33.3		871					1.6	80	-63.9	-83.3	-105.7	-1031	
6/8/96	8:00	3.320	51598	15893		4.6	237	-33.3		1166					1.4	72	-56.1	-90.3	-103.1	-921	
7/8/96	8:00	3.325	51873	16151		5.0	259	3.5		829					0.8	41	-72.3	-91.5	-100.5	-790	
8/8/96	8:00	3.312	51181	15482	-4.2	0.1	5.12	3.5		42					1.7	90	-57.2	-97.6	-97.9	-626	
Balance 8E		ΔS	52	-4.55	0.00		794			2908		0				282	-62.4	-90.7	-101.8	-3368	
Totals		ΔS	5478				5908			20581		0				1961				-19050	0

Balance Period No: 9

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain			Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
				δ	Cl	mm	δ	m ³	δ	Cl	m ³	δ	Cl	mm	m ³	δE [*]			
8/8/96	8:00	3.312	51181	15482	-4.2									1.7	-57.2	-97.6	-97.9		
	8:00	3.297	50389	14720											1.9	-51.6	-100.2	-95.3	-704
	8:00	3.285	49778	14119											2.3	-47.7	-101.9	-92.6	-548
	8:00	3.332	52262	16516				17.7	925	2.6	1998				1.5	-80.3	-117.6	-90.0	-451
	8:00	3.318	51492	15790		-2.4		0.7	36	2.6	181				1.9	-48.9	-107.6	-87.4	-844
Balance 9A		ΔS	308	-3.30	0.00		961		2283		0			390	-57.1	-106.8	-91.3	-2546	
13/8/96	8:00	3.335	52432	16673										2.2	-59.2	-118.1	-84.8	-505	
	8:00	3.324	51816	16100			10.0	524	-12.8	977				1.9	-43.6	-109.3	-82.2	-847	
	8:00	3.315	51336	15635			1.2	62	1.4	211				1.0	-56.8	-125.9	-79.2	-684	
	8:00	3.302	50653	14972	-1.8		1.2	61	1.4	77				1.3	-57.3	-131.7	-76.2	-734	
	Balance 9B		ΔS	-818	-2.10	0.00		724		1561		0			333	-54.2	-121.3	-80.6	-2770
17/8/96	8:00	3.295	50286	14619										1.7	-51.6	-128.8	-73.3	-429	
	8:00	3.284	49728	14069			0.3	15	1.4	149				2.8	-39.4	-113.7	-70.3	-484	
	8:00	3.273	49160	13525						58				3.2	-39.5	-115.9	-67.3	-443	
	8:00	3.274	49216	13574	-0.8		2.8	138	-3.2	394				2.9	-50.8	-132.0	-70.0	-342	
	Balance 9C		ΔS	-1398	-1.30	0.00		153		674		0			527	-45.3	-122.6	-70.2	-1697
Totals		ΔS	-1908				1838		4518		0			1250				-7014	0

Balance Period No: 10

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain			Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
					δ	Cl	mm	m ³	δ	Cl	m ³	Cl	m ³	δ	Cl	mm	m ³			
20/8/96	8:00	3.274	49216	13574	-0.8										2.9	-50.8	-132.0	-70.0		
21/8/96	8:00	3.297	50389	14720			9.4	474	-3.2		1180				1.0	52	-68.2	-152.8	-456	
22/8/96	8:00	3.290	50032	14368			1.0	50	-3.2		170				1.6	79	-53.6	-126.9	-493	
23/8/96	8:00	3.281	49575	13920							74				1.7	87	-54.9	-123.1	-435	
24/8/96	8:00	3.304	50760	15074	0.7		9.8	497	-0.2		1209				1.7	83	-69.9	-130.3	-470	
Balance 10A		ΔS	1500	-0.05	0.00		1021				2633	0			300	-61.7	-133.3	-76.9	-1854	
25/8/96	8:00	3.294	50235	14569							106				2.8	141	-40.9	-102.5	-470	
26/8/96	8:00	3.283	49677	14019							70				2.0	100	-41.6	-100.1	-520	
27/8/96	8:00	3.278	49423	13772			1.8	89	-1.0		227				1.9	95	-57.9	-111.6	-468	
28/8/96	8:00	3.272	49104	13476	0.8		1.0	49	-1.0		160				2.1	103	-61.1	-117.6	-402	
Balance 10B		ΔS	-1598	0.75	0.00		138				563	0			438	-50.4	-108.0	-84.3	-1861	
29/8/96	8:00	3.263	48539	13037							77				1.8	89	-50.5	-112.6	-427	
30/8/96	8:00	3.255	47974	12650							65				2.1	101	-49.7	-114.6	-351	
31/8/96	8:00	3.278	49423	13772			9.0	445	5.8		1022				2.2	106	-52.0	-119.7	-239	
1/9/96	8:00	3.269	48920	13329	2.0	22.2					75				3.1	152	-42.4	-111.1	-366	
Balance 10C		ΔS	-147	1.40			445				1239	0			448	-48.6	-114.5	-77.7	-1383	
Totals		ΔS	-245				1604				4435	0			1186				-5098	0

Balance Period No: 11

West Lake

Day & Time	Stage m AHD	Area m ²		Volume m ³	Lake		Rain			Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
					δ	Cl	mm	δ	Cl	m ³	δ	Cl	mm	m ³	δE* δE _{pan}	δA				
1/9/96	8:00	3.269	48920	13329	2.0	22.2								3.1	-42.4	-111.1	-74.7			
2/9/96	8:00	3.260	48332	12891						55	12.0		2.1	102	-42.1	-112.6	-72.8	-391		
3/9/96	8:00	3.264	48606	13085			3.0	1.2	12.0	488	12.0		3.1	150	-45.9	-116.6	-73.4	-290		
4/9/96	8:00	3.255	47974	12650						87	12.0		3.1	149	-41.4	-110.0	-74.0	-373		
5/9/96	8:00	3.248	47357	12317	3.0	23.9				63	12.0		2.5	117	-40.2	-107.6	-74.6	-279		
Balance 11A		ΔS		-1012	2.50	23.03				693		0		518	-42.4	-111.7	-73.7	-1333	69	1411
6/9/96	8:00	3.257	48120	12747						618	12.0		3.5	165	-45.7	-113.1	-75.3	-273		
7/9/96	8:00	3.258	48192	12795			5.2	8.0	12.0	333	12.0		3.5	171	-43.1	-109.1	-75.9	-235		
8/9/96	8:00	3.261	48400	12940			3.3	8.0	12.0	311	12.0		0.7	35	-54.2	-119.4	-76.5	-291		
9/9/96	8:00	3.272	49104	13476	5.1	25.5	5.0	-13.4	12.0	621	12.0		2.4	115	-48.1	-111.6	-77.1	-215		
Balance 11B		ΔS		1159	4.05	24.70				1883		0		486	-47.8	-113.3	-76.2	-1013	152	1154
10/9/96	8:00	3.304	50760	15074			11.2	-13.4	12.0	1431	12.0		3.2	159	-48.6	-112.3	-76.8	-242		
11/9/96	8:00	3.354	53478	17679			19.0	-13.4	12.0	2247	12.0		2.8	147	-46.5	-110.4	-76.4	-511		
12/9/96	8:00	3.342	52877	17041			0.2	1.2	12.0	129	12.0		1.7	92	-46.0	-110.0	-76.1	-686		
13/9/96	8:00	3.334	52375	16620	4.3	27.2				40	12.0		1.8	96	-45.8	-109.8	-75.8	-365		
Balance 11C		ΔS		3144	4.70	26.37				3847		0		494	-46.7	-110.6	-76.3	-1804	323	2065
Totals		ΔS		3291				2517		6423		0		1499				-4150	544	4630

Total balance period calculation

GW In m ³	540	Lake-GW m ³	4629
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Balance Period No: 12

West Lake

Day & Time	Stage m AHD	Area m ²		Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
						δ	Cl	mm	δ	Cl	m ³	δ	Cl	mm	m ³	δE [*]	δA		
13/9/96	8:00	3.334	52375	16620		4.3	27.2	2	1.2	12.0	304			1.8		-109.8	-75.8		
14/9/96	8:00	3.330	52151	16411				104	7.7	12.0	573			4.1	214	-111.0	-75.5	-403	
15/9/96	8:00	3.334	52375	16620				262	7.7	12.0	573			3.6	190	-123.8	-75.1	-436	
16/9/96	8:00	3.345	53014	17200				265	7.7	12.0	1101			2.2	115	-119.9	-74.8	-671	
17/9/96	8:00	3.339	52665	16883		7.5	28.0	1	7.7	12.0	114			2.9	154	-111.2	-75.8	-330	
Balance 12A			ΔS	263		5.90	27.58				2092	0			673	-52.2	-75.3	-1840	1963
18/9/96	8:00	3.341	52790	16989							456			2.5	134	-57.7	-116.3	-453	
19/9/96	8:00	3.331	52207	16464				238	5.2	12.0	160			4.4	229	-36.8	-96.7	-534	
20/9/96	8:00	3.323	51760	16048				78	5.2	12.0	71			3.3	170	-36.5	-94.9	-322	
21/9/96	8:00	3.315	51336	15635		8.5	28.7	0.1	5.2	12.0	55			2.6	136	-36.4	-93.4	-332	
Balance 12B			ΔS	-1248		8.00	28.35				742	0			670	-41.9	-100.3	-1641	1692
22/9/96	8:00	3.384	55286	19310							3113			5.6	296	-47.0	-97.0	-358	
23/9/96	8:00	3.371	54472	18597				22	-13.9	12.0	72			3.5	190	-34.4	-91.1	-595	
24/9/96	8:00	3.361	53853	18055							28			3.0	163	-38.5	-92.9	-407	
25/9/96	8:00	3.350	53274	17466		8.6	29.5				33			2.6	141	-35.5	-91.5	-481	
Balance 12C			ΔS	1831		8.55	29.12				3246	0			790	-38.8	-80.7	-1842	2010
Totals			ΔS	846							6080	0			2133			-5322	5665

Total balance period calculation

GW In m ³	412
Lake-GW m ³	5671

Balance Period No: 13

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
				δ	Cl	mm	δ	Cl	m ³	δ	Cl	mm	δE _{pan}			
25/9/96	8:00	3.350	53274	17466								2.6	-35.5	-91.5	-80.6	
26/9/96	8:00	3.341	52790	16989					29		12.0	3.1	-34.9	-91.1	-80.5	-342
27/9/96	8:00	3.404	56531	20428		19.2	-13.2	12.0	3070		12.0	1.5	-60.4	-104.9	-80.3	-632
28/9/96	8:00	3.391	55718	19699		0.1	-13.2	12.0	65		12.0	4.0	-46.5	-97.5	-80.2	-575
29/9/96	8:00	3.382	55166	19200	8.3	1.7	94	12.0	155		12.0	3.8	-37.7	-92.7	-80.1	-536
Balance 13A		ΔS	1734	8.45	32.70		1185		3319	0			-44.9	-96.5	-80.3	0
30/9/96	8:00	3.371	54472	18597					62		12.0	4.0	-34.5	-90.8	-80.0	-446
1/10/96	8:00	3.361	53853	18055					40		12.0	2.2	-37.5	-92.0	-79.9	-462
2/10/96	8:00	3.354	53478	17679					36		12.0	1.9	-40.3	-95.3	-78.1	-311
3/10/96	8:00	3.345	53014	17200	9.4	36.6		12.0	29		12.0	3.3	-36.0	-93.9	-76.2	-333
Balance 13B		ΔS	-2000	8.85	36.25		0		167	0			-37.1	-93.0	-78.5	0
4/10/96	8:00	3.340	52726	16936					112		12.0	3.4	-36.5	-95.7	-74.4	-198
5/10/96	8:00	3.331	52207	16464					43		12.0	3.9	-34.9	-95.7	-72.5	-313
6/10/96	8:00	3.322	51705	15996					36		12.0	3.3	-33.7	-95.7	-70.7	-334
7/10/96	8:00	3.317	51440	15738	11.2	37.5		12.0	37		12.0	3.7	-32.1	-95.1	-68.8	-105
Balance 13C		ΔS	-1462	10.30	37.05		0		228	0			-34.3	-95.6	-71.6	691
Totals		ΔS	-1728				1185		3714	0			2041		-4586	691

Total balance period calculation

GW In m ³	576
Lake-GW m ³	4712

Balance Period No: 14

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
			ΔS	ΔS	δ	Cl	mm	δ	Cl	m ³	δ	Cl	mm	m ³	δE _{pan}	δA			
7/10/96	8:00	3.317	51440	15738	11.2	37.5								3.7	-32.1	-95.1	-68.8		
8/10/96	8:00	3.310	51077	15379						28		12.0		4.5	-33.3	-96.9	-68.3	-156	
9/10/96	8:00	3.302	50653	14972						83		12.0		3.7	-38.9	-105.0	-67.7	-302	
10/10/96	8:00	3.309	51025	15328			4.5	0.4	12.0	373		12.0		3.0	-34.7	-99.5	-67.2	-97	
11/10/96	8:00	3.307	50921	15226	12.0	38.4	2.6	0.4	12.0	289		12.0		3.9	-32.3	-96.2	-66.6	-323	
Balance 14A			ΔS	-512	11.60	37.93	362			773	0			770	-34.8	-99.4	-67.4	55	941
12/10/96	8:00	3.299	50495	14821						67		12.0		3.3	-30.7	-94.2	-66.1	-306	
13/10/96	8:00	3.295	50286	14619						40		12.0		3.7	-30.9	-95.0	-65.5	-56	
14/10/96	8:00	3.288	49931	14268			0.2	0.4	12.0	45		12.0		3.4	-34.4	-101.3	-65.0	-238	
15/10/96	8:00	3.284	49728	14069	14.0	39.2				97		12.0		2.7	-34.9	-99.3	-67.3	-161	
Balance 14B			ΔS	-1157	13.00	38.80	10			249	0			656	-32.7	-97.4	-66.0	0	817
16/10/96	8:00	3.277	49373	13722						49		12.0		4.0	-29.6	-89.8	-69.7	-197	
17/10/96	8:00	3.271	49046	13427						64		12.0		3.9	-28.3	-86.5	-72.0	-165	
18/10/96	8:00	3.263	48539	13037						55		12.0		3.4	-31.6	-86.5	-74.4	-277	
19/10/96	8:00	3.258	48192	12795	15.8	40.1				53		12.0		3.4	-30.3	-82.7	-76.7	-128	
Balance 14C			ΔS	-1274	14.90	39.67	0			221	0			727	-30.0	-86.4	-73.2	0	859
Totals			ΔS	-2943			372			1243	0			2153			-2405	55	2617

GW In m ³	0
Lake-GW m ³	2407

Total balance period calculation

Balance Period No: 15

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain			Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
					δ	Cl	mm	m ³	δ	Cl	m ³	δE [*]	δA	m ³	mm	δE _{pan}				
19/10/96	8:00	3.258	48192	12795	15.8	40.1								3.4	-30.3	-82.7	-76.7			
20/10/96	8:00	3.254	47900	12603						41	12.0			3.9	-30.2	-79.5	-79.1	-44		
21/10/96	8:00	3.288	49931	14268			15.0	749	-22.1	12.0	1686	12.0		5.5	-40.3	-82.5	-81.4	-501		
22/10/96	8:00	3.306	50867	15175			4.6	234	-22.1	12.0	642	12.0		1.9	95	-52.9	-79.0	126		
23/10/96	8:00	3.331	52207	16464	14.0	41.7	10.2	533	-7.2	12.0	1165	12.0		4.2	216	-40.8	-76.5	-193		
Balance 15A			ΔS	3669	14.90	40.88		1515			3534		0		768	-41.1	-84.9	-79.0	512	10222
24/10/96	8:00	3.332	52262	16516			4.0	209	-7.2	12.0	505	12.0		3.4	180	-36.2	-74.1	-482		
25/10/96	8:00	3.322	51705	15996							90	12.0		4.1	213	-30.4	-71.6	-397		
26/10/96	8:00	3.313	51233	15533							69	12.0		4.2	215	-30.2	-69.2	-317		
27/10/96	8:00	3.305	50814	15125	15.4	43.2					61	12.0		4.8	243	-31.0	-66.7	-226		
Balance 15B			ΔS	-1339	14.70	42.45		209			725		0		851	-32.0	-70.4	-1422	61	1479
28/10/96	8:00	3.298	50442	14770							42	12.0			241	-31.3	-64.3	-156		
29/10/96	8:00	3.290	50032	14368							30	12.0		4.8	268	-30.4	-67.0	-164		
30/10/96	8:00	3.282	49626	13970							70	12.0		5.2	262	-29.6	-69.6	-206		
31/10/96	8:00	3.275	49270	13624	17.0	44.8	0.2	10	22.1	12.0	96	12.0		3.7	182	-34.9	-72.3	-269		
Balance 15C			ΔS	-1501	16.20	44.02		10			238		0		953	-31.5	-68.3	-796	0	886
Totals			ΔS	829				1734			4497		0		2572			-2830	573	3387

Lawn irrigation and East Lake top up commence sub balance 15A

Total balance period calculation

GW In m ³	535
Lake-GW m ³	3276

Balance Period No: 16

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³	
			ΔS	m ³	δ	Cl	mm	m ³	δ	Cl	m ³	Cl	mm	m ³	δE^*	δA				
31/10/96	8:00	3.275	49270	13624	17.0	44.8							3.7		-34.9	-87.7	-72.3			
1/11/96	8:00	3.269	48920	13329						72	12.0		4.3	209	-28.1	-80.4	-75.0	-158		
2/11/96	8:00	3.261	48400	12940						61	12.0		4.6	223	-26.8	-77.1	-77.7	-227		
3/11/96	8:00	3.253	47824	12555						52	12.0		5.0	241	-25.9	-74.0	-80.3	-196		
4/11/96	8:00	3.245	47091	12175	19.7	47.9				37	12.0		6.2	296	-23.7	-72.0	-83.0	-121		
Balance 16A		ΔS		-1449	18.35	46.37		0		222		0		969	-26.1	-75.9	-79.0	-702	11	717
5/11/96	8:00	3.235	46301	11708						46	12.0		7.2	337	-23.4	-74.5	-79.8	-176		
6/11/96	8:00	3.254	47900	12603			8.5	407	9.5	860	12.0		3.6	170	-29.4	-76.2	-76.5	-202		
7/11/96	8:00	3.272	49104	13476			5.0	246	9.5	800	12.0		0.4	20	-43.1	-86.0	-73.3	-153		
8/11/96	8:00	3.264	48606	13085	19.1	51.1				167	12.0		3.6	176	-33.6	-87.4	-70.0	-382		
Balance 16B		ΔS		910	19.40	49.50		653		1873		0		703	-32.4	-81.1	-74.9	-913	399	1319
9/11/96	8:00	3.255	47974	12650						47	12.0		4.6	222	-27.7	-85.6	-66.8	-260		
10/11/96	8:00	3.246	47177	12222						60	12.0		5.0	238	-25.5	-86.5	-63.5	-250		
11/11/96	8:00	3.237	46451	11801						43	12.0		6.2	292	-22.2	-83.9	-60.3	-172		
12/11/96	8:00	3.225	45547	11249	23.1	54.2				61	12.0		6.1	279	-21.3	-81.9	-62.5	-334		
Balance 16C		ΔS		-1836	21.10	52.63		0		211		0		1031	-24.2	-84.5	-63.3	-1016	0	1065
Totals		ΔS		-2375			653			2306		0		2703				-2631	410	3101

GW In m ³	375
Lake-GW m ³	3020

Total balance period calculation

Balance Period No: 17

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
			ΔS		δ	Cl	mm	m ³	δ	Cl	m ³	Cl	δ	mm	m ³			
12/11/96	8:00	3.225	45547	11249	23.1	54.2							6.1	-21.3	-81.9	-62.5		
13/11/96	8:00	3.218	45010	10932			0.4	18	-24.9	12.0			5.0	-20.5	-79.6	-64.8	-202	
14/11/96	8:00	3.212	44548	10663			0.3	13	-24.9	12.0			4.0	-18.6	-75.1	-67.0	-184	
15/11/96	8:00	3.300	50547	14871			22.0	1112	-24.9	12.0			4.4	-35.5	-89.5	-69.3	-600	
16/11/96	8:00	3.340	52726	16936	17.3	64.9	14.8	780	-24.9	12.0			5.5	-38.7	-88.6	-71.5	-509	
Balance 17A			ΔS	5687	20.20	59.57		1924			0			901	-28.3	-83.2	-1495	3119
17/11/96	8:00	3.325	51873	16151									4.1	-32.8	-82.0	-73.8	-597	
18/11/96	8:00	3.314	51285	15584						26	12.0		4.0	-31.2	-78.5	-76.0	-360	
19/11/96	8:00	3.304	50760	15074									4.6	-32.4	-77.2	-76.5	-276	
20/11/96	8:00	3.295	50286	14619	19.5	75.7				10	12.0		4.4	-31.9	-75.5	-77.0	-241	
Balance 17B			ΔS	-2317	18.40	70.30		0		36		0		880	-32.2	-78.3	-1473	1944
21/11/96	8:00	3.283	49677	14019									4.7	-31.9	-74.9	-77.5	-377	
22/11/96	8:00	3.272	49104	13476						11	12.0		4.9	-32.5	-74.2	-77.9	-300	
23/11/96	8:00	3.262	48469	12988									5.1	-32.5	-73.7	-78.4	-240	
24/11/96	8:00	3.253	47824	12555	19.5	86.4	1.1	53	2.7	12.0			5.1	-29.4	-74.0	-78.9	-297	
Balance 17C			ΔS	-2064	19.50	81.03		53		67		0		969	-31.6	-74.2	-1214	1605
Totals			ΔS	1306				1976		6262		0		2750			-4183	6668

Total balance period calculation		GW In m ³	Lake-GW m ³
		2810	6719

Balance Period No: 18

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³	
				δ	Cl	mm	δ	Cl	mm	δ	Cl	mm	m ³	δE _{pan}	δA				
24/11/96	8:00	3.253	47824	12555		19.5	86.4						5.1	-29.4	-74.0	-78.9			
25/11/96	8:00	3.243	46921	12081									5.7	-26.5	-73.1	-79.4	-206		
26/11/96	8:00	3.233	46150	11616									5.1	-27.1	-70.3	-80.4	-228		
27/11/96	8:00	3.225	45547	11249						12	12.0		5.0	-25.3	-68.8	-81.5	-150		
28/11/96	8:00	3.214	44701	10752		22.4	108.2			14	12.0		4.4	-20.0	-65.5	-82.5	-311		
Balance 18A		ΔS	-1803	20.95	97.30			0		26		0		934	-26.1	-69.4	-80.9	801	1681
29/11/96	8:00	3.205	44026	10353						19	12.0		5.1	-22.6	-63.8	-83.5	-192		
30/11/96	8:00	3.198	43519	10047				0.7	30	20	12.0		5.2	-23.0	-60.3	-84.5	-127		
1/12/96	8:00	3.196	43375	9960				3.3	143	252	12.0		4.0	-17.2	-53.9	-85.6	-310		
2/12/96	8:00	3.192	43085	9787		22.8	130.0	2.5	108	181	12.0		3.5	-15.1	-53.9	-86.6	-311		
Balance 18B		ΔS	-965	22.60	119.10			281		472		0		778	-27.6	-58.0	-85.1	1142	2056
3/12/96	8:00	3.190	42941	9701															
4/12/96	8:00	3.178	42017	9192				1.4	60	237	12.0		4.3	-18.6	-62.0	-85.0	-197		
5/12/96	8:00	3.169	41290	8817						13	12.0		5.2	-22.0	-63.3	-83.5	-302		
6/12/96	8:00	3.158	40292	8368		26.2	156.0			13	12.0		5.5	-23.1	-62.4	-81.9	-157		
Balance 18C		ΔS	-1419	24.50	143.00			60		20	12.0		5.5	-22.6	-63.7	-80.3	-243		
7/12/96	8:00	3.149	39334	8009						283		0		863	-20.7	-82.7	-89.9	963	1831
8/12/96	8:00	3.138	38247	7583															
9/12/96	8:00	3.131	37598	7317						21	12.0		5.5	-18.1	-63.9	-78.7	-162		
10/12/96	8:00	3.122	36811	6983		27.4	172.0			19	12.0		5.9	-23.0	-63.8	-77.2	-215		
Balance 18D		ΔS	-1385	26.80	164.00					29	12.0		5.2	-19.6	-62.8	-75.6	-99		
Totals		ΔS	-5572					0		20	12.0		5.3	-19.8	-60.6	-77.3	-156		
										89		0		842	-18.1	-62.8	-632	17	675
								341		870		0		3417			-3367	2923	6243

Total balance period calculation	
GW In m ³	3080
Lake-GW m ³	6412

Balance Period No: 19

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain			Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
			ΔS		δ	Cl	mm	m ³	δ	Cl	m ³	δE*	δE _{pan}	mm	m ³	δE*	δA			
10/12/96	8:00	3.122	36811	6983	27.4	172.0								5.3	-17.8	-60.6	-77.3			
11/12/96	8:00	3.112	35961	6619						18	12.0			5.2	-17.3	-58.2	-79.1	-191		
12/12/96	8:00	3.120	36640	6909			5.8	213	-16.3	539	12.0			4.9	-16.7	-55.8	-80.8	-282		
13/12/96	8:00	3.114	36131	6691			0.5	18	-1.8	126	12.0			4.8	-16.5	-50.4	-82.6	-188		
14/12/96	8:00	3.106	35443	6404	28.7	187.0				26	12.0			5.1	-15.6	-51.4	-84.3	-131		
Balance 19A			ΔS	-579	28.05	179.50	231			709		0			-16.5	-54.0	-81.7	-792	965	
15/12/96	8:00	3.098	34741	6124										5.5	-14.4	-49.1	-86.1	-112		
16/12/96	8:00	3.085	33546	5680						27	12.0			8.1	-13.1	-52.5	-87.8	-196		
17/12/96	8:00	3.077	32820	5414						24	12.0			7.4	-12.1	-49.6	-87.8	-43		
18/12/96	8:00	3.065	31772	5027	31.3	195.0				28	12.0			8.1	-11.2	-52.1	-87.8	-152		
Balance 19B			ΔS	-1377	30.00	191.00	0			106		0			-12.7	-50.8	-87.4	-503		
19/12/96	8:00	3.053	30776	4651										8.0	-10.5	-54.7	-87.8	-151		
20/12/96	8:00	3.044	30013	4378						25	12.0			6.8	-9.1	-45.5	-87.7	-93		
21/12/96	8:00	3.035	29214	4111						49	12.0			6.5	-7.3	-36.5	-87.7	-125		
22/12/96	8:00	3.026	28432	3852	33.7	212.0								9.0	-7.4	-46.2	-87.7	-0.5		
Balance 19C			ΔS	-1175	32.50	203.50	0			102		0			-8.6	-45.7	-87.7	-369		
Totals			ΔS	-3131			231			917		0			2614			-1665		

Integrated balances end sub-balance 19A
Commencing sub-bal 19B West Lake breaks up into disjointed ponds

Balance Period No: 22

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains m ³	Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³		
					δ	Cl	mm	m ³		δ	Cl	mm	m ³				δE* δE _{pan}	δA
15/1/97 8:00	2.805	3947	366		43.0	304						5.4	11.0	-23.6	-88.7			
16/1/97 8:00	2.795	3321	329									5.8	21.2	-24.5	-90.3	-15.8		
17/1/97 8:00	2.783	2731	293									5.5	16.7	-27.4	-91.9	-19.3		
18/1/97 8:00	2.774	2340	271									6.8	17.2	-14.5	-93.5	-4.8		
19/1/97 8:00	2.768	2149	257		43.7	317						8.0	18.0	2.9	-95.1	4.0		
Balance 22A		ΔS	-109		43.35	310.50	0		0	0			73.2	13.1	-15.9	-92.7	-35.8	
20/1/97 8:00	2.761	1974	243				0.2	0.4	15.5	12.0		9.4	19.3	-16.3	-96.7	4.9		
21/1/97 8:00	2.756	1867	233									4.7	9.0	-21.4	-96.0	-1.0		
22/1/97 8:00	2.749	1760	220									5.6	10.2	-34.2	-95.3	-2.8		
23/1/97 8:00	2.741	1667	207		41.2	306						7.4	12.7	-22.8	-94.6	-0.3		
Balance 22B		ΔS	-50		42.45	311.50	0.4		0.4	0	0		51.3	8.9	-23.7	-95.7	0.9	
24/1/97 8:00	2.732	1573	192									10.4	16.9	-27.0	-93.9	1.9		
25/1/97 8:00	2.722	1478	177									7.4	11.3	-23.5	-93.2	-3.7		
26/1/97 8:00	2.718	1443	171									4.0	5.8	-15.0	-92.5	-0.2		
27/1/97 8:00	2.713	1399	164		42.2	304						5.2	7.4	-28.5	-91.8	0.4		
Balance 22C		ΔS	-43		41.70	305.00		0	0	0	0		41.4	9.9	-23.5	-92.9	-1.6	
Totals		ΔS	-202				0.4		0.4	0	0		165.8			-36.6	0	0

Balance Period No: 23

West Lake

Day & Time	Stage m AHD	Area m ²		Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
						δ	Cl	mm	δ	Cl		mm	δ	Cl	mm	δE _{pan}	δA		
27/1/97	8:00	2.713	1399	164		42.2	304					5.2			9.2	-28.5	-91.8		
28/1/97	8:00	2.713	1399	164								6.0			8.5	-32.8	-91.0	8.5	
29/1/97	8:00	2.705	1331	153								7.1			9.7	-34.2	-90.2	-1.3	
30/1/97	8:00	2.698	1268	144								5.5			7.2	-15.0	-89.4	-1.8	
31/1/97	8:00	2.691	1201	135		41.6	308					6.8			8.4	-25.5	-88.7	-0.6	
Balance 23A			ΔS	-29		41.90	306.00				0				33.7	10.4	-89.8	4.7	
1/2/97	8:00	2.685	1129	128								5.1			6.0	10.0	-87.9	-1.0	
2/2/97	8:00	2.679	1080	122								6.9			7.6	13.9	-87.1	1.6	
3/2/97	8:00	2.672	1028	114								3.4			3.6	23.5	-86.3	-4.4	
4/2/97	8:00	2.668	1000	110		39.6	318					3.8			3.8	18.8	-86.1	-0.2	
Balance 23B			ΔS	-25		40.60	313.00				0				21.0	16.5	-86.9	-4.0	
5/2/97	8:00	2.658	945	100								7.1			6.9	9.8	-86.0	-3.1	
6/2/97	8:00	2.648	890	91.3								5.8			5.4	10.6	-85.8	-3.3	
7/2/97	8:00	2.639	833	83.6								5.8			5.0	12.8	-85.7	-2.7	
8/2/97	8:00	2.630	772	76.4		41	330					6.2			4.9	15.6	-85.5	-2.3	
Balance 23C			ΔS	-33.6		40.30	324.00				0				22.2	12.2	-85.8	-11.4	
Totals			ΔS	-87.6							0				76.9			-10.7	0
											0							0	0

Balance Period No: 25

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains m ³	Summer Top Up m ³	Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
			ΔS	ΔS	δ	CI	mm	δ	CI		mm	δE _{pan}	δE*	δA	
20/2/97 8:00	2.585	530	47.4	47.4	36.3	306					2.9	12.0	-19.1	-88.1	
21/2/97 8:00	2.581	512	45.3	45.3							4.7	2.4	-22.6	-89.4	
22/2/97 8:00	2.581	512	45.3	45.3							3.9	2.0	-27.5	-90.6	0.3
23/2/97 8:00	2.577	495	43.3	43.3							2.7	1.4	-37.4	-91.9	2.0
24/2/97 8:00	2.583	521	46.4	46.4	27.7	266	1.1	-25.2	12.0	131	2.5	-3.3	1.8	-93.1	-0.6
Balance 25A		ΔS	-1		32.00	286.00	0.6			0	7.0	0.7	-21.4	-91.2	3.8
25/2/97 8:00	2.590	554	50.1	50.1							2.3	1.2	-5.8	-92.6	5.5
26/2/97 8:00	2.585	530	47.4	47.4							1.3	0.7	-28.4	-92.2	
27/2/97 8:00	2.574	482	41.9	41.9							4.7	2.4	-35.7	-91.7	4.9
28/2/97 8:00	2.562	429	36.4	36.4	28.8	258					5.2	2.4	-35.9	-91.2	-2.0
Balance 25B		ΔS	-10		28.25	262.00	0			0	6.7	-3.6	-26.5	-91.9	-3.1
1/3/97 8:00	2.548	366	30.8	30.8							6.9	2.7	-52.0	-90.7	-3.3
2/3/97 8:00	2.543	345	29.1	29.1							2.5	0.9	-30.1	-90.3	
3/3/97 8:00	2.540	333	28.1	28.1							6.0	2.1	-38.6	-89.8	-2.9
4/3/97 8:00	2.540	333	28.1	28.1	32.8	270					6.4	2.1	-48.1	-87.4	-0.8
Balance 25C		ΔS	-8.3		30.80	264.00	0			0	7.8	0.3	-42.2	-89.5	1.1
Totals		ΔS	-19.3				0.6			0		21.5			2.1
									131	0					-0.5
										0					1.6
										0					0
															0

Drain mass excluded from 25A, no water reached SW pond

Balance Period No: 26

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³	
				δ	Cl	mm	m ³	δ	Cl	m ³	δ	Cl	mm				m ³
4/3/97	8:00	2.540	333	28.1	32.8	270						6.4	1.2	-48.1	-87.4		
5/3/97	8:00	2.545	353	29.8								4.7	1.6	-51.1	-84.9	3.3	
6/3/97	8:00	2.547	361	30.5								5.1	1.8	-52.0	-82.5	2.5	
7/3/97	8:00	2.548	366	30.8			0.2	0.1	34.4	12.0	20	12.0	6.3	2.3	-53.9	-80.1	2.5
8/3/97	8:00	2.547	361	30.5	28.4	217						3.8	1.4	-3.6	-59.7	1.1	
Balance 26A		ΔS	2.4	30.60	243.50		0.1				0		7.1	-1.4	-54.2	-81.3	9.4
9/3/97	8:00	2.550	374	31.6								5.8	2.1	-3.0	-61.1	-75.2	3.2
10/3/97	8:00	2.547	361	30.5								4.4	1.6	-1.8	-63.1	-72.8	0.5
11/3/97	8:00	2.547	361	30.5								5.6	2.0	-2.0	-61.7	-74.1	2.0
12/3/97	8:00	2.538	325	27.4	27.1	202						4.7	1.6	-4.9	-64.2	-75.3	-1.5
Balance 26B		ΔS	-3.1	27.75	209.50		0			0			7.4	-2.9	-62.5	-74.4	4.3
13/3/97	8:00	2.531	296	25.2								4.7	1.5	-4.1	-63.1	-76.6	-0.7
14/3/97	8:00	2.523	260	23								3.3	0.9	-1.1	-58.1	-77.9	-1.3
15/3/97	8:00	2.512	215	20.4								6.7	1.6	-1.4	-59.0	-79.2	-1.0
16/3/97	8:00	2.511	212	20.2	30.0	221				106		5.8	1.2	4.9	-47.7	-80.4	1.0
Balance 26C		ΔS	-7.2	28.55	211.50		0			106			5.2	-0.4	-57.0	-78.5	-2.0
Totals		ΔS	-7.9				0.1			126			19.7			11.7	0

Drain flow is seepage from lawn and road verge irrigation

Drain mass excluded from 26A and 26C, no water reached SW pond

Balance Period No: 27

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation		Apparent GW Flux m ³	GW In m ³	Lake-GW m ³		
					δ	Cl	mm	δ	Cl	m ³	mm	δ	Cl	mm	m ³				δE* δE _{pan}	δA
16/3/97	8:00	2.511	212	20.2	30.0	221		4.5	7.1	-3.4	12.0	628		5.8	4.9	-47.7	-80.4	refer note		
17/3/97	8:00	2.733	1583	194										4.0	3.6	-86.4	-134.7			
18/3/97	8:00	2.682	1103	125								12		3.9	5.2	-73.0	-123.9			
19/3/97	8:00	2.640	841	84.4										4.8	4.7	-62.3	-115.3			
20/3/97	8:00	2.600	600	55.9	-1.1	240								3.9	2.8	-60.9	-113.0			
Balance 27A		ΔS		35.7	14.45	230.50		7.1				640			16.2	-70.6	-121.7	-81.8	-285.2	
21/3/97	8:00	2.565	443	37.7										3.3	1.7	-57.1	-109.1	-81.9	-16.5	
22/3/97	8:00	2.536	318	26.8										6.0	2.3	-55.1	-106.0	-82.0	-8.6	
23/3/97	8:00	2.522	256	22.7										3.5	1.0	-44.5	-98.3	-82.0	-3.1	
24/3/97	8:00	2.515	225	21.1	7.4									4.5	1.1	-40.9	-94.3	-82.1	-0.5	
Balance 27B		ΔS		-34.8	3.15	0.00		0		0					6.1	-49.4	-101.9	-82.0	-28.7	
25/3/97	8:00	2.523	260	23.0										2.8	0.7	-39.7	-93.5	-81.2	2.6	
26/3/97	8:00	2.522	256	22.7										5.0	1.3	-34.4	-90.8	-80.3	1.0	
27/3/97	8:00	2.523	260	23.0										3.4	0.9	-28.5	-87.7	-79.4	1.2	
28/3/97	8:00	2.521	251	22.5	13.1									3.9	1.0	-23.5	-84.9	-78.4	0.5	
Balance 27C		ΔS		1.4	10.25	0.00		0		0					3.8	-31.5	-89.2	-79.8	5.2	
Totals		ΔS		2.3				7.1				640			26.2				-309	0

Drain mass excluded from 27A, no water reached SW pond

Balance Period No: 28

West Lake

Day & Time	Stage m AHD	Area m ²		Volume m ³	Lake		Rain		Drains		Summer Top Up			Evaporation			Apparent GW Flux m ³	GW In m ³	Lake-GW m ³	
					δ	CI	mm	m ³	δ	CI	m ³	CI	m ³	mm	δE [*] m ³	δA				
28/3/97	8:00	2.521	251	22.5		13.1								3.9	-23.5	-84.9	-78.4			
29/3/97	8:00	2.552	383	32.3				6	-12.0		2060			2.6	0.8	-26.3	-86.9	-77.5	-2056	
30/3/97	8:00	3.125	37069	7093				1490	-12.0		6651	3530	-16.8	2.6	49	-148.9	-210.2	-76.6	-4562	
31/3/97	8:00	3.077	32820	5414							80			2.5	87	-91.7	-156.7	-75.7	-1672	
1/4/97	8:00	3.034	29127	4082		-6.8					21			3.9	120	-89.8	-143.5	-80.9	-1233	
Balance 28A			ΔS	4059.5		3.15	0.00	1496			8812	3530			257	-89.2	-149.3	-77.7	-9522	
2/4/97	8:00	3.000	25939	3144							26			3.0	83	-62.4	-115.7	-86.2	-881	
3/4/97	8:00	2.973	23011	2483							18			3.9	94	-61.2	-109.4	-91.4	-585	
4/4/97	8:00	2.940	18561	1794				0.5	-26.1		29			3.1	64	-72.9	-105.3	-96.6	-663	
5/4/97	8:00	2.908	14674	1264		-6.5					28			2.8	47	-85.1	-95.5	-101.8	-511	
Balance 28B			ΔS	-2818		-6.65	0.00	9			101	0			289	-70.4	-106.5	-94.0	-2639	
6/4/97	8:00	2.895	13008	1084				4.7	-39.5		709			1.8	26	-91.8	-83.4	-107.1	-925	
7/4/97	8:00	2.875	10465	849				0.3	-40.2		15			4.2	49	-93.5	-71.3	-112.3	-204	
8/4/97	8:00	2.926	16818	1547				5.9	-40.2		1905			1.3	17	-102.0	-81.7	-107.7	-1289	
9/4/97	8:00	2.903	14060	1192		-8.0					27			4.7	72	-75.2	-98.2	-103.1	-310	
Balance 28C			ΔS	-72		-7.25	0.00	164			2656	0			164	-90.6	-83.7	-107.5	-2727	
Totals			ΔS	1169.5				1669			11569	3530			710				-14889	0

Balance Period No: 30

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up			Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³	
				δ	Cl	mm	δ	Cl	m ³	δ	Cl	mm	m ³	δE* δE _{pan}				δA
21/4/97	8:00	2.698	144	-2.3								3.4	-67.0	-109.6	-90.0			
22/4/97	8:00	2.710	160						27			1.7	2.2	-49.2	-104.5	-88.5	-8.8	
23/4/97	8:00	2.710	160									2.3	3.2	-50.3	-106.6	-87.0	3.2	
24/4/97	8:00	2.708	157									1.9	2.6	-51.8	-109.4	-85.5	-0.4	
25/4/97	8:00	2.695	140	-0.4					30			2.9	3.8	-50.4	-110.7	-84.1	-43.2	
Balance 30A		ΔS	-4.0	-1.35	0.00	0			57	0			11.7	-50.4	-107.8	-86.3	-49.3	
26/4/97	8:00	2.695	140									2.3	2.8	-54.0	-115.7	-82.6	2.8	
27/4/97	8:00	2.678	1073			0.2	7.9		33			2.3	2.6	-57.7	-122.2	-81.1	-49.6	
28/4/97	8:00	2.671	1021						24			1.7	1.7	-38.5	-106.7	-79.6	-30.3	
29/4/97	8:00	2.658	945	3.5					10			4.0	3.9	-38.3	-106.2	-80.1	-18.1	
Balance 30B		ΔS	-39	1.55	0.00	0.2			67	0			11.1	-47.1	-112.7	-80.8	-95.1	
30/4/97	8:00	2.656	98.6															
1/5/97	8:00	2.672	114			3.5	7.9		328			2.0	1.9	-53.7	-120.8	-80.5	-332	
2/5/97	8:00	2.677	1066			6.5	4.0		779			1.2	1.2	-67.4	-132.9	-81.0	-769	
3/5/97	8:00	2.686	120						17			1.9	2.0	-35.6	-102.5	-81.4	-9.0	
3/5/97	8:00	2.686	129	3.4		6.5	-5.8		677			2.6	2.8	-41.9	-107.7	-81.9	-673	
Balance 30C		ΔS	28	3.45	0.00	17.4			1801	0			7.9	-49.6	-116.0	-81.2	-1782	
Totals		ΔS	-15.0			17.6			1925	0			30.7				-1927	0

Balance Period No: 32

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
					δ	Cl	mm	m ³	δ	Cl	m ³	Cl	m ³	mm	m ³			
15/5/97	8:00	2.640	841	84.4	1.7								2.2	-45.4	-35.6	-119.3		
16/5/97	8:00	2.636	812	81.1						41			1.7	-49.9	-28.4	-118.7	-43	
17/5/97	8:00	2.633	792	78.7						74			1.9	-47.3	-38.5	-118.0	-75	
18/5/97	8:00	2.644	866	87.8			2.7	2.3	-35.5	231			1.1	0.9	-65.4	-3.2	-117.3	-223
19/5/97	8:00	2.657	939	99.6	0.5		4.5	4.2	-35.5	722			1.7	1.6	-48.7	-42.8	-116.6	-713
Balance 32A		ΔS		15.2	1.10	0.00		6.6		1068	0			5.4	-52.8	-28.2	-117.6	-1054
20/5/97	8:00	2.665	982	107						106			0.9	0.9	-54.3	-42.8	-112.7	-98
21/5/97	8:00	2.659	950	102						76			2.3	2.2	-39.7	-73.1	-108.8	-79
22/5/97	8:00	2.656	934	98.6						27			2.9	2.8	-46.8	-72.2	-104.9	-28
23/5/97	8:00	2.666	988	108	-0.1					952			3.1	3.0	-45.1	-81.5	-100.9	-940
Balance 32B		ΔS		8.4	0.20	0.00		0.0		1161	0			8.9	-46.5	-67.4	-106.8	-1144
24/5/97	8:00	2.744	1698	212			14.8	25.1	-3.0	992			1.3	1.8	-55.1	-87.3	-97.0	-911
25/5/97	8:00	2.764	2044	249			5.2	10.6	-3.0	539			1.5	2.8	-67.6	-99.9	-93.1	-510
26/5/97	8:00	2.758	1907	237			0.2	0.4	-7.5	102			1.6	3.1	-45.8	-104.7	-89.2	-111
27/5/97	8:00	2.750	1772	222	-1.3		0.3	0.5	-7.5	131			1.8	3.2	-54.9	-106.1	-90.6	-143
Balance 32C		ΔS		114	-0.70	0.00		36.7		1764	0			10.9	-55.8	-99.5	-92.5	-1676
Totals		ΔS		137.6			43.2			3993	0			25.1			-3874	0

Balance Period No: 35

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains m ³	Summer Top Up m ³	Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
				δ	Cl	mm	δ			mm	m ³	δE* δE _{pan}	δA	
28/6/97	8:00	2.948	19720	1947						1.7		-81.7	-136.7	-89.2
29/6/97	8:00	2.940	18561	1794				24		0.7	14	-71.4	-120.4	-93.0
30/6/97	8:00	2.933	17650	1668				26		1.8	32	-52.6	-106.5	-96.9
1/7/97	8:00	2.925	16695	1530				25		2.1	36	-46.0	-105.2	-96.3
2/7/97	8:00	2.918	15849	1416				25		2.5	41	-41.9	-104.3	-95.7
Balance 35A		ΔS	-531	-7.90	0.00		0	100	0		123	-53.0	-109.1	-95.5
3/7/97	8:00	2.938	18298	1757				844		2.6	44	-53	-109.4	-95.1
4/7/97	8:00	2.955	20700	2089		8.0	-44.2	28		2.1	41	-104	-132.0	-94.6
5/7/97	8:00	2.947	19568	1928		0.3	-15.2	81		1.6	31	-122	-144.3	-94.0
6/7/97	8:00	3.057	31110	4775		19.0	-15.2	3429		1.5	39	-129	-152.7	-93.4
Balance 35B		ΔS	3359	-9.15	0.00		743	4382	0		155	-102.2	-134.6	-94.3
7/7/97	8:00	3.107	35532	6440				1678		2.4	80	-80.9	-129.8	-92.8
8/7/97	8:00	3.094	34386	5985		11.0	-15.2	254		0.5	19	-60.6	-123.6	-89.3
9/7/97	8:00	3.138	38247	7583		3.0	2.9	1950		1.2	44	-67.3	-118.5	-95.8
10/7/97	8:00	3.118	36470	6836		8.6	-14.7	17		2.2	82	-64.7	-108.8	-102.3
Balance 35C		ΔS	2061	-11.50	0.00			3899	0		225	-68.4	-120.2	-95.1
Totals		ΔS	4889				1566	8381	0		502			-4556
									0					0

Balance Period No: 37

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³	
					δ	Cl	mm	δ	Cl	m ³	δ	Cl	mm	m ³				δE* mm
22/7/97	8:00	3.059	31275	4838	-10.0								2.1	-50.4	-125.3	-76.6		
23/7/97	8:00	3.051	30606	4590					13				2.8	-47.4	-120.0	-78.5		
24/7/97	8:00	3.069	32111	5155			8.0	-13.6	609				2.6	81	-138.5	-80.4	-220	
25/7/97	8:00	3.099	34828	6158			9.1	-13.6	1111				2.2	74	-95.4	-164.7	-351	
26/7/97	8:00	3.093	34297	5951	-8.6		1.8	-11.8	252				1.4	48	-97.2	-159.9	-473	
Balance 37A		ΔS		1113	-9.30	0.00	636		1985		0			290	-76.4	-145.8	-81.4	-1218
27/7/97	8:00	3.109	35706	6511			6.5	-11.8	805				1.1	38	-96.6	-152.5	-86.1	-439
28/7/97	8:00	3.099	34828	6158					33				2.2	77	-69.6	-126.9	-88.0	-309
29/7/97	8:00	3.090	34025	5849			1.0	-3.8	34				2.2	75	-76.5	-134.3	-86.7	-302
30/7/97	8:00	3.081	33181	5546					10				1.8	60	-68.6	-130.5	-85.4	-253
Balance 37B		ΔS		-405	-4.30	0.00	266		882		0			250	-77.8	-136.1	-86.5	-1303
31/7/97	8:00	3.073	32456	5284	-6.6				8				1.6	51	-63.3	-128.3	-84.0	-219
1/8/97	8:00	3.065	31772	5027					8				2.3	74	-62.3	-129.3	-82.7	-191
2/8/97	8:00	3.057	31110	4775					9				2.9	92	-56.5	-125.6	-81.4	-169
3/8/97	8:00	3.052	30691	4621	-4.7				8				0.7	23	-68.6	-125.3	-86.6	-139
Balance 37C		ΔS		-925	-2.35	0.00	0		33		0			239	-62.7	-127.1	-83.7	-719
Totals		ΔS		-217			902		2900		0			779			-3240	0

Balance Period No: 40

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³	
			δ	Cl	mm	δ	m ³	δ	Cl	m ³	δE [*]	δE _{pan}	mm	m ³	δA					
31/8/97	8:00	3.216	44856	10842	-2.2									2.4		-51.5	-99.7	-92.8		
1/9/97	8:00	3.207	44173	10441						2				3.2	144	-49.4	-95.5	-97.0	-259	
2/9/97	8:00	3.243	46921	12081			13.0	-28.4	610	1579				1.3	61	-62.4	-98.0	-95.7	-488	
3/9/97	8:00	3.260	48332	12891			7.9	-2.4	382	1048				2.0	94	-69.6	-101.7	-94.4	-526	
4/9/97	8:00	3.250	47562	12412	-3.5		0.1	-2.4	4.8	31				2.0	95	-59.7	-102.8	-93.1	-420	
Balance 40A		ΔS		1570	-2.85	0.00	997			2660			0		394	-60.3	-99.5	-95.0	-1693	
5/9/97	8:00	3.242	46839	12034						7.000				2.3	108	-61.3	-104.2	-91.7	-277	
6/9/97	8:00	3.387	55469	19476			38.8	-54.8	2152	7302				2.1	108	-155.9	-177.8	-90.4	-1904	
7/9/97	8:00	3.371	54472	18597			0.5	-22.6	27	72				3.0	164	-95.7	-142.4	-89.1	-814	
8/9/97	8:00	3.455	58474	23366	-17.9		28.0	-22.6	1637	4650				3.0	167	-124.2	-162.8	-87.8	-1351	
Balance 40B		ΔS		10954	-10.70	0.00	3817			12031			0		547	-109.3	-146.8	-89.8	-4347	
9/9/97	8:00	3.488	59564	25315			15.2	-22.6	905	2186				3.3	193	-124.0	-164.7	-87.0	-949	
10/9/97	8:00	3.492	59667	25554			8.0	-26.2	477	880				2.6	152	-96.0	-146.5	-86.2	-966	
11/9/97	8:00	3.478	59301	24721			0.1	-26.2	5.9	530				2.3	135	-94.8	-146.8	-85.4	-757	
12/9/97	8:00	3.467	58887	24071	-20.2		1.0	-23.9	59	62				2.7	157	-140.0	-182.6	-84.6	-614	
Balance 40C		ΔS		705	-19.05	0.00	1448			3181			0		638	-113.7	-160.1	-85.8	-3285	
Totals		ΔS		13229			6261			17872			0		1579				-9325	0

Balance Period No: 41

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³	
					δ	Cl	mm	m ³	δ	Cl	m ³	δ	Cl	mm	m ³	δE _{pan}				δE*
12/9/97	8:00	3.467	58887	24071	-20.2									2.7	-140.0	-182.6	-84.6			
13/9/97	8:00	3.452	58374	23191						13				3.1	183	-108.8	-159.6	-83.8	-710	
14/9/97	8:00	3.443	58098	22667						12				2.5	146	-112.3	-163.4	-83.0	-390	
15/9/97	8:00	3.435	57851	22203						8				3.1	181	-102.1	-156.0	-82.2	-291	
16/9/97	8:00	3.424	57470	21569	-19.8					6				3.1	180	-97.1	-153.8	-80.5	-460	
Balance 41A		ΔS		-2502	-20.00	0.00		0		39			0		691	-105.1	-158.2	-82.4	-1850	
17/9/97	8:00	3.415	57087	21053						7				2.6	149	-111.1	-168.5	-78.8	-374	
18/9/97	8:00	3.406	56652	20541			0.4	23	4.3	8				3.0	172	-109.5	-166.3	-79.0	-371	
19/9/97	8:00	3.398	56155	20090			0.2	11.2	4.3	8				2.9	165	-117.3	-172.6	-79.2	-306	
20/9/97	8:00	3.390	55656	19643	-19.0					11				3.0	169	-101.9	-158.2	-79.3	-289	
Balance 41B		ΔS		-1926	-19.40	0.00		34		34			0		655	-110.0	-166.4	-79.1	-1339	
21/9/97	8:00	3.381	55106	19145						6				2.5	139	-97.0	-153.3	-79.5	-365	
22/9/97	8:00	3.373	54604	18706						8				3.2	177	-102.9	-157.6	-79.7	-270	
23/9/97	8:00	3.366	54161	18325						8				3.4	187	-95.4	-148.7	-81.2	-202	
24/9/97	8:00	3.360	53793	18001	-17.2		0.7	38	-2.2	157				4.0	218	-105.8	-154.2	-82.7	-300	
Balance 41C		ΔS		-1642	-18.10	0.00		38		179			0		722	-100.3	-153.4	-80.8	-1137	
Totals		ΔS		-6070				72		252			0		2067				-4326	0

Balance Period No: 42

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain			Drains		Summer Top Up			Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³
			ΔS	ΔS	δ	Cl	mm	m ³	δ	Cl	m ³	δ	Cl	mm	m ³	ΔE _{pan}	ΔE*			
24/9/97	8:00	3.360	53793	18001	-17.2									4.0		-105.8	-154.2	-82.7		
25/9/97	8:00	3.353	53427	17626						51				4.3	229	-76.0	-129.6	-84.2	-197	
26/9/97	8:00	3.348	53171	17359						88				3.4	182	-85.2	-133.8	-85.7	-247	
27/9/97	8:00	3.342	52877	17041						161				2.8	149	-89.5	-134.0	-87.2	-335	
28/9/97	8:00	3.336	52489	16725	-14.3					18				3.3	176	-88.8	-130.8	-88.7	-158	
Balance 42A			ΔS	-1276	-15.75	0.00		80		318		0			737	-84.9	-132.1	-86.5	-937	
29/9/97	8:00	3.330	52151	16411						6				3.7	191	-87.4	-127.8	-90.2	-129	
30/9/97	8:00	3.325	51873	16151						117				3.1	163	-97.8	-130.2	-91.7	-214	
1/10/97	8:00	3.324	51816	16100					-1.1	258				4.4	229	-92.5	-125.3	-93.2	-204	
2/10/97	8:00	3.317	51440	15738	-13.6					29				3.1	162	-77.0	-117.4	-94.7	-229	
Balance 42B			ΔS	-987	-13.95	0.00		124		410		0			745	-88.7	-125.2	-92.5	-777	
3/10/97	8:00	3.310	51077	15379						11				3.9	198	-69.9	-112.3	-96.2	-172	
4/10/97	8:00	3.305	50814	15125						52				4.0	202	-82.0	-112.0	-97.7	-104	
5/10/97	8:00	3.298	50442	14770						10				4.8	243	-74.4	-113.0	-93.6	-122	
6/10/97	8:00	3.290	50032	14368	-8.8					5				5.6	283	-58.0	-109.0	-89.4	-124	
Balance 42C			ΔS	-1370	-11.20	0.00		0		78		0			926	-71.1	-111.6	-94.2	-522	
Totals			ΔS	-3633			204			806		0			2407				-2236	0

Balance Period No: 43

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up		Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³	
				δ	Cl	mm	m ³	δ	Cl	m ³	δ	mm	m ³	δE ⁺				δA
6/10/97	8:00	3.290	50032	14368	-8.8							5.6	-58.0	-109.0	-89.4			
7/10/97	8:00	3.285	49778	14119					5			4.6	-75.6	-120.2	-85.7	-25		
8/10/97	8:00	3.291	50083	14418			3.4	170	1.0			4.1	-96.6	-129.4	-86.5	-145		
9/10/97	8:00	3.335	52432	16673			15.6	818	1.0			4.7	-89.1	-123.5	-87.3	-238		
10/10/97	8:00	3.357	53631	17840	-7.0		9.5	509	2.9			4.9	-79.3	-117.1	-88.1	-460		
Balance 43A		ΔS	3472	-7.90	0.00		1498				0		931	-85.1	-122.5	-86.9	-868	
11/10/97	8:00	3.346	53067	17253								4.2	-67.7	-110.7	-88.9	-387		
12/10/97	8:00	3.336	52489	16725					23			3.9	-72.5	-110.9	-89.7	-333		
13/10/97	8:00	3.327	51985	16255					9			3.8	-75.7	-110.1	-90.5	-282		
14/10/97	8:00	3.320	51598	15893	-5.0				84			3.4	-74.7	-123.6	-79.4	-268		
Balance 43B		ΔS	-1947	-6.00	0.00		0		124		0		801	-72.7	-113.8	-87.1	-1270	
15/10/97	8:00	3.311	51129	15430								4.9	-68.0	-117.1	-80.6	-217		
16/10/97	8:00	3.302	50653	14972					6			4.2	-64.5	-113.2	-81.7	-255		
17/10/97	8:00	3.296	50337	14669					9			5.0	-62.9	-110.7	-82.9	-65		
18/10/97	8:00	3.286	49829	14169	-3.1				15			5.0	-53.7	-104.5	-84.0	-258		
Balance 43C		ΔS	-1724	-4.05	0.00		0		39		0		968	-62.3	-111.4	-82.3	-795	
Totals		ΔS	-199				1498		3936		0		2699			-2933	0	0

Balance Period No: 44

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³	
			ΔS	δ	δ	Cl	mm	m ³	δ	Cl	m ³	δ	mm	m ³	δE_{pan}				δE^*
18/10/97	8:00	3.286	49829	14169	-3.1								5.0	-53.7	-104.5	-84.0			
19/10/97	8:00	3.278	49423	13772						7			5.1	-50.6	-101.4	-85.2	-150		
20/10/97	8:00	3.268	48859	13280						6			6.8	-46.3	-101.8	-77.7	-165		
21/10/97	8:00	3.260	48332	12891						48			4.7	-52.7	-111.3	-70.2	-209		
22/10/97	8:00	3.251	47661	12459	1.6					6			6.0	-51.5	-106.2	-74.9	-148		
Balance 44A		ΔS		-1710	-0.75	0.00		0		67		0		1105	-50.3	-105.2	-77.0	-672	
23/10/97	8:00	3.243	46921	12081						77			4.3	-59.9	-107.2	-79.5	-258		
24/10/97	8:00	3.237	46451	11801			0.1	4.7	28.4	84			5.2	-61.4	-101.6	-84.2	-121		
25/10/97	8:00	3.230	45923	11478						18			3.3	-58.9	-94.8	-88.8	-187		
26/10/97	8:00	3.221	45238	11067	3.0					14			4.6	-52.3	-89.3	-93.5	-216		
Balance 44B		ΔS		-1392	2.30	0.00		4.7		193		0		809	-58.1	-98.2	-86.5	-781	
27/10/97	8:00	3.215	44778	10797						8			4.8	-53.2	-88.4	-92.9	-62		
28/10/97	8:00	3.209	44321	10530			1.8	79.8	11.4	103			5.0	-58.1	-87.1	-92.2	-225		
29/10/97	8:00	3.200	43662	10134						18			5.3	-47.9	-87.5	-91.6	-180		
30/10/97	8:00	3.188	42795	9616	5.8					9			6.2	-43.3	-87.3	-91.0	-261		
Balance 44C		ΔS		-1451	4.40	0.00		79.8		138		0		941	-50.7	-87.6	-91.9	-728	
Totals		ΔS		-4553			84.5			398		0		2855				-2181	0

Balance 44A corresponds to start irrigation pumping

Balance Period No: 45

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³		
					δ	Cl	mm	m ³	δ	Cl	m ³	δ	mm	m ³				δE [*]	δA
30/10/97	8:00	3.188	42795	9616	5.8								6.2	-43.3	-87.3	-91.0			
31/10/97	8:00	3.178	42017	9192					7				5.2	-39.1	-86.8	-90.4	-210		
1/11/97	8:00	3.170	41372	8858					12				4.9	-204	-43.5	-89.7	-142		
2/11/97	8:00	3.162	40687	8530					13				5.2	-214	-46.4	-83.3	-127		
3/11/97	8:00	3.156	40096	8287	9.5				6				5.6	-227	-40.3	-88.6	-22		
Balance 45A		ΔS	-1329		7.65	0.00		0	38		0			867	-42.3	-85.9	-87.5	-500	
4/11/97	8:00	3.148	39231	7970					39				5.5	-219	-44.1	-97.1	-72.6	-137	
5/11/97	8:00	3.140	38445	7659					12				4.4	-170	-47.9	-94.3	-76.5	-153	
6/11/97	8:00	3.132	37688	7355					8				4.4	-167	-40.0	-86.2	-80.3	-145	
7/11/97	8:00	3.123	36897	7019	12.3				17				6.4	-237	-34.9	-82.0	-84.2	-116	
Balance 45B		ΔS	-1268		10.90	0.00		0	76		0			793	-41.7	-89.9	-78.4	-551	
8/11/97	8:00	3.115	36215	6727					41				5.4	-198	-37.3	-83.9	-80.0	-135	
9/11/97	8:00	3.108	35620	6476					12				5.8	-210	-36.1	-86.1	-75.8	-53	
10/11/97	8:00	3.102	35091	6263					5				5.0	-177	-38.0	-81.1	-80.4	-41	
11/11/97	8:00	3.095	34475	6020	15.4				33				5.9	-207	-34.8	-75.5	-84.9	-69	
Balance 45C		ΔS	-999		13.85	0.00		0	91		0			792	-36.5	-81.7	-80.3	-298	
Totals		ΔS	-3596					0	205		0			2452				-1349	0

Balance Period No: 46

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³	Lake		Rain		Drains		Summer Top Up		Evaporation		Apparent GW Flux	GW In m ³	Lake-GW m ³
				δ	CI	mm	m ³	δ	CI	m ³	δE* mm	δE* m ³	δA			
11/11/97	8:00	3095	34475	6020	15.4							5.9	-34.8	-75.5	-84.9	
12/11/97	8:00	3085	33546	5680					30			6.6	223	-33.0	-70.7	-89.5
13/11/97	8:00	3080	33091	5513	16.9				51			1.5	49	-39.8	-54.0	-94.1
14/11/97	8:00	3075	32636	5349					29			2.5	82	-33.9	-54.9	-98.7
15/11/97	8:00	3066	31856	5059	18.1				56			5.3	172	-30.6	-54.7	-103.2
Balance 46A		ΔS	-961	16.80	0.00		0		166		0		526	-34.3	-58.6	-96.4
16/11/97	8:00	3059	31275	4838					43			6.9	217	-27.6	-53.9	-107.8
17/11/97	8:00	3052	30691	4621					21			5.4	168	-25.1	-62.1	-98.3
18/11/97	8:00	3045	30099	4408					59			6.3	190	-24.8	-64.4	-88.7
19/11/97	8:00	3036	29301	4141	22.2				27			6.7	198	-23.2	-69.9	-79.2
Balance 46B		ΔS	-918	20.15	0.00		0		150		0		774	-25.2	-62.6	-93.5
20/11/97	8:00	3027	28519	3880					26			5.4	157	-24.6	-66.1	-81.6
21/11/97	8:00	3019	27798	3655					24			6.0	170	-29.1	-55.9	-84.1
22/11/97	8:00	3037	29388	4170			5.2	153	690	-5.1		3.1	89	-32.8	-43.3	-86.5
23/11/97	8:00	3030	28780	3966	22.7				26			4.0	115	-26.8	-52.3	-88.9
Balance 46C		ΔS	-175	22.45	0.00		153		766		0		532	-28.3	-54.4	-85.3
Totals		ΔS	-2054				153		1082		0		1831			-1458
																0

Balance Period No: 47

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation		δE*	δA	Apparent GW Flux	GW In m ³	Lake-GW m ³
			ΔS		δ	Cl	mm	m ³	δ	Cl	m ³	δE _{pan}	mm						
23/11/97	8:00	3.030	28780	3966		22.7							4.0	-26.8	-52.3	-88.9			
24/11/97	8:00	3.024	28255	3795						13			5.5	-25.2	-59.2	-84.5	-26		
25/11/97	8:00	3.016	27522	3572						99			2.5	-29.9	-53.9	-81.4	-252		
26/11/97	8:00	3.013	27242	3490						70			4.9	-28.7	-59.9	-78.3	-46		
27/11/97	8:00	3.004	26357	3249		24.2				25			3.9	-23.8	-64.6	-77.9	-165		
Balance 47A		ΔS		-717		23.45	0.00			207		0		-26.9	-59.4	-80.5	-490		
28/11/97	8:00	2.996	25513	3041						15			4.8	-23.1	-63.9	-77.4	-99		
29/11/97	8:00	2.987	24570	2816						65			7.4	-20.8	-61.7	-80.5	-105		
30/11/97	8:00	2.980	23815	2647						28			6.9	-20.1	-57.3	-83.6	-30		
1/12/97	8:00	2.973	23011	2483		26.2				30			6.6	-20.3	-59.4	-78.4	-40		
Balance 47B		ΔS		-766		25.20	0.00			138		0		-21.1	-60.6	-80.0	-274		
2/12/97	8:00	2.965	22010	2303						83			5.8	-20.3	-46.6	-82.6	-132		
3/12/97	8:00	2.954	20566	2068						79			6.0	-17.7	-45.7	-86.8	-185		
4/12/97	8:00	2.945	19275	1889						68			5.2	-16.6	-37.4	-91.0	-143		
5/12/97	8:00	2.934	17772	1685		28.8				54			4.7	-15.1	-34.3	-95.2	-171		
Balance 47C		ΔS		-798		18.33	0.00			284		0		-17.4	-41.0	-88.9	-631		
Totals		ΔS		-2281				29.9		629		0		1545			-1395	0	0

Balance Period No: 48

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation		δA	Apparent GW Flux	GW In m ³	Lake-GW m ³	
			ΔS	ΔS	δ	Cl	mm	m ³	δ	Cl	m ³	mm	δE ⁺ δE _{pan}						
5/12/97	8:00	2.934	17772	1685	28.8								4.7	-15.1	-34.3	-95.2			
6/12/97	8:00	2.923	16445	1497									7.5	-13.8	-39.5	-96.7	-60		
7/12/97	8:00	2.915	15483	1369									7.4	-12.9	-37.9	-98.1	-10		
8/12/97	8:00	2.908	14674	1264									7.2	-10.9	-48.2	-85.0	4		
9/12/97	8:00	2.896	13133	1097	31.1								6.3	-11.1	-52.7	-81.6	-80		
Balance 48A		ΔS		-588	19.97	0.00		0		0				442	-12.4	-44.6	-90.3	-146	
10/12/97	8:00	2.881	11225	914									8.3	-10.2	-57.7	-78.2	-81		
11/12/97	8:00	2.868	9554	779									7.0	-7.5	-50.7	-74.8	-62		
12/12/97	8:00	2.856	8274	672									6.4	-5.6	-37.8	-82.1	-50		
13/12/97	8:00	2.844	7127	580	34.3								6.6	-5.2	-35.6	-89.4	-41		
Balance 48B		ΔS		-517	21.80	0.00		0		0				282	-7.1	-45.5	-81.1	-235	
14/12/97	8:00	2.835	6357	519									8.9	-4.4	-32.3	-93.4	-1		
15/12/97	8:00	2.828	5767	477									8.3	-4.3	-45.8	-83.3	9		
16/12/97	8:00	2.819	5002	428									8.7	-1.1	-47.4	-73.1	-2		
17/12/97	8:00	2.809	4239	382	36.9								5.6	2.7	-36.9	-75.4	-20		
Balance 48C		ΔS		-198	23.73	0.00		0		0				183	-1.8	-40.6	-81.3	-15	
Totals			ΔS	-1303				0		0				907			-396	0	0

Balance Period No: 49

West Lake

Day & Time	Stage m AHD	Area m ²	Volume m ³		Lake		Rain		Drains		Summer Top Up		Evaporation			Apparent GW Flux	GW In m ³	Lake-GW m ³	
					δ	Cl	mm	m ³	δ	Cl	m ³	δ	mm	m ³	δE _{pan}				δE*
17/12/97	8:00	4239	382	36.9									5.6	2.7	-36.9	-75.4			
18/12/97	8:00	3508	340										5.8	22.6	1.7	-35.2	-77.7	-19.4	
19/12/97	8:00	2788	2951	308									5.8	18.9	1.7	-30.7	-79.9	-13.1	
20/12/97	8:00	2779	2545	283									5.2	14.3	-0.5	-34.2	-82.2	-10.7	
Balance 49A		ΔS	-99	12.30	0.00		0			0				55.8	1.0	-33.4	-79.9	-43.2	
21/12/97	8:00	2774	271	36.1									6.8	16.6	-0.8	-31.5	-84.5	4.6	
22/12/97	8:00	2771	2238	264									5.0	11.5	-0.1	-36.5	-81.9	4.5	
23/12/97	8:00	2760	1951	241									9.2	19.2	-1.4	-46.4	-79.3	-3.8	
24/12/97	8:00	2745	1710	214									7.6	13.9	2.9	-32.2	-83.3	-13.1	
25/12/97	8:00	2735	1604	197	39.3								8.4	14.0	3.5	-29.6	-87.3	-3.0	
Balance 49B		ΔS	-86	37.70	0.00		0			0				75.2	0.8	-35.2	-83.3	-10.8	
Totals		ΔS	-185				0			0				131.0				-54.0	0

