

## Sediment Basin Water Monitoring - September 2018

Monitoring Location: POINT 1 - Sediment Basin Outlet

Licensee: Laing O'Rourke Australia Construction Pty Ltd  
 Premises: Woolgoolga to Ballina Pacific Highway Upgrade Project, Harwood NSW 2465  
 Licence No: 20713



Portion / Section	Contractor	Basin Name/ Number	Rainfall start date	Rainfall end date	Rainfall total (mL)	Date of Treatment	Date of Discharge	Volume of Discharge (KL)	EPL water quality parameters			Turbidity NTU Limit - Varies per Contractor	Comments
									Oil & Grease Nil	pH 6.5 - 8.5	TSS (mg/L) Limit ≤ 50 mg/L		
A 3	SWC	PB- 036510N	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	800	Nil	7.50	30	40	
A 3	SWC	TB- 037020S	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	500	Nil	7.50	9	20	
A 3	SWC	TB- 037370N	25/08/2018	8/09/2018	111	11/09/2018	11/09/2018	400	Nil	7.20	19	25	
A 3	SWC	TB- 037620N	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	350	Nil	6.90	6	24	
A 3	SWC	TB- 037810N	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	450	Nil	6.70	2	25	
A 3	SWC	TB- 038010N	25/08/2018	8/09/2018	111	11/09/2018	11/09/2018	280	Nil	7.90	3	20	
A 3	SWC	TB- 038070N	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	280	Nil	7.10	7	20	
A 3	SWC	TB- 038180N	25/08/2018	8/09/2018	111	12/09/2018	12/09/2018	250	Nil	7.10	11	27	
A 3	SWC	TB- 038480N	25/08/2018	8/09/2018	111	7/09/2018	7/09/2018	600	Nil	6.50	9	30	
A 3	SWC	TB- 038550N	25/08/2018	8/09/2018	111	7/09/2018	7/09/2018	600	Nil	6.80	7	35	
A 3	SWC	TB- 039030N	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	350	Nil	6.80	2	20	
A 3	SWC	TB- 039580N	25/08/2018	8/09/2018	111	11/09/2018	11/09/2018	900	Nil	7.90	17	45	
A 3	SWC	TB- 040870N	25/08/2018	8/09/2018	111	7/09/2018	7/09/2018	500	Nil	6.80	33	24	
A 3	SWC	TB- 041340S	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	450	Nil	8.10	10	24	
A 3	SWC	PB- 043490S	25/08/2018	8/09/2018	111	11/09/2018	11/09/2018	400	Nil	7.10	18	12	
A 3	SWC	PB- 044200S	25/08/2018	8/09/2018	111	11/09/2018	11/09/2018	300	Nil	7.90	10	10	
A 3	SWC	PB- 044470N	25/08/2018	8/09/2018	111	10/09/2018	10/09/2018	900	Nil	7.60	13	24	
A 3	SWC	PB- 046000N	25/08/2018	8/09/2018	96	7/09/2018	7/09/2018	450	Nil	8.20	7	4	
A 3	SWC	PB- 047020N	25/08/2018	8/09/2018	96	12/09/2018	12/09/2018	600	Nil	7.10	23	12	
A 3	SWC	PB- 047340N	25/08/2018	8/09/2018	96	11/09/2018	11/09/2018	300	Nil	7.20	1	10	
A 3	SWC	PB- 047710N	25/08/2018	8/09/2018	96	10/09/2018	10/09/2018	450	Nil	6.80	25	45	
A 3	SWC	PB- 048010S	25/08/2018	8/09/2018	96	7/09/2018	7/09/2018	600	Nil	7.10	2	24	
A 3	SWC	TB- 048610S	25/08/2018	8/09/2018	96	11/09/2018	11/09/2018	200	Nil	7.10	2	15	
A 3	SWC	TB- 048780N	25/08/2018	8/09/2018	96	11/09/2018	11/09/2018	300	Nil	7.70	43	24	
A 3	SWC	TB- 050010N	25/08/2018	8/09/2018	96	12/09/2018	12/09/2018	300	Nil	6.90	14	27	
A 3	SWC	TB- 050360N	25/08/2018	8/09/2018	96	11/09/2018	11/09/2018	300	Nil	7.10	1	24	
A 3	SWC	PB- 052390N	25/08/2018	8/09/2018	96	11/09/2018	11/09/2018	600	Nil	7.60	1	24	
A 3	SWC	PB- 052680N	25/08/2018	8/09/2018	96	10/09/2018	10/09/2018	450	Nil	6.80	1	24	
A 3	SWC	TB- 053830N	25/08/2018	8/09/2018	96	12/09/2018	12/09/2018	350	Nil	6.80	20	24	
A 3	SWC	PB- 054660N	25/08/2018	8/09/2018	96	10/09/2018	10/09/2018	550	Nil	7.00	16	24	
A 3	SWC	PB- 055110N	25/08/2018	8/09/2018	96	10/09/2018	10/09/2018	300	Nil	7.80	10	24	
A 3	SWC	PB-056880N	25/08/2018	8/09/2018	104.8	6/09/2018	6/09/2018	720	Nil	7.10	13	40	
A 3	SWC	PB-057010N	25/08/2018	8/09/2018	104.8	6/09/2018	6/09/2018	150	Nil	6.70	45	20	
A 3	SWC	TB-057280N	25/08/2018	8/09/2018	104.8	6/09/2018	6/09/2018	675	Nil	6.80	31	30	
A 3	SWC	TB-062840S	25/08/2018	8/09/2018	104.8	6/09/2018	6/09/2018	150	Nil	8.00	9	5	
A 3	SWC	TB-063540N	25/08/2018	8/09/2018	104.8	6/09/2018	6/09/2018	150	Nil	8.00	27	35	
A 3	SWC	TB-063890N	25/08/2018	8/09/2018	114.2	6/09/2018	6/09/2018	125	Nil	6.60	4	5	
A 3	SWC	TB-067080N	25/08/2018	8/09/2018	114.2	6/09/2018	6/09/2018	700	Nil	7.00	2	24	
A 3	SWC	TB-067520N	25/08/2018	8/09/2018	114.2	6/09/2018	6/09/2018	400	Nil	7.00	8	30	
A 3	SWC	TB-067340N	25/08/2018	8/09/2018	114.2	6/09/2018	6/09/2018	600	Nil	8.10	7	24	
A 3	SWC	PB-056880N	25/08/2018	8/09/2018	104.8	6/09/2018	6/09/2018	400	Nil	6.90	8	20	
A 3	SWC	TB-059210N	25/08/2018	8/09/2018	104.8	7/09/2018	7/09/2018	400	Nil	6.80	29	60	
A 3	SWC	TB-059350N	25/08/2018	8/09/2018	104.8	7/09/2018	7/09/2018	580	Nil	6.90	7	20	
A 3	SWC	TB-062840N	25/08/2018	8/09/2018	104.8	7/09/2018	7/09/2018	150	Nil	7.70	6	5	
A 3	SWC	TB-065570N	25/08/2018	8/09/2018	114.2	7/09/2018	7/09/2018	325	Nil	7.00	6	5	
A 3	SWC	TB-066490N	25/08/2018	8/09/2018	114.2	7/09/2018	7/09/2018	190	Nil	7.00	2	10	
A 3	SWC	TB-067080N	25/08/2018	8/09/2018	114.2	6/09/2018	7/09/2018	800	Nil	7.10	5	24	
A 3	SWC	TB-067340N	25/08/2018	8/09/2018	114.2	6/09/2018	7/09/2018	100	Nil	6.50	8	24	
A 3	SWC	TB-068090N	25/08/2018	8/09/2018	114.2	7/09/2018	7/09/2018	1000	Nil	7.00	35	50	
A 3	SWC	TB-066490N	25/08/2018	8/09/2018	114.2	7/09/2018	10/09/2018	200	Nil	7.10	3	24	
A 3	SWC	TB-067080N	25/08/2018	8/09/2018	114.2	6/09/2018	10/09/2018	600	Nil	6.80	3	24	
A 3	SWC	TB-067520N	25/08/2018	8/09/2018	114.2	10/09/2018	10/09/2018	100	Nil	7.60	30	24	
A 3	SWC	PB-067940N	25/08/2018	8/09/2018	114.2	10/09/2018	10/09/2018	400	Nil	6.50	4	25	
A 3	SWC	TB-068090N	25/08/2018	8/09/2018	114.2	10/09/2018	10/09/2018	400	Nil	7.10	25	32	
A 3	SWC	PB-056880N	25/08/2018	8/09/2018	104.8	11/09/2018	11/09/2018	200	Nil	6.80	3	24	
A 3	SWC	TB-059350N	25/08/2018	8/09/2018	104.8	11/09/2018	11/09/2018	100	Nil	8.40	6	24	
A 3	SWC	TB-067080N	25/08/2018	8/09/2018	114.2	11/09/2018	11/09/2018	200	Nil	7.50	2	24	
A 3	SWC	PB-067940N	25/08/2018	8/09/2018	114.2	11/09/2018	11/09/2018	175	Nil	7.40	8	20	
A 3	SWC	TB-068090N	25/08/2018	8/09/2018	114.2	11/09/2018	11/09/2018	60	Nil	7.10	7	30	
A 3	SWC	PB-068700N	25/08/2018	8/09/2018	114.2	11/09/2018	11/09/2018	500	Nil	6.60	23	55	
A 3	SWC	TB-065570N	25/08/2018	8/09/2018	114.2	11/09/2018	11/09/2018	200	Nil	8.40	3	24	
A 3	SWC	TB-064530N	25/08/2018	8/09/2018	114.2	12/09/2018	12/09/2018	600	Nil	8.30	10	10	
A 3	SWC	PB-068700N	25/08/2018	8/09/2018	114.2	12/09/2018	12/09/2018	400	Nil	7.60	39	40	
A 3	SWC	PB-067940N	25/08/2018	8/09/2018	114.2	13/09/2018	13/09/2018	600	Nil	8.10	12	20	
A 3	SWC	PB-067940N	25/08/2018	8/09/2018	114.2	14/09/2018	14/09/2018	300	Nil	8.00	11	20	discharged to increase storage capacity for future rain events
A 3	SWC	PB-067940N	25/08/2018	8/09/2018	114.2	17/09/2018	17/09/2018	150	Nil	8.30	16	20	discharged to increase storage capacity for future rain events
A 3	SWC	TB-068090N	25/08/2018	8/09/2018	114.2	21/09/2018	21/09/2018	300	Nil	6.70	3	24	discharged to increase storage capacity for future rain events
A 3	SWC	PB-068700N	25/08/2018	8/09/2018	114.2	21/09/2018	21/09/2018	400	Nil	6.60	4	24	discharged for basin re-build
A 4	BGC	SB 77500 E	25/08/2018	27/08/2018	0.0236	28/08/2018	29/08/2018	1140	Nil	7.12	13	19	As per August report, results for TSS received
A 4	BGC	SB 78400 E	25/08/2018	27/08/2018	0.0236	28/08/2018	28/08/2018	2340	Nil	7.17	9	33	As per August report, results for TSS received
A 4	BGC	SB 77500 W	4/09/2018	8/09/2018	0.0774	7/09/2018	12/09/2018	621	Nil	7.5	24	74	As per results from EAL
A 4	BGC	SB 78000	4/09/2018	8/09/2018	0.0774	7/09/2018	N/A	N/A	N/A	N/A	N/A	N/A	Basin is compliant with markers
A 4	BGC	SB 78000	4/09/2018	8/09/2018	0.0774	7/09/2018	N/A	N/A	N/A	N/A	N/A	N/A	Basin is compliant with markers
A 4	BGC	SB 77500 E	4/09/2018	8/09/2018	0.0774	7/09/2018	12/09/2018	1140	Nil	7.38	24	29	As per results from EAL
A 4	BGC	SB 78450 W	4/09/2018	8/09/2018	0.0774	7/09/2018	13/09/2018	295	Nil	8.22	7	78.4	
A 4	BGC	SB 78400 E	4/09/2018	8/09/2018	0.0774	7/09/2018	12/09/2018	2340	Nil	7.44	24	36	As per results from EAL
A 4	BGC	SB GH4	4/09/2018	8/09/2018	0.0774	7/09/2018	11/09/2018	1751	Nil	7.31	15	31	As per results from EAL
A 4	BGC	SB 78450	4/09/2018	8/09/2018	0.0774	7/09/2018	12/09/2018	781	Nil	7.86		74.1	As per results from EAL

A 4	BGC	SB 75200 E	4/09/2018	8/09/2018	0.0774	7/09/2018	11/09/2018	498	Nil	7.59		75.4	
A 4	BGC	SB 75200 W	4/09/2018	8/09/2018	0.0774	7/09/2018	13/09/2018	213	Nil	7.34		30.9	
A 4	BGC	SB 75500	4/09/2018	8/09/2018	0.0774	11/09/2018	14/09/2018	327	Nil	7.5	36	54	As per results from EAL
A 4	BGC	SB 69620	4/09/2018	8/09/2018	0.076	13/09/2018	13/09/2018	2292	Nil	7.73		51.3	
A 4	BGC	SB 69910	4/09/2018	8/09/2018	0.076	13/09/2018	13/09/2018	283	Nil	7.34		42.5	
A 4	BGC	SB 69610 W	4/09/2018	8/09/2018	0.076	13/09/2018	13/09/2018	390	Nil	7.41		29.7	
A 4	BGC	SB 69052	4/09/2018	8/09/2018	0.076	13/09/2018	N/A	N/A	N/A	N/A	N/A	N/A	Basin is compliant with markers
A 4	BGC	SB 77120	4/09/2018	8/09/2018	0.0774	7/09/2018	12/09/2018	397	Nil	8.02		67.9	
A 4	BGC	SB 78450 W	25/09/2018	27/09/2018	0.0066	27/09/2018	27/09/2018	295	Nil	8.47		40	
B 5	Golding	Castle Basin	1/09/2018	10/09/2018	82	12/09/2018	14/09/2018	300	Nil	7.20		10	sample not submitted to lab
B 5	Golding	Old BMD Basin (Castles)	1/09/2018	10/09/2018	82	12/09/2018	14/09/2018	200	Nil	7.47	7	6	
B 5	Golding	Iluka East Lower Basin	1/09/2018	10/09/2018	82	12/09/2018	14/09/2018	650	Nil	7.71		8	sample not submitted to lab
E	AFHJV	Sediment Basin 1	3/09/2018	6/09/2018	87	6/09/2018	7/09/2018	600	Nil	6.59	Field: 28 mg/L Lab: 3 mg/L	7.1	Pre-treatment with Gypsum. Gypsum, Ecofloc and HCL acid treatment following rain event.
E	AFHJV	Sediment Basin 2	3/09/2018	6/09/2018	87	06 & 07/09/2018	10 & 11/09/2018	2000	Nil	6.61	Field: 28 mg/L Lab: 20 mg/L	4.3	Pre-treatment with Gypsum. Gypsum, Ecofloc and HCL acid treatment following rain event.
B 6	BMD	BMD-SB01	4/09/2018	8/09/2018	71.4	N/A	7/09/2018	5	Nil	7.43	14	30.2	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB01	4/09/2018	8/09/2018	71.4	N/A	10/09/2018	700	Nil	6.92	14	22.3	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB01	4/09/2018	8/09/2018	71.4	N/A	11/09/2018	100	Nil	6.62	14	30.9	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB03	4/09/2018	8/09/2018	71.4	N/A	8/09/2018	900	Nil	6.58	9	17.8	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB03	4/09/2018	8/09/2018	71.4	N/A	10/09/2018	800	Nil	6.60	9	8.6	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB06	4/09/2018	8/09/2018	71.4	12/09/2018	13/09/2018	400	Nil	7.90	13	23.6	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB08	4/09/2018	8/09/2018	71.4	13/09/2018	13/09/2018	400	Nil	7.74		43.5	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB12	4/09/2018	8/09/2018	71.4	N/A	11/09/2018	200	Nil	6.90		8.3	TSS/Turbidity correlation approved
B 6	BMD	BMD-SBCB	4/09/2018	8/09/2018	71.4	N/A	11/09/2018	200	Nil	8.16		21.6	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB11	4/09/2018	8/09/2018	71.4	N/A	13/09/2018	300	Nil	7.12	13	34.2	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB11	4/09/2018	8/09/2018	71.4	N/A	12/09/2018	200	Nil	7.34	13	38.2	TSS/Turbidity correlation approved
B 6	BMD	BMD-SB11	4/09/2018	8/09/2018	71.4	N/A	13/09/2018	100	Nil	6.58	13	44.4	TSS/Turbidity correlation approved
B 6	BMD	MC01	4/09/2018	8/09/2018	71.4	N/A	8/09/2018	50	Nil	6.64	13	12.8	TSS/Turbidity correlation approved
B 6	BMD	MC01	4/09/2018	8/09/2018	71.4	N/A	10/09/2018	100	Nil	6.64	13	12.8	TSS/Turbidity correlation approved
B 6	BMD	MC03	4/09/2018	8/09/2018	71.4	N/A	14/09/2018	300	Nil	7.32		8.5	TSS/Turbidity correlation approved
B 6	BMD	MC03	4/09/2018	8/09/2018	71.4	N/A	13/09/2018	200	Nil	7.22		8.3	TSS/Turbidity correlation approved
C	CPB	144800	3/09/2018	11/09/2018	82.4	11/09/2018	13/09/2018	510	Nil	8.43	5		
C	CPB	119800	3/09/2018	11/09/2018	82.4	11/09/2018	12/09/2018	450	Nil	6.80	8		
D 10 & 11	LendLease	Cut 3 SW (147220W)	3/09/2018	8/09/2018	98	10/09/2018	11/09/2018	671	Nil	7.10	26.4	19	
D 10 & 11	LendLease	Monti's Basin (149200E)	3/09/2018	8/09/2018	98	10/09/2018	11/09/2018	2263	Nil	7.20	10.86	7	
D 10 & 11	LendLease	Lumley's Basin (152200W)	3/09/2018	8/09/2018	98	10/09/2018	12/09/2018	2489	Nil	7.20	11.69	17	