

		Max TDS (ton/day) (at LDP)	Total Flow (ML/day)	TDS conc. (T/ML)	Actual flow taken	Actual TDS per LDP	Total Flow (T/day)	Total TDS Flow Diverted (T/day)	TDS conc. of diverted flow (T/ML)	TDS Collected from Coxs	TDS Collected from Wollomgambe	Piping Requirements (length km)	Total reduction of TDS - T/day (normalised)	Total Diverged Flow (ML/day) % of max capacity 35 ML	% reduction TDS in Wollamgambe	% reduction TDS in Coxes	Normalised total pipe length	Total Pump Power Normalised	RO Treatment (normalised)	pipe length for pump calc	Inlet altitude	Outlet altitude	Altitude difference	Friction loss	Head loss	Pump power	Total Pump Power
<b>Option 1</b>	CL002	5.73	25	0.2292	25	5.7	25.0	5.7	0.2	0.0	5.7	33.4	0.0	0.7	1.0	0.0	0.0	0.1	1.0	33.4	1062	941	-121	1670	1549	38725	38725
<b>Option 2</b>	SV006	125.2	36	3.4777778	35	121.7	35.0	121.7	3.5	121.7	0.0	4.9	1.0	1.0	0.0	0.8	1.0	1.0	0.0	4.9	897	941	44	245	289	10115	10115
<b>Option 3</b>	CL002	5.73	25	0.2292	25	5.7	35.0	12.4	0.4	6.7	5.7	33.4	0.1	1.0	1.0	0.0	0.0	0.0	1.0	33.4	1062	941	-121	1670	1549	38725	42700
<b>Option 4</b>	CL002	5.73	25	0.2292	25	5.7	35.0	40.5	1.2	34.8	5.7	33.7	0.3	1.0	1.0	0.2	0.0	0.0	0.7	33.4	1062	941	44	245	289	41615	41615
<b>Option 5</b>	SV001	6.7	10	0.67	10	6.7	35.0	93.6	2.7	93.6	0.0	7.3	0.8	1.0	0.0	0.6	0.9	1.0	0.2	6.95	891	941	50	347.5	397.5	3975	11200
		SV006	125.2	36	3.4777778	25	86.944444444													4.9	897	941	44	245	289	7225	

Can change

Normalised criteria

Pumping calculations (can change length for each pipe and altitudes)

**Total TDS in Coxs**

154.66 ton/day

**Total TDS in Wollongambe**

5.73 ton/day

**Max flow capacity**

35 ML/day

	Option 1	Option 2	Option 3	Option 4	Option 5							
Weighting	Criteria	Weighting	Score	Weighted	Score	Weighted	Score	Weighted	Score	Weighted		
Environmental	Flow Capacity	0.025	0.714	0.018	1.000	0.025	1.000	0.025	1.000	0.025		
	Total TDS reduction	0.025	0.000	0.000	1.000	0.025	0.058	0.001	0.300	0.007		
	TDS Reduction Wollongambe	0.025	1.000	0.025	0.000	0.000	1.000	0.025	1.000	0.025		
	TDS Reduction Coxs	0.025	0.000	0.000	0.787	0.020	0.043	0.001	0.225	0.006		
Economic	Piping requirement	0.225	0.010	0.002	1.000	0.225	0.010	0.002	0.000	0.918	0.207	
	Pumping requirement	0.225	0.122	0.027	1.000	0.225	0.000	0.000	0.033	0.007	0.967	0.218
	RO treatment requirement	0.45	1.000	0.450	0.000	0.000	0.961	0.433	0.714	0.321	0.247	0.111
<b>Total</b>		<b>1</b>	<b>0.523</b>	<b>0.520</b>	<b>0.487</b>	<b>0.392</b>	<b>0.392</b>		<b>0.594</b>			

Can change overall weighting or change individual weighting, but has to add up to 1

**Results Tabulated**

Weighting	Environmental	Economic	Best Option	Option 1	Option 2	Option 3	Option 4	Option 5
0.9	0.1		Option 2	0.439	0.677	0.521	0.605	0.591
0.8	0.2		Option 2	0.449	0.657	0.517	0.578	0.592
0.7	0.3		Option 2	0.460	0.638	0.513	0.551	0.592
0.6	0.4		Option 2	0.470	0.618	0.508	0.525	0.592
0.5	0.5		Option 2	0.481	0.598	0.504	0.498	0.593
0.4	0.6		Option 5	0.491	0.579	0.500	0.472	0.593
0.3	0.7		Option 5	0.502	0.559	0.496	0.445	0.594
0.2	0.8		Option 5	0.512	0.539	0.492	0.419	0.594
0.1	0.9		Option 5	0.523	0.520	0.487	0.392	0.594