

Scenario	Strategic Issue	Catchment	Option
Storage Scenario	Water Security	Manning	5.1 Manning Peg Leg Creek Dam - Local Scheme Only
	Water Security	Bulahdelah	1.1 Bulahdelah Off Stream Storage
	Water Security	Gloucester	3.1 Gloucester Off Stream Storage
	Water Security	Stroud	2.1 Stroud Additional Off Stream Storage
	Climate Change	Manning	5.1 Peg Leg Pumped Hydro
Climate Independent Scenario	Water Security	Manning	5.4 Manning Desalination - Local Scheme Only
	Water Security	Bulahdelah	1.1 Bulahdelah Off Stream Storage
	Water Security	Bulahdelah	1.7 Bulahdelah Groundwater
	Water Security	Gloucester	3.1 Gloucester Off Stream Storage
	Water Security	Gloucester	3.7 Gloucester Groundwater
	Water Security	Stroud	2.1 Stroud Additional Off Stream Storage
	Water Security	Stroud	2.5 Stroud Groundwater
	Sustainable Effluent Management	Taree / Dawson	4.1 Recycled Water Unrestricted - Taree Rec Grounds
Recycled Water Scenario	Water Security	Manning	5.3 Manning Peg Leg Creek Dam - Local Scheme with PRW Recovery
	Water Security	Bulahdelah	1.1 Bulahdelah Off Stream Storage
	Water Security	Bulahdelah	1.7 Bulahdelah Groundwater
	Water Security	Gloucester	3.1 Gloucester Off Stream Storage
	Water Security	Gloucester	3.7 Gloucester Groundwater
	Water Security	Stroud	2.1 Stroud Additional Off Stream Storage
	Water Security	Stroud	2.5 Stroud Groundwater
	Sustainable Effluent Management	Taree / Dawson	4.1 Recycled Water Unrestricted - Taree Rec Grounds
	Sustainable Effluent Management	Gloucester	4.3 Recycled Water Restricted - Gloucester
	Sustainable Effluent Management	Gloucester	4.4 Recycled Water Unrestricted - Gloucester
Water Sharing Scenario	Water Security	Manning	5.2 Manning Peg Leg Creek Dam - Combined Demand
	Water Security	Gloucester	3.3 Gloucester Regional Connection Pipeline from Manning via Krumbach
	Water Security	Bulahdelah	1.5 Bulahdelah Regional Connection Pipeline from Manning via Nabiach
	Water Security	Stroud	2.3 Stroud Regional Connection Pipeline from Hunter Water via Dungog
	Sustainable Effluent Management	Taree / Dawson	4.1 Recycled Water Unrestricted - Taree Rec Grounds
	Sustainable Effluent Management	Old Bar	4.2 Recycled Water Unrestricted - Old Bar
	Sustainable Effluent Management	Gloucester	4.3 Recycled Water Restricted - Gloucester
	Sustainable Effluent Management	Gloucester	4.4 Recycled Water Unrestricted - Gloucester
	Sustainable Effluent Management	Forster	4.6 Recycled Water Unrestricted - Forster
	Climate Change	Manning	5.1 Peg Leg Pumped Hydro

CAPEX Overheads	%
Contingency	50%
Planning, small jobs	5%
Planning, big jobs	3%
Design, small jobs	10%
Design, big jobs	5%
Project Management	5%

Option	Strategic Issue	Catchment / Supply Zone	Yield	Unit	Direct Cost	Contingency	Total Direct Cost	Planning	Design	Project Management	Total CAPEX	Estimated Annual O&M
1.1 Bulahdelah Off Stream Storage	Water Security	Bulahdelah	200	ML	\$10,657,410	\$5,328,705	\$15,986,115	\$319,722	\$532,871	\$799,306	\$17,638,014	\$359,661
1.2 Bulahdelah Regional Connection Pipeline from Tea Gardens	Water Security	Bulahdelah	0.57	ML/day	\$14,278,006	\$7,139,003	\$21,417,009	\$428,340	\$713,900	\$1,070,850	\$23,630,100	
1.3 Bulahdelah Regional Connection Pipeline from Manning via Smiths Lake	Water Security	Bulahdelah	0.57	ML/day	\$35,657,489	\$17,828,745	\$53,486,234	\$1,069,725	\$1,782,874	\$2,674,312	\$59,013,145	
1.4 Bulahdelah Desalination at Pacific Palms	Water Security	Bulahdelah	0.57	ML/day	\$56,517,332	\$28,258,666	\$84,775,999	\$1,695,520	\$2,825,867	\$4,238,800	\$93,536,185	
1.5 Bulahdelah Regional Connection Pipeline from Manning via Nabisac	Water Security	Bulahdelah	0.57	ML/day	\$20,607,424	\$10,303,712	\$30,911,135	\$618,223	\$1,030,371	\$1,545,557	\$34,105,286	\$393,852
1.7 Bulahdelah Groundwater	Water Security	Bulahdelah	N/A								\$500,000	
1.9 Bulahdelah Desalination from Myall River	Water Security	Bulahdelah	0.57		\$56,694,260	\$28,347,130	\$85,041,389	\$1,700,828	\$2,834,713	\$4,252,069	\$93,829,000	
2.1 Stroud Additional Off Stream Storage	Water Security	Stroud	115	ML	\$5,661,664	\$2,830,832	\$8,492,496	\$169,850	\$283,083	\$424,625	\$9,370,054	\$20,899
2.2 Stroud Desalination at Pacific Palms	Water Security	Stroud	0.49	ML/day	\$47,408,070	\$23,704,035	\$71,112,105	\$1,422,242	\$2,370,403	\$3,555,605	\$78,460,356	
2.3 Stroud Regional Connection Pipeline from Hunter Water via Dungog	Water Security	Stroud	0.49	ML/day	\$9,810,091	\$4,905,046	\$14,715,137	\$294,303	\$490,505	\$735,757	\$16,235,701	\$162,982
2.5 Stroud Groundwater	Water Security	Stroud	N/A								\$500,000	
2.8 Stroud Duralie Mine Dam Pipeline Transfer	Water Security	Stroud	0.49	ML/day	\$5,840,530	\$2,920,265	\$8,760,794	\$175,216	\$292,026	\$438,040	\$9,666,076	
2.9 Stroud Desalination from Karuah River	Water Security	Stroud	0.49	ML/day	\$47,606,422	\$23,803,211	\$71,409,633	\$1,428,193	\$2,380,321	\$3,570,482	\$78,788,628	
3.1 Gloucester Off Stream Storage	Water Security	Gloucester	250	ML	\$12,567,998	\$6,283,999	\$18,851,997	\$377,040	\$628,400	\$942,600	\$20,800,037	\$530,986
3.2 Gloucester Stratford Mine Dam Pipeline Transfer	Water Security	Gloucester	1.31	ML/day	\$11,552,013	\$5,776,006	\$17,328,019	\$346,560	\$577,601	\$866,401	\$19,118,581	
3.3 Gloucester Regional Connection Pipeline from Manning via Krumbach	Water Security	Gloucester	1.31	ML/day	\$24,887,716	\$12,443,858	\$37,331,574	\$746,631	\$1,244,386	\$1,866,579	\$41,189,170	\$1,013,213
3.4 Gloucester Desalination at Hallidays Point	Water Security	Gloucester	1.31	ML/day	\$54,680,365	\$27,340,183	\$82,020,548	\$1,640,411	\$2,734,018	\$4,101,027	\$90,496,005	
3.5 Gloucester Desalination from Gloucester River	Water Security	Gloucester	1.31	ML/day	\$54,440,643	\$27,220,321	\$81,660,964	\$1,633,219	\$2,722,032	\$4,083,048	\$90,099,264	
3.6 Gloucester Stormwater Harvesting	Water Security	Gloucester	8000	ML	\$115,693,997	\$57,846,998	\$173,540,995	\$3,470,820	\$5,784,700	\$8,677,050	\$191,473,565	
3.7 Gloucester Groundwater	Water Security	Gloucester	N/A								\$500,000	
4.1 Recycled Water Unrestricted - Taree Rec Grounds	Sustainable Effluent Management	Taree / Dawson	179	ML/annum	\$2,613,000	\$1,306,500	\$3,919,500	\$78,390	\$130,650	\$195,975	\$4,324,515	\$155,000
4.2 Recycled Water Unrestricted - Old Bar	Sustainable Effluent Management	Old Bar	36	ML/annum	\$2,379,644	\$1,189,822	\$3,569,466	\$71,389	\$118,982	\$178,473	\$3,938,311	\$52,145
4.3 Recycled Water Restricted - Gloucester	Sustainable Effluent Management	Gloucester	65	ML/annum	\$456,943	\$228,471	\$685,414	\$22,847	\$45,694	\$34,271	\$788,226	\$1,018
4.4 Recycled Water Unrestricted - Gloucester	Sustainable Effluent Management	Gloucester	105	ML/annum	\$2,050,235	\$1,025,117	\$3,075,352	\$61,507	\$102,512	\$153,768	\$3,393,138	\$65,253
4.5 Recycled Water Unrestricted - Bulahdelah	Sustainable Effluent Management	Bulahdelah	52	ML/annum	\$2,940,199	\$1,470,100	\$4,410,299	\$88,206	\$147,010	\$220,515	\$4,866,030	
4.6 Recycled Water Unrestricted - Forster	Sustainable Effluent Management	Forster	331	ML/annum	\$11,655,443	\$5,827,722	\$17,483,165	\$349,663	\$582,772	\$874,158	\$19,289,759	\$380,126
5.1 Manning Peg Leg Creek Dam - Local Scheme Only	Water Security	Manning	5000	ML	\$116,145,922	\$58,072,961	\$174,218,883	\$3,484,378	\$5,807,296	\$8,710,944	\$192,221,501	\$1,361,834
5.2 Manning Peg Leg Creek Dam - Combined Demand	Water Security	Manning	5000	ML	\$116,145,922	\$58,072,961	\$174,218,883	\$3,484,378	\$5,807,296	\$8,710,944	\$192,221,501	\$1,361,834
5.3 Manning Peg Leg Creek Dam - Local Scheme with PRW Recovery	Water Security	Manning			\$164,639,582	\$82,319,791	\$246,959,374	\$4,939,187	\$8,231,979	\$12,347,969	\$272,478,509	\$4,432,964
5.4 Manning Desalination - Local Scheme Only	Water Security	Manning	28.4	ML/day	\$122,152,158	\$61,076,079	\$183,228,237	\$3,664,565	\$6,107,608	\$9,161,412	\$202,161,822	\$3,881,726
5.5 Manning Desalination - Combined Demand	Water Security	Manning	30.3	ML/day	\$129,099,922	\$64,549,961	\$193,649,883	\$3,872,998	\$6,454,996	\$9,682,494	\$213,660,371	\$4,209,608
5.1 Peg Leg Pumped Hydro	Climate Change	Manning	1607	kWh	\$506,167	\$253,083	\$759,250	\$25,308	\$50,617	\$37,962	\$873,137	\$20,247
5.6 Manning Desalination - Local Scheme Only 12ML/d	Water Security	Manning	12	ML/day	\$63,887,065	\$31,943,532	\$95,830,597	\$1,916,612	\$3,194,353	\$4,791,530	\$127,132,957	\$4,807,575