

Project Cost Allocation Summary

Background

Project No	522/517	Activity	Water Supply
Project Name	Replacement Mains		
Project Manager	City Water & Waste		
Year first spend on the project	2005	Project Scope	Design & Construction of 120km of replacement water mains
Year of first cost allocation	2007		
Year of current cost allocation	2007		
Project cost	\$28,557,434		

Level of Service Definitions

Measure	proportion	Primary Driver	Replacement of assets that have reached the end of their useful life
Existing Capacity	100.0		
Existing Demand	102.0		
Total Capacity	107.0	Secondary Driver	Additional capacity for growth
Design Capacity Year	2106		
End of Life Year	2106		
Backlog Capacity	2	Capacity Discussion	Analysis of historical mains replacement shows 47% of mains replaced are made bigger than the pipe they are replacing. With an average 7% overall increase in pipe capacity (by cross sectional area) across all pipe replacements
Growth Capacity	5		
New Work Capacity	7		
% Backlog of New Work	28.6	References	Water Supply Asset Management Plan
% Growth of New Work	71.4		

Localities:

locality	percentage	comment
Hagley Park	100	City Wide Project

Operations and Maintenance

O&M Cost Share	\$0
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Renewal

Stand Alone Renewal Cost	\$20,424,902	Renewal Scope	120 Km of water main at average unit rate of \$197/m
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New Works

Stand Alone New Works Cost	\$8,616,228	New Works Scope	47% of mains replaced are made bigger than the pipe they are replacing, 47% of 120km is 56400m, min pipe size 100mm
Renewal Cost Share	\$20,424,902		
New Work Cost Share	\$8,616,228		

Preliminary Cost Shares

Backlog Cost Share	\$2,323,580
Growth Cost Share	\$5,808,951

Growth project

Stand Alone Growth Cost	\$13,168,228	Growth Project Scope	100mm = minimum main size Land 47% of 120km @ 1m wide
Growth Cap	\$14,485,051		

Unallocated costs

Unallocated Cost Share	\$0
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Project funding

External Funding	\$0
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Summary of Cost Allocation

	%	Total Cost	Net Cost
O&M		\$0	\$0
Renewal	71.5%	\$20,424,902	\$20,424,902
Backlog	8.1%	\$2,323,580	\$2,323,580
Growth	20.3%	\$5,808,951	\$5,808,951
Unallocated	0%	\$0	\$0
External Funding			\$0
Project Total	100%	\$28,557,434	\$28,557,434