502/109/05

Water Supply

New Assets

Huntsbury 4 Contribution

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$30,947	$0	$1,949	$0	$28,997

COST ALLOCATION

Primary Driver:	Provide additional capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations. Existing demand estimated at 6.25% (time since completion/predicted time until design capacity reached)
References:	Water Supply Asset Management Plan, File PG-001-243,

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	New Reservoir at Huntsbury 4
Location:	Huntsbury
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new reservoir.
Implications of not doing the project:	Water supply will not be available for new development.
Linkages with other projects:	New Reservoirs (growth).
Location of other relevant supporting information:	Water Supply Asset Management Plan

502/109/06

Water Supply

New Assets

Grampian New Well

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$53,009	$0	$15,902	$0	$37,106

COST ALLOCATION

Primary Driver:	Provision of capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations. Existing demand estimated at 30% (time since completion/predicted time until design capacity reached)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	New Well at Grampian PS (Completed)
Location:	Grampian Pump Station
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new well.
Implications of not doing the project:	The system will be unable to meet peak demands. Water supply will not be available for new developments.
Linkages with other projects:	New Wells Programme.
Location of other relevant supporting information:	Water Supply Asset Management Plan

502/109/13

Water Supply

New Assets

Thompsons PS

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$849,343	$0	$106,167	$0	$743,175

COST ALLOCATION

Primary Driver:	Provision of additional capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations. Existing demand estimated at 12.5% (time since completion/predicted time until design capacity reached)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	New Pump Station (incl 2 wells) at Thompsons Rd, Belfast
Location:	Thompsons Rd, Belfast
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new well.
Implications of not doing the project:	The system will be unable to meet peak demands. Water supply will not be available for new developments.
Linkages with other projects:	New Wells Programme.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

502/109/20

Water Supply

New Assets

Morgans Valley 2 Contribution

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$65,404	$0	$8,175	$0	$57,228

COST ALLOCATION

Primary Driver:	Provision of additional capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations. Existing demand estimated at 12.5% (time since completion/predicted time until design capacity reached)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Contribution towards developer funded 250m3 concrete reservoir.
Location:	Morgans Valley
Special features being addressed:	To provide additional capacity for future development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and contribute towards.
Implications of not doing the project:	Water supply will not be available for new development.
Linkages with other projects:	New Reservoirs (growth).
Location of other relevant supporting information:	Water Supply Asset Management Plan.

502/109/8

Water Supply

New Assets

Moncks Spur

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$345,690	$0	$76,051	$0	$269,638

COST ALLOCATION

Primary Driver:	Provision of additional capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations. Existing demand estimated at 22% (time since completion/predicted time until design capacity reached)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Moncks Spur 3 Reservoir (Completed)
Location:	Moncks Spur
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct reservoir.
Implications of not doing the project:	Water supply will not be available for new development.
Linkages with other projects:	New Reservoirs (growth)
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/445

Water Supply

New Assets

Belfast New Well

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$207,583	$0	$10,379	$0	$197,204

COST ALLOCATION

Primary Driver:	Provision of capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations. Existing demand estimated at 5% (time since completion/predicted time until design capacity reached)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Design and construction of a new well at Belfast Pump Station.
Location:	Darroch St, Belfast
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new well.
Implications of not doing the project:	The system will be unable to meet peak demands. Water supply will not be available for new developments.
Linkages with other projects:	New Wells Programme.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/507

Water Supply

New Assets

Dunbars New Well

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$326,360	$0	$20,560	$0	$305,799

COST ALLOCATION

Primary Driver:	Provision of additional capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations. Existing demand estimated at 6.25% (time since completion/predicted time until design capacity reached)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	New well to provide additional capacity for growth (Under Construction 2005/06).
Location:	Dunbars PS, Halswell
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new well.
Implications of not doing the project:	The system will be unable to meet peak demands. Water supply will not be available for new developments.
Linkages with other projects:	New Wells Programme.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/507

Water Supply

New Assets

New Wells for growth

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$1,629,469	$0	$0	$0	$1,629,469

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	The planning, design and construction of new wells.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and plan & construct new wells.
Implications of not doing the project:	The system will be unable to meet peak demands. Water supply will not be available for new developments.
Linkages with other projects:	New Wells Programme, Well Renewals.
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/511

Water Supply

New Assets

Submains

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$290,000	$0	$0	$0	$290,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	The planning, design and construction of new submains.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and plan & construct new submains.
Implications of not doing the project:	Water supply will not be available for new developments.
Linkages with other projects:	New Mains.
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/512

Water Supply

New Assets

Additional Infrastructure for Developments

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$730,000	$0	$0	$0	$730,000

COST ALLOCATION

Primary Driver:	Provision of additional capacity for growth
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Council contributions towards infrastructure provided by developers with greater capacity than required to service their development alone.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and contribute towards developer provided infrastructure.
Implications of not doing the project:	New infrastructure does not have capacity for future growth. Inefficient extensions to council network constructed.
Linkages with other projects:	New Mains.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/513

Water Supply

New Assets

New Mains

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$6,200,000	$0	$0	$0	$6,200,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	The planning, design and construction of sewer mains to service new development.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and plan & construct new mains.
Implications of not doing the project:	Water supply will not be available for new developments.
Linkages with other projects:	New Submains and Mains Renewals
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/544

Water Supply

New Assets

New Secondary Station

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$1,040,000	$0	$0	$0	$1,040,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Planning, design and construction new secondary pump stations.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new secondary stations.
Implications of not doing the project:	Water supply will not be available for new developments.
Linkages with other projects:	New Reservoirs.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/545

Water Supply

New Assets

New Reservoirs (growth)

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$1,000,000	$0	$0	$0	$1,000,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	The planning, design and construction of new reservoirs to provide storage for growth on hills areas.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new reservoirs.
Implications of not doing the project:	Water supply will not be available for new developments.
Linkages with other projects:	New Secondary Stations.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/604

Water Supply

New Assets

New Pump Stations

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$4,500,000	$0	$0	$0	$4,500,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	The planning, design and construction of 2 new water supply pump stations
Location:	Various locations within Christchurch - Northern Area, West
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct new pump stations.
Implications of not doing the project:	Water supply will not be available for new developments.
Linkages with other projects:	New Wells Programme
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/619

Water Supply

New Assets

Land Purchase for Pump Station

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$900,000	$0	$0	$0	$900,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Purchase of land to construct new pump stations & wells on.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and purchase land for new pump stations.
Implications of not doing the project:	There will be nowhere to put new pump stations and an inability for the system to meet future demands.
Linkages with other projects:	New Wells, New Pump Stations.
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/660

Water Supply

New Assets

Unallocated Headworks

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$1,725,000	$0	$0	$0	$1,725,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Planning, design and construction/installation of miscellaneous headworks items.
Location:	Various locations within Christchurch.
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and plan & construct new headworks items.
Implications of not doing the project:	The system will be unable to meet demand. Unable to support new development. No budget available to fund miscellaneous items.
Linkages with other projects:	Additional infrastructure for developments.
Location of other relevant supporting information:	Water Supply Asset Management Plan

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Water Supply

New Assets

Mt Pleasant Water Supply Cost Share

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$315,000	$0	$0	$0	$315,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan. File PG-001-243

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Water Mains Reservoir and Pump Station
Location:	Mt Pleasant
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct mains, reservoir and pump station.
Implications of not doing the project:	Water supply will not be available for new development.
Linkages with other projects:	Local Cost Share Areas
Location of other relevant supporting information:	Water Supply Asset Management Plan. File PG-001-243

Water Supply

New Assets

Huntsbury Water Supply Cost Share

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$205,000	$0	$0	$0	$205,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan. File PG-001-224

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Local Cost Share Area for Water Mains, Reservoir and Pump Station
Location:	Huntsbury
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct mains, reservoir and pump station.
Implications of not doing the project:	Water supply will not be available for new development.
Linkages with other projects:	Local Cost Share Areas
Location of other relevant supporting information:	Water Supply Asset Management Plan. File PG-001-244

Water Supply

New Assets

Worsleys Spur Water Cost Share

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$650,000	$0	$0	$0	$650,000

COST ALLOCATION

Primary Driver:	Provision of capacity for growth.
Secondary Driver:	
Capacity discussion:	All work (100%) is attributable to growth. Actual capacities have not been used in calculations.
References:	Water Supply Asset Management Plan. File WS-003-003-12

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Cost Share established in 1999 for Land Purchase, Tank Relocation and construction of a Pump Station and Rising Main.
Location:	Worsleys Spur
Special features being addressed:	To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and construct water supply.
Implications of not doing the project:	Water supply not available for new development.
Linkages with other projects:	Local Cost Share Areas.
Location of other relevant supporting information:	Water Supply Asset Management Plan. File WS-003-003-12

502/104/10

Water Supply

Renewal & Replacement

Burnside Well Replacement

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$345,588	$0	$51,838	$0	$293,749

COST ALLOCATION

Primary Driver:	Provision of additional capacity for growth
Secondary Driver:	Replacement of asset that has reached the end of its useful life
Capacity discussion:	Well replacement has been completed. Actual capacity has been used in calculations.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Replacement Well at Burnside Pump Station (Completed)
Location:	Burnside Park
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and replace well.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Well Replacements.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

502/104/11

Water Supply

Renewal & Replacement

Picton PS

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$1,351,210	$643,169	$0	$0	$708,040

COST ALLOCATION

Primary Driver:	Renewal of asset that has reached the end of its useful life
Secondary Driver:	Provision of additional capacity for growth
Capacity discussion:	Picton PS is replacing the Clarence & Mandeville Pump Stations. Clarence and Mandeville Pump stations capacity from 2001 WSAMP has been used. Picton capacity is the capacity of the new station.
References:	Water Supply Asset Management Plan 2001 & 2004 revisions

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Replacement of Clarence and Mandeville Pump Stations with a new Pump Station at Picton Ave.
Location:	Picton Ave
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and replace pump stations.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Well Replacements, New Wells.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

502/104/21

Water Supply

Renewal & Replacement

Farrington Well Replacement

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$265,161	$0	$38,116	$0	$227,044

COST ALLOCATION

Primary Driver:	Provision of additional capacity for growth
Secondary Driver:	Replacement of asset that has reached the end of its useful life
Capacity discussion:	Well replacement has been completed. Actual capacity has been used in calculations. Old well had a capacity of 46 L/s new well has capacity of 320 L/s.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Replacement Well at Farrington Pump Station (Completed)
Location:	Farrington Pump Station
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and replace well.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Well renewals, new wells.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/314

Water Supply

Renewal & Replacement

Worcester PS

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$891,441	$413,946	$0	$0	$477,495

COST ALLOCATION

Primary Driver:	Replacement of asset that has reached the end of its useful life
Secondary Driver:	Provision of additional capacity for growth
Capacity discussion:	Capacity from Asset Management Plan
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Renewal of Fitzgerald PS with new PS at New Site (Worcester)
Location:	Worcester St
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and replace pump stations.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Well renewals, new wells
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/414

Water Supply

Renewal & Replacement

Hills Road

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$232,632	$41,340	$0	$0	$191,292

COST ALLOCATION

Primary Driver:	Replacement of asset that has reached the end of its useful life
Secondary Driver:	Provision of additional capacity for growth
Capacity discussion:	The new well is expected to produce 280 m3/hr
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Replacement of Well 3 at Hills Rd PS
Location:	Hills Rd
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and replace well.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Well renewals, new wells.
Location of other relevant supporting information:	Water Supply Asset Management Plan

522/419

Water Supply

Renewal & Replacement

Westmorland 2 Reservoir Replacement

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$595,400	$14,828	$0	$30,572	$550,000

COST ALLOCATION

Primary Driver:	Replacement of tank that has reached the end of its useful life
Secondary Driver:	Provision of additional capacity for growth
Capacity discussion:	Reservoir capacity from Water Supply AMP. 250m3 reservoir being replaced with a 400m3 reservoir.
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Design & Construction of replacement reservoir at Westmorland 2 site.
Location:	Westmorland 2 Reservoir Site
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and replace reservoir.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Other renewal works.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/517

Water Supply

Renewal & Replacement

Replacement Mains

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$25,357,434	$16,057,908	$0	$0	$9,299,526

COST ALLOCATION

Primary Driver:	Replacement of assets that have reached the end of their useful life
Secondary Driver:	Additional capacity for growth
Capacity discussion:	Analysis of historical mains replacement shows 47% of mains replaced are made bigger than the pipe they are replacing. With a 7% overall increase in pipe capacity (by cross sectional area)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Replacement programme of water mains that have reached the end of their useful lives. Some with pipes of greater capacity than the pipes which they are replacing.
Location:	Various locations within Christchurch.
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and the replacement of mains with the same or greater capacity.
Implications of not doing the project:	Maintenance costs will rise significantly. Increased loss of service to customers while broken mains are repaired.
Linkages with other projects:	New Mains Programme.
Location of other relevant supporting information:	Water Supply Asset Management Plan.

522/519

Water Supply

Renewal & Replacement

Replacement Wells

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$3,500,875	$445,544	$0	$0	$3,055,331

COST ALLOCATION

Primary Driver:	Replacement of Wells that have reached the end of their useful life
Secondary Driver:	Provision of additional capacity for growth
Capacity discussion:	New well estimated to produce 250m3/hr (average capacity of recently completed wells)
References:	Water Supply Asset Management Plan

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Replacement of wells which have reached the end of their useful lives for capacity or quality reasons.
Location:	Various locations within Christchurch.
Special features being addressed:	Lifecycle asset management. Planning for future demand.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered include do nothing and replace pump stations.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Other well replacements, new wells.
Location of other relevant supporting information:	Water Supply Asset Management Plan

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Water Supply

Renewal & Replacement

Harewood Pump Station Renewal

COSTS

Total	Renewal	Backlog	Unallocated	Growth
$595,000	$79,363	$0	$0	$515,637

COST ALLOCATION

Primary Driver:	Replacement of well that has reached the end of its useful life.
Secondary Driver:	Provision of additional capacity for growth.
Capacity discussion:	New well estimated to produce 250m3/hr (average capacity of recently completed wells). Replacement pump station will be much bigger than existing station.
References:	Water Supply Asset Management Plan.

ATTRIBUTES

Project Manager:	City Water & Waste
Work Planned:	Consenting, Design & Construction of replacement pump station at a new site.
Location:	Harewood
Special features being addressed:	Replacement of assets that have reached the end of their useful lives. To provide capacity for new development.
A statement of the outcomes being addressed (LoS, Community Outcomes):	A City of People who Value and Protect the Natural Environment. An Attractive and Well-designed City.
Options considered:	Options considered included, do nothing, renew pump station and renew pump station with greater capacity.
Implications of not doing the project:	The system will be unable to meet current or future demands.
Linkages with other projects:	Replacement Wells.
Location of other relevant supporting information:	Water Supply Asset Management Plan.