

**466th MEETING OF  
CANTERBURY REGIONAL COUNCIL**

**ADDITIONAL DOCUMENTS**

**COUNCIL MEETING**

**Thursday 8 December 2016 at 10.00 a.m.**

**Council Chamber  
200 Tuam Street  
CHRISTCHURCH**

<b>Item</b>		<b>page</b>
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**Environment  
Canterbury  
Regional Council**  
*Kaunihera Taiao ki Waitaha*



## Council Report

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### 4.1.3 Report of the Performance, Audit and Risk Committee meeting held on 1 December 2016

<b>Author</b>	Louise McDonald Senior Administration Officer
<b>Endorsed by</b>	Miles McConway Director Finance and Corporate Services

### Purpose

For the Council to receive the report from the Performance, Audit and Risk Committee meeting held on 1 December 2016 and to receive the summary of the financial reports for the year to 31 October 2016.

There are no recommendations for decision from the Committee to the Council.

### Corrections

Are there any corrections Committee members wish to make to the Committee report?

Once received by the Council the report will be recorded as a true and accurate record of the Committee meeting.

### Attachments

1. Report of the Performance, Audit and Risk Committee meeting held on 1 December 2016.
2. Summary of the financial reports for the year to 31 October 2016.

### Recommendations

That the Council:

1. receives the report of the Performance, Audit and Risk Committee meeting held on 1 December 2016.
2. notes the resolutions made by the Committee under delegated authority.
3. receives the summary of the financial reports for the year to 31 October 2016.



**CANTERBURY REGIONAL COUNCIL  
ENVIRONMENT CANTERBURY**

**REPORT OF THE PERFORMANCE, AUDIT AND RISK COMMITTEE**

**THE 127th MEETING HELD IN THE COUNCIL CHAMBER  
200 TUAM STREET, CHRISTCHURCH  
ON THURSDAY, 1 DECEMBER 2016 AT 2.05PM**

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1. Apologies
2. Conflicts Of Interest
3. Deputations and Petitions
4. Performance
  - 4.1 Action List
  - 4.2 Operational Performance Report October 2016
  - 4.3 Financial Health Report October 2016
  - 4.4 Greater Christchurch Metro Financial Update
5. Audit
  - 5.1 Audit New Zealand Report year end 30 June 2016
6. Risk
  - 6.1 Health and Safety
  - 6.2 Risk Management
7. Public Excluded
  - 7.1 Internal Audit – Data Management
8. Notices of Motion
9. Extraordinary and Urgent Business
10. Questions
11. Next Meeting

**PRESENT**

Councillors Rod Cullinane (Chair), Claire McKay, Lan Pham, Peter Scott and John Sunckell

**IN ATTENDANCE**

Chairman David Bedford, Councillors Tom Lambie, Steve Lowndes and Peter Skelton

Julian Tan, Audit New Zealand for item 5.1

**MANAGEMENT AND OFFICERS PRESENT**

Bill Bayfield (Chief Executive), Miles McConway (Director Finance and Corporate Service), Jill Atkinson (Director Strategy and Planning), Stefanie Rixecker (Director Science), Katherine Trought (Director Communications), Catherine Schache (General Counsel), Katherine Harbrow (Chief Financial Officer), John McClelland (Manager Finance) and Louise McDonald (Senior Administration Officer)

Report writers and other staff were also in attendance.

**WELCOME**

Cr Cullinane welcomed every to this meeting.

**1. APOLOGIES**

There were no apologies.

**2. CONFLICTS OF INTEREST**

No conflicts of interest were declared.

**3. DEPUTATIONS AND PETITIONS**

There were no petitions or requests for deputations received.

**4. PERFORMANCE**

**4.1 Action List**

*Refer page 4 – Performance, Audit and Risk Committee Agenda*

Miles McConway presented this report.

**Resolved**

***That the Performance, Audit and Risk Committee receive the Action List.***

Cr Sunckell/Cr McKay  
CARRIED

**4.2 Operational Performance Report**

*Refer page 6 – Performance, Audit and Risk Committee Agenda*

Wendy Gainford presented this report for the year to 31 October 2016.

Clarification was requested on two sentences on compliance (page 15 of the agenda) regarding the Waitaki Plan Change 3 consent review and what the 54 water consents monitored with 37 non-compliant consents relate to?

**Resolved**

***That the Performance, Audit and Risk Committee receive the Operational Performance report for the year to 31 October 2016.***

Cr Scott/Cr Pham  
CARRIED

**4.3 Financial Health Report**

*Refer page 22 – Performance, Audit and Risk Committee Agenda*

John McClelland presented this report.

**Resolved**

***That the Performance, Audit and Risk Committee receive the monthly financial health report for the period ending 31 October 2016.***

Cr Sunckell/Cr Scott  
CARRIED

#### 4.4 Greater Christchurch Metro Financial Update

*Refer page 28 – Performance, Audit and Risk Committee Agenda*

Rob Woods presented this report and advised the following corrections to the percentages quoted in first paragraph “Patronage and Commerciality Ratio” (page 29 of the agenda):

- Year to date patronage is down 3.3%.
- Year on year patronage for October is down 5.2%.

Referring to the action sheet (item 4.1) Rob Woods advised that the target for 2016/17 was 74% of fare transactions by Metrocard. The revised 2016/17 patronage forecast was 13.3 million.

#### **Resolved**

***That the Performance, Audit and Risk Committee receives the financial update on the Greater Christchurch Metro Programme.***

Cr Pham/Cr McKay  
CARRIED

### 5. AUDIT

#### 5.1 Audit New Zealand Report Year End 30 June 2016

*Refer page 32 – Performance, Audit and Risk Committee Agenda*

Cr Cullinane welcomed Julian Tan, Audit New Zealand to the meeting. Mr Tan presented the report to the Council on the audit of Environment Canterbury for the year ended 30 June 2016.

#### **Resolved**

***That the Performance, Audit and Risk Committee receive the Report to the Council on the 30 June 2016 Environment Canterbury audit from Audit New Zealand.***

Cr Scott/Cr Sunckell  
CARRIED

### 6. RISK

#### 6.1 Health and Safety Report

*Refer page 52 – Performance, Audit and Risk Committee Agenda*

Matthew Bennett presented this report.

The Committee expressed interest in future reports including benchmarking information with comparison of data from other councils.

#### **Resolved**

***That the Performance, Audit and Risk Committee receive the Health and Safety report.***

Cr Pham/Cr Scott  
CARRIED

## 6.2 Risk Management

*Refer page 56 – Performance, Audit and Risk Committee Agenda*

Katherine Harbrow presented this report.

Due to its potential risk to service delivery and budget, it was requested that public transport be included in the risks to be managed.

**Resolved**

**That the Performance, Audit and Risk Committee receives the risk report.**

Cr Scott/Cr Sunckell  
CARRIED

## 7. PUBLIC EXCLUDED

*Refer page 80 - Performance, Audit and Risk Committee Agenda*

**Resolved**

*That the public be excluded from the following part of the proceedings of this meeting, namely:*

### 7.1 Internal Audit

*The general subject of the matters to be considered while the public is excluded, the reason for passing this resolution and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:*

<i>General subject of each matter to be considered</i>	<i>Reason for passing this resolution in relation to each matter</i>	<i>Ground(s) under section 48(1) for the passing of this resolution</i>
<i>Internal Audit</i>	<i>That good reason exists for not discussing the matter with the public present and is not outweighed by the public interest.</i>	<i>Section 48(1)(a)</i>

*This resolution is made in reliance on section 48(1) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 6 or section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceeding of the meeting in public are as follows:*

### 7.1 Avoid prejudice to measure that prevent or mitigate material loss to members of the public – Section 7(2)(e)

*That appropriate officers and advisors remain to provide advice to the Committee.*

Cr McKay/Cr Sunckell  
CARRIED

The meeting went into public excluded session from 2.44 to 3.15 pm

## 7.1 INTERNAL AUDIT

The Committee confirmed the decision from the public excluded session in the open meeting:



**Resolved**

***That the Performance, Audit and Risk Committee:***

- 1. receive the update on progress on the 2016-17 Internal Audit Plan;***
- 2. receive the Local Government Official Information and Meetings Act (LGOIMA) Review (Ernst & Young - September 2016);***
- 3. receive the Data Management Strategy report (Ernst & Young - November 2016); and***
- 4. make the report and attachments publicly available.***

Cr Scott/Cr Sunckell  
CARRIED

**8. NOTICES OF MOTION**

There were no notices of motion.

**9. EXTRAORDINARY AND URGENT BUSINESS**

There was no extraordinary or urgent business.

**10. QUESTIONS**

Councillor Pham asked if the valuable information coming out about the resilience of the transport network following the Hurunui/Kāikoura earthquakes, would come to this Committee for consideration in its responsibility of risk management.

Bill Bayfield advised that information would be provided to the Councillors, directly or through to this Committee or a Council meeting, as appropriate timewise.

**11. NEXT MEETING**

To be advised.

**CLOSURE**

The meeting closed at 3.20 pm.

CONFIRMED

DATE \_\_\_\_\_ CHAIRPERSON



**CANTERBURY REGIONAL COUNCIL  
ENVIRONMENT CANTERBURY**

**REPORT OF PART OF THE 127<sup>TH</sup> MEETING  
OF THE PERFORMANCE, AUDIT AND RISK COMMITTEE HELD  
WITH THE PUBLIC EXCLUDED  
IN THE COUNCIL CHAMBER, 200 TUAM STREET, CHRISTCHURCH  
ON THURSDAY 1 DECEMBER 2016 AT 2.44 PM**

**PRESENT**

Councillors Rod Cullinane (Chair), Claire McKay, Lan Pham, Peter Scott and John Sunckell

**IN ATTENDANCE**

Chairman David Bedford, Councillors Tom Lambie and Peter Skelton  
Julian Tan, Audit New Zealand

**STAFF**

Bill Bayfield (Chief Executive), Miles McConway (Director Finance and Corporate Service), Jill Atkinson (Director Strategy and Planning), Stefanie Rixecker (Director Science), Katherine Trought (Director Communications), Catherine Schache (General Counsel), Katherine Harbrow (Chief Financial Officer), Jeremy Dickson (Business Support & Customer Services Manager), Steve McAuley (Transaction Services Team Leader – Internal Audit Practice Leader) and Louise McDonald (Senior Administration Officer)

**APOLOGIES**

There were no apologies

**7.1 INTERNAL AUDIT DATA MANAGEMENT**

*Refer page 2 - Performance, Audit and Risk Committee Public Excluded Agenda*

Steve McAuley presented the update on the progress of the 2016-17 internal audit programme.

It was requested that the status update include dates when audits are due to be started.

The Committee were advised the recommendations from the Local Government Official Information and Meetings Act (LGOIMA) Review had been implemented. A report will be provided to the Committee.

**Resolved**

***That the Performance, Audit and Risk Committee:***

- 1. receive the update on progress on the 2016-17 Internal Audit Plan;***
- 2. receive the Local Government Official Information and Meetings Act (LGOIMA) Review (Ernst & Young - September 2016);***
- 3. receive the Data Management Strategy report (Ernst & Young - November 2016); and***
- 4. make the report and attachments publicly available.***

Cr Scott/Cr McKay  
CARRIED

**Resolved**

***That the meeting come out of public excluded session.***

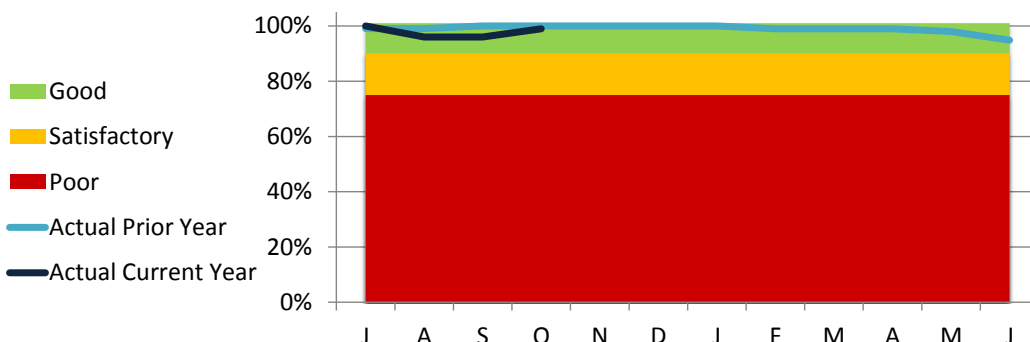
David Bedford/Dame Margaret Bazley

The meeting moved out of public excluded session at 3.50 pm.

CONFIRMED

DATE \_\_\_\_\_ CHAIRPERSON

### Delivery of Levels of Service Targets



### Summary of Levels of Service Targets

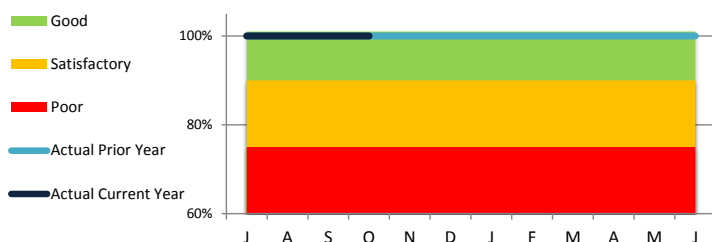
Total	% OK	Won't Achieve	Not On Track	On Track	Achieved
97	96	1	0	93	3
100%	99%	1.0%	0.0%	95.9%	3.1%

Levels of Service Targets by Portfolio		Total	% OK	Won't Achieve	Not On Track	On Track	Achieved
CWMS	<div><div></div></div>	6	100%	0	0	6	0
Transport, GCR & UD	<div><div></div></div>	10	100%	0	0	9	1
Regional leadership	<div><div></div></div>	15	100%	0	0	13	2
Air quality	<div><div></div></div>	5	100%	0	0	5	0
Biodiversity & biosecurity	<div><div></div></div>	16	100%	0	0	16	0
Hazards, risks & safety	<div><div></div></div>	34	100%	0	0	34	0
Planning, consents & compliance	<div><div></div></div>	11	91%	1	0	10	0

### Summary of Financial Performance

	Year to Date \$m					Full Year \$m			
	Act	Bud	Var	%		Fcast	Bud	Var	%
<b>FUNDING OF SERVICES - REVENUE</b>									
Rates	29.7	29.7	0	0%		0	91.9	(91.9)	-100%
Grants	8.8	8.9	(0.0)	0%		0	29.9	(29.9)	-100%
User Pays and other	11.4	11.9	(0.5)	-4%		0	35.6	(35.6)	-100%
<b>Total Revenue</b>	<b>50.0</b>	<b>50.5</b>	<b>(0.5)</b>	<b>-1%</b>		<b>0</b>	<b>157.4</b>	<b>(157.4)</b>	<b>-100%</b>
<b>DELIVERY OF SERVICES - EXPENDITURE</b>									
Canterbury Water Management Strategy (CWMS)	7.6	8.2	(0.6)	-7%		0	25.3	(25.3)	-100%
Transport, greater Christchurch rebuild and urban development	22.1	22.4	(0.4)	-2%		0	69.3	(69.3)	-100%
Regional leadership	4.3	4.4	(0.1)	-3%		0	13.1	(13.1)	-100%
Air quality	1.1	1.4	(0.2)	-17%		0	3.7	(3.7)	-100%
Biodiversity and biosecurity	2.3	2.5	(0.2)	-8%		0	9.4	(9.4)	-100%
Hazards, risks and safety	6.8	7.6	(0.8)	-10%		0	23.2	(23.2)	-100%
Planning, consents and compliance	4.6	5.1	(0.4)	-8%		0	15.1	(15.1)	-100%
<b>Total Expenditure</b>	<b>48.9</b>	<b>51.6</b>	<b>(2.8)</b>	<b>-5%</b>		<b>0</b>	<b>159.0</b>	<b>(159.0)</b>	<b>-100%</b>
<b>Reserve Accumulation / (Use)</b>	<b>1.1</b>	<b>(1.1)</b>	<b>2.2</b>			<b>0</b>	<b>(1.6)</b>	<b>1.6</b>	

## Delivery of Levels of Service Targets



Total	Will not achieve	Not on track	On track	Achieved
6	0	0	6	0
	0.0%	0.0%	100%	0%
	0.0%		100.0%	



Levels of Service = 5      Measures = 7      Targets = 7      Not measured this year = 1

The chart reports on performance against targets - refer to LoS Summary for details of Levels of Service, Measures and Targets for this portfolio.

### Comments on service delivery

**Delivery of Targets:** Facilitation of Zone Committees continues, with work on quarterly Zone Committee reports. Waimakariri and Orari-Temuka-Opihi-Pareora (OTOP) science work is well advanced and reporting through to community and zone committee meetings as part of scheduled RMA Planning work schedule. Science for Zone Delivery is starting to ramp up and Environmental Infrastructure projects are tracking well. Phase II of the farm portal is progressing alongside the Land and Water Regional Plan (LWRP) Plan Change 5 (PC5) hearing.

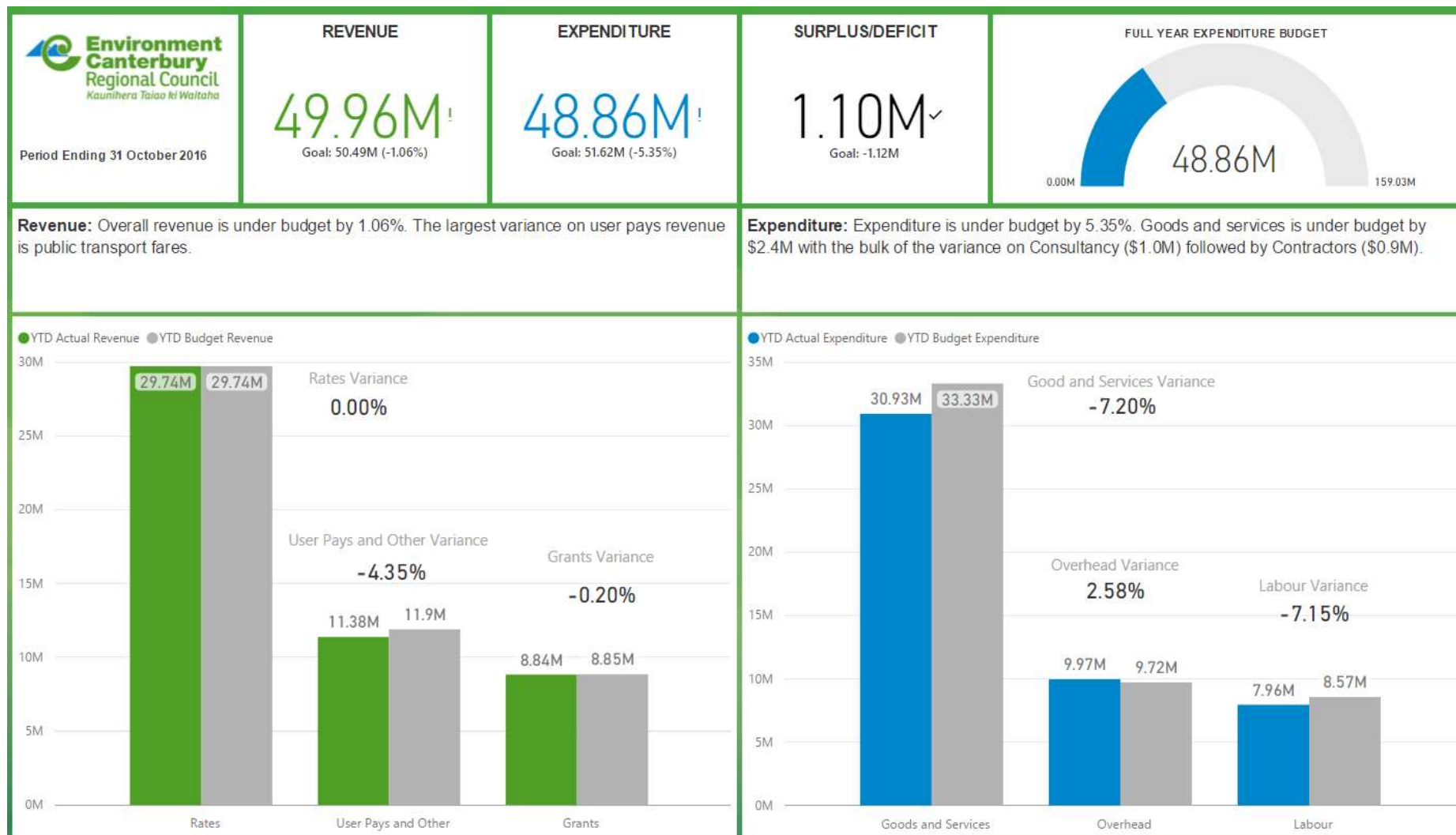
### Comments on financial performance:

**Revenue:** Revenue is under budget due to a delay in consultants finalising the OTOP Water Resource Study, the cost of which is to be reimbursed via a grant from the Ministry for Primary Industries.

**Expenditure:** Preparation is underway for water quality and quantity work programmes, contracts have now been secured. Associated goods and services spending is expected to level out over the summer months as these work programmes begin. Science focus has been on sub-regional plan work, so zone delivery work has been underspent to date but is expected to move closer to budget as the year progresses.

**Emerging Issues:** No emerging issues

	Year to Date					Full Year			
FUNDING OF SERVICES - REVENUE	Act	Bud	Var	%		Fcast	Bud	Var	%
Rates	7.5	7.5	-	0%		-	23.4	(23.4)	-100%
Grants	-	0.2	(0.2)	-100%		-	0.3	(0.3)	-100%
UP and other	0.1	0.0	0.1	100%+		-	0.0	(0.0)	-100%
Total Revenue	7.6	7.7	(0.1)	-1%		-	23.7	(23.7)	-100%
DELIVERY OF SERVICES - EXPENDITURE	Act	Bud	Var	%		Fcast	Bud	Var	%
CWMS Facilitation	0.7	0.7	(0.0)	-1%		-	2.2	(2.2)	-100%
Water quality and quantity monitoring	1.7	1.9	(0.2)	-11%		-	6.0	(6.0)	-100%
RMA Water Framework	2.6	2.6	(0.0)	-1%		-	8.0	(8.0)	-100%
ZIP Delivery	2.4	2.7	(0.3)	-9%		-	8.3	(8.3)	-100%
Regional Water Infrastructure	0.2	0.3	(0.1)	-35%		-	0.8	(0.8)	-100%
Total Expenditure	7.6	8.2	(0.6)	-7%		-	25.3	(25.3)	-100%
Reserve Accumulation / (Use)	(0.0)	(0.5)	0.5			0	(1.5)	1.5	



As at 31 October 2016

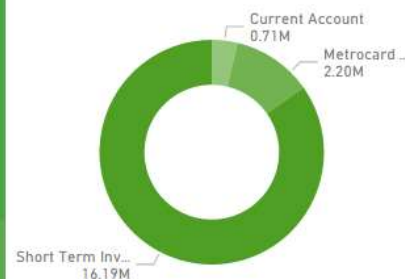
**Note:**

Metrocard balances are held in a trust account.

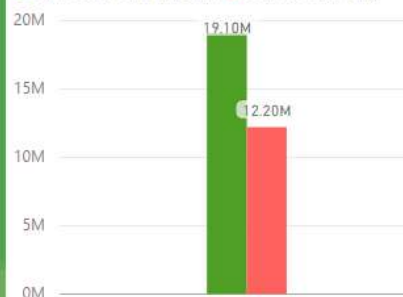
**CASH AND BANK**

19.10M

Total Actual Cash and Bank by Category



● Total Actual Cash and Bank ● Cash Reserves Policy



**Financial Position**

Cash and Bank	19M
Other Current Assets	20M
Non Current Assets	1,104M
Current Liabilities	-16M
Non Current Liabilities	-31M
<b>Net Assets</b>	<b>1,096M</b>
<b>Equity</b>	<b>1,096M</b>

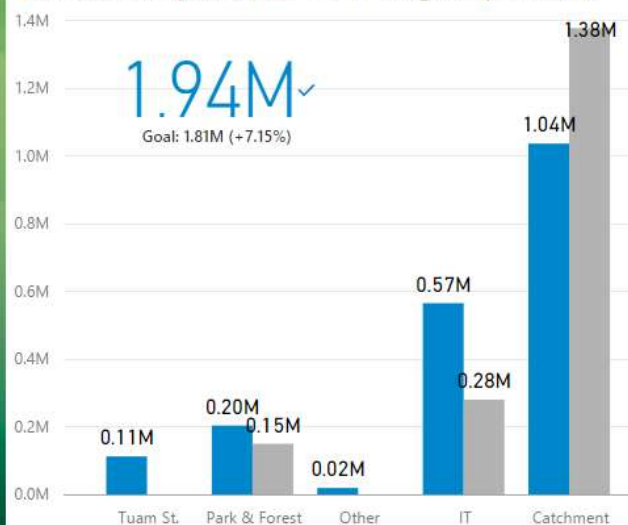
● Current Assets ● Current Liabilities

Current Assets	Current Liabilities	Working Capital
39.09M	15.70M	= 23.39M



Positive working capital indicates that an organisation is able to meet its short-term payables and obligations as they fall due

● YTD Actual Capital Works ● YTD Budget Capital Works



**Note:**

Capital expenditure is slight ahead of budget.

The expenditure on Tuam St relates to furniture which was included in the project budget but slipped into the current year.

IT expenditure on the new website is ahead of schedule, but expected to be close to the budget at year end.

Catchment expenditure is currently under budget, it is anticipated that this will be caught up as the year progresses.



<b>Author</b>	Monique Eade Strategy Advisor
<b>Endorsed by</b>	Bill Bayfield Chief Executive

## Preliminary Implications for Earthquake Recovery on Environment Canterbury

### Purpose

The Kaikōura earthquakes and subsequent aftershocks have caused significant damage and reserves money is required to assist fund the ongoing recovery work.

### Value proposition

The communities of Kaikōura and Hurunui have been significantly impacted by the North Canterbury earthquakes. Damage to the Kowhai River stopbanks exposes the community to a heightened level of flood risk and the raised seabed impedes boats being able to access the harbour except for two hours either side of high tide. This access is important for the economic recovery of Kaikōura.

As a result of the earthquakes Environment Canterbury also has a number of other obligations such as supporting the management of earthquake waste, new flood modelling and supporting the territorial authorities and their communities.

The scope and cost of recovery is an emerging picture and this paper sets out the known costs enabling the Chief Executive to proceed with assisting the recovery effort. This paper does not cover the costs associated with our response effort.

### Recommendations

#### That the Council:

- 1. Notes the significant impact the 14 November 2016 earthquakes had on the Kaikōura and Hurunui communities including the damage to infrastructure, the tourism industry and the social and economic resilience of the community.**
- 2. Notes that repair works are underway on the Kowhai River stopbank, Lyell Creek and drainage and that these are being funded through the existing rating district budget and reserves.**

- 3. Ratifies the decision of the Chief Executive to provide \$100,000 from general reserves if required to scope, plan, cost and timetable the required repair works needed to the Kaikōura harbour.**
- 4. Approves using \$10,000 per week for eight weeks of general reserves if required to monitor the landslide dams.**
- 5. Directs staff to provide an update to Council in February on actual costs incurred to date and updated estimates.**

## **Proposal**

### **Background**

The North Canterbury earthquakes series has caused significant damage to important infrastructure in Kaikōura. The repair work is vital for the ongoing safety of the Kaikōura community, with works protecting them from rainfall events causing flooding. The repair work will also help reinstate their livelihoods and rebuild resilience into the community.

Three key projects have been identified requiring immediate work. The total cost estimate of these projects is noted below.

1. Repairs to the Kowhai River stopbanks, Lyell Creek and drainage network: around \$910,000
2. Harbour works: around \$2.6 million
3. Landslide dams: best estimate \$10,000 per week.

For now legal, project management and additional staffing costs are being met by existing budgets. It is anticipated that some additional money is likely to be required and this will be included in the update to Council in February.

It has also been identified that flood modelling will be required in the Kaikōura and Hurunui districts in 2017. The costs of this work are yet to be worked through but it is likely that these will not be able to be met within existing budgets.

All numbers provided in this paper are best estimates of known work required. The situation and knowledge is evolving daily and these estimates are provided to help build a picture of the financial cost associated with the recovery effort. They rely on a number of assumptions which may vary depending on what is found when work commences. For this reason all cost estimates should be treated with some caution.

The funding requested in this paper ensures recovery work is able to continue until Council meet again in February. At that time staff will be able to report on actual costs incurred to date and should be in a position to provide better estimates.

## **1. Repairs to the Kowhai River stopbanks, Lyell Creek and drainage network**

The earthquake and subsequent aftershocks caused significant damage to the Kowhai River stopbanks. The repairs to the stopbank are essential to protect the Kaikōura township from flooding.

A timetable of repairs is yet to be compiled however urgent repairs to the stopbank are underway. Work is currently limited by the number of contractors and machinery able to access and work in Kaikōura.

As at 31 October 2016, the combined (rivers and drains) rating district balance was \$884,000. The cost to repair the Kowhai River stopbanks and Lyell Creek is estimated to be \$910,000. This leaves a shortfall of \$26,000.

While the combined rating district 2016/17 budget and reserves will almost entirely cover this expenditure there is a risk in exhausting these reserves as there will be no money available if further work is required. General reserves would be needed in this circumstance.

Exceeding the combined reserve and annual maintenance budget by 10% requires a special report to the scheme Liaison Committees. Discussions are currently underway with key members and a special meeting will be held in early 2017. An update will be provided to Council in February including a request to top up the rating district budget if required.

## **2. Harbour works**

The earthquakes and subsequent aftershocks caused significant uplift of the seabed in some coastal areas in Kaikōura. The reduction of water depth has resulted in marine facilities becoming unsafe and unusable for navigation. Access to the sea, and safe berthing and launching / recovery of vessels is vital for:

- Tourism – Kaikōura's marine environment is a big draw card for tourism. The safe and un-restricted access to the sea and harbour is critical for the operation of these vessels.
- Fishing – A sizeable fleet of inshore fishing vessels operate from Kaikōura. Sea access, and secure unloading facilities are vital for this industry.
- Coastguard – The Kaikōura Coastguard provide the only dedicated Search and Rescue vessel between Picton and Christchurch. Dedicated and unrestricted access is required for the time and safe recovery of vessels in often poor conditions.
- Private and individual facilities – Recreational boating is popular in Kaikōura with large volumes of traffic frequenting the ramps and slipways on the Kaikōura coast particularly over the holiday periods.

The affected facilities include:

- South Bay Boat Harbour – this provides for the safe access and storage of vessels used by the fishing and tourism industry, cruise ship tenders and recreational vessels.
- South Bay Coastguard Access – immediately west of the boat harbour is a purpose built launching ramp and access channel to allow immediate, safe and unobstructed access for the Coastguard vessel in an emergency.

- Ingles Bay Wharf – on the north side of the peninsula there is a small wharf facility used by the larger local fishing vessels and cruise ship tenders.
- Individual slipways and boat ramps – are located around the peninsula and to the north and south providing individual access points for small boats. These are used by boating clubs, camp grounds and provide public facilities.

The Chief Executive has authorised \$100,000 to help scope, plan, cost and timetable the required works. This was done in reliance of his delegated authority to authorise contingency expenditure for an emergency, which includes earthquakes.<sup>1</sup>

Emergency repair of these facilities is estimated to cost \$2.6 million and take approximately four months to complete. The scoping work which has been authorised will form the base of an application to central government for funding.

### 3. Landslide dams

As a result of the earthquake over one hundred landslide dams have formed. There is now a way for the public to view these on our website.<sup>2</sup>

GNS Science (GNS) are currently monitoring approximately 50 of these dams three times a week. Of these, nine dams are considered to pose a significant risk to people and/or infrastructure. These nine are shown in the table below. GNS is undertaking some “worst case scenario” modelling on these dams. It is currently unclear if this work will be complete before on-going monitoring is passed over to Environment Canterbury and who pays for this work.

Dam name	Last checked	Dam status
Conway 420	5 Dec 2016	Dam remains intact, front face eroding. High chance of failure, but no out of river flooding anticipated.
Gelt 200	5 Dec 2016	Water seeping through dam and lake level dropping. Moderate chance of failure, but no out of river flooding anticipated.
Hapuku 740	5 Dec 2016	Lake level slowly rising. Moderate chance of failure. Investigating potential effects.
Leader 220	5 Dec 2016	Lake level rising, no water leaking past dam. Moderate chance of failure, but no out of river flooding anticipated.
Leader 320	5 Dec 2016	Small lake behind substantial dam. Low chance of failure. Larger dam below.
Linton 340	5 Dec 2016	Dam remains intact, but face starting to erode. High chance of failure. Could affect some areas around Inland Road.
Ote Makura 100	5 Dec 2016	Small narrow lake behind dam with little change in lake level since November 19. Clean water flowing from dam face, moderate chance of failure.

<sup>1</sup> See Delegations Manual for Environment Canterbury sections 11.2 and 11.7.

<sup>2</sup> <http://ecan.maps.arcgis.com/apps/Cascade/index.html?appid=50f00d42e29c46b1a61b848440c5295a>

		Investigating potential effects.
Stanton 200	5 Dec 2016	Lake level slowly increasing. Some water seeping past dam. Moderate chance of failure, but no out of river flooding anticipated.
Towry 500	5 Dec 2016	Dam has breached. Lake level has dropped significantly, with only a small amount of water remaining.

It is currently planned that Environment Canterbury will pick up the monitoring programme of these dams on 12 December 2016 as part of our flood warning responsibility. It is likely the monitoring programme will not need to be as extensive as the current GNS programme due to the changing risk profile and purpose of monitoring.

Environment Canterbury will likely look to monitor key dams once a week at an estimated cost of \$10,000 per week for an as-yet undefined period. The monitoring programme will be continually assessed to ensure adequate protection and information is available.

The risk of dam breach may reduce over time but due to the “risk to people” element some of these dams are likely to require permanent monitoring. More permanent monitoring options are being considered in conjunction with GNS.

#### **4. Waste and Environmental Management support**

The Waste and Environmental Management Team (WEMT) was established in 2012 in response to waste and environmental challenges arising from the Christchurch Earthquakes. It is jointly funded by the Christchurch City Council, Selwyn District Council, Waimakariri District Council and Land and Information New Zealand.

The WEMT provide advice, education and support for effective waste disposal and reuse as well as offering compliance management and streamlining the customer experience. Their expertise has been offered to support the Hurunui and Kaikōura District Councils. This offer is yet to be accepted.

#### **5. Recovery legislation, interpretation and legal costs**

Legal costs have reached approximately \$40,000 to date and these are likely to be on-going. The estimated costs are dependent on the complexity of the legislation and the number of orders in council we are involved in. These costs are initially being met within existing budgets and an update will be provided to Council in February.

#### **6. Potential revenue loss**

After the Christchurch earthquakes there was a loss of income due to rates remissions. Based on the numbers of red and yellow stickered properties in Kaikōura and Hurunui the loss of income is likely to be minimal in comparison. For a full year the loss of revenue is expected to be approximately \$53,600 in Kaikōura and \$45,600 in Hurunui but the full impact will be assessed once staff have greater certainty.

## Financial implications

	<b>Total expected costs</b>	<b>Money requested from reserves if required</b>	<b>Comments</b>
Repairs to the Kowhai River stopbanks and Lyell Creek	\$910,000		\$884,000 exists within current rating district budget and reserves Around \$26,000 is likely to be required from general reserves
Harbour works	\$2,600,000	\$100,000	Funding being sort from central government
Landslide dams	\$80,000	\$80,000	Estimated cost through to February 2017
Flood modelling	Currently being met in existing budgets and through prioritising existing work although money to help with flood modelling is likely to be required.		
<b>Total additional money requested from reserves</b>	\$180,000 – from general rates \$884,000 – from combined Kaikōura rating district budget and reserves		

## Legal compliance and risk assessment

With the stopbank compromised and landslide dams affecting some residents the Kaikōura district is particularly vulnerable to future events. Heavy rainfall is now as much a risk to the township as a future aftershock.

Staff are continuing to take legal and other professional advice as required to minimise risks to Council.

## Consistency with council policy

Council holds reserves for unexpected expenditure. Using reserves to support the recovery from a natural disaster is consistent with Council policy.