

# WATERCARE SERVICES LIMITED

## AGENDA | Board meeting | 28/06/2017

<b>Venue</b>	Watercare Services Limited, 73 Remuera Road, Newmarket
<b>Time</b>	11:30am

### Open Public Meeting

Item	Spokesperson	Action sought at governance meeting	Supporting Material
1. Apologies	Chair	<ul style="list-style-type: none"> <li>Record Apologies</li> </ul>	
2. Minutes of Meeting	Chair	<ul style="list-style-type: none"> <li>Approve Board Meeting Minutes 30 May 2017</li> </ul>	Minutes 30 May 2017
3. Directors' Corporate Governance Items	Chair	<ul style="list-style-type: none"> <li>Review Board Planner</li> <li>Review Disclosure of Interests (Directors &amp; Executive Management)</li> <li>Review Director Appointments and Terms</li> </ul>	Board Planner Disclosure of Interests
4. For information			
a) Health & Safety Report	R Jaduram	<ul style="list-style-type: none"> <li>Receive report</li> </ul>	Report
b) Chief Executive's Report and Scorecard	R Jaduram	<ul style="list-style-type: none"> <li>Receive report</li> </ul>	Report
c) Strategic Programme Update: Non-revenue water	S Cunis	<ul style="list-style-type: none"> <li>Receive presentation</li> </ul>	Presentation
5. General Business	Chair		

Date of next Meeting – 31 July 2017

Location – Watercare Newmarket, 73 Remuera Road, Newmarket

# MINUTES

SUBJECT	WATERCARE SERVICES BOARD MEETING
VENUE	Hobson Room, Jubilee Building, Parnell Trust, 545 Parnell Road, Parnell
DATE	30 May 2017
TIME	11.30am
STATUS	Open Session

	<b>Present:</b>	<b>In Attendance:</b>	<b>Public in Attendance:</b>
	M Devlin (Chair) J Hoare (Deputy Chair) N Crauford C Harland T Lanigan B Green D Thomas  I Cronin-Knight (Board Observer)	<i>Watercare Services Limited</i> R Jaduram (CE) R Fisher M Smith R Chenery M Bourne for agenda item 4(a) P Jones for agenda item 4(a) J Simperingham  <i>Simpson Grierson</i> Bill Loutit for agenda item 4 (a)  <i>Tonkin + Taylor</i> Karen Baverstock for agenda item 4 (a) Peter Roan for agenda item 4 (a)	Approximately twenty members of the public. Media.
1.	<b>Apologies:</b> <ul style="list-style-type: none"> <li>There were no apologies.</li> </ul>		
2.	<b>Minutes of Previous Meeting</b> <ul style="list-style-type: none"> <li>Subject to minor amendments, the Board <b>resolved</b> that the minutes of the public section of the Board meeting held on 20 April 2017 be confirmed as correct.</li> </ul>		
3.	<b>Directors Corporate Governance Items</b> <ul style="list-style-type: none"> <li>Board Planner 2017 The report was noted.</li> <li>Disclosure of Interests The reports on the disclosure of interests were noted.</li> <li>Director Appointments and Terms The report was noted. N Crauford noted that her first term was for 19 months, not two years. Management will amend the paper to set out the date of first appointment of each Director.</li> </ul>		
4.	<b>Approvals</b> <b>(a) Huia Water Treatment Plant Replacement</b> The Board received a presentation from M Bourne, Bill Loutit (Simpson Grierson), Karen Baverstock (Tonkin + Taylor) and P Jones. The presentation is appended as Appendix A.  M Bourne discussed the strategically important business need to replace the ageing asset being the Huia Water Treatment Plant.  Bill Loutit from Simpson Grierson advised the Board that if this decision was being made five years ago, Watercare could have used the Manuka Road site, and vegetation could have been cleared without seeking consent. However, the Unitary Plan requires Watercare to apply for a consent to clear trees, and therefore Watercare is now required to consider alternative sites. Bill Loutit explained the legal position which requires Watercare to focus on the process, not the outcome, of considering alternatives. The process needs to be robust. There is no requirement to find the best site, and Watercare is not required to consider every single option. The Environment Court would require that Watercare establishes that the process is robust. As legal counsel for this project, Bill Loutit confirmed that Watercare's process		

has been robust. It has been uninfluenced by politics, and been undertaken by independent subject matter experts. In his opinion, the process followed more than satisfies the legal tests.

Karen Baverstock, Principal Planner at Tonkin + Taylor, explained the process undertaken to ascertain the sites. Three Multi Criteria Analysis (MCA) workshops were held. The MCA scores resulted in Manuka Road being ranked overall as number one.

P Jones explained the consultation undertaken by Watercare during the process. Although there is no obligation to consult at this stage of the process, it is Watercare's practice to consult. As a site had not been chosen, Watercare consulted with two communities. The consent requirements of the site alternatives were explained.

M Bourne discussed the costs of the options. The costs of each of the options did not influence the independent experts. The other considerations taken into account were also explained.

The preferred option recommended by Management is Manuka Road with reservoirs being constructed on Woodlands Park Road. The reasons for this option selection included the fact that the current Huia WTP is an established part of the community, Watercare has long held the designation on Manuka Road, the designation signalled to the community that the potential site could at some stage be developed for a new WTP, and the potential to offset ecological effects but not the social effects on Parker Road North.

The Board noted their concern with the ecological significance of the Manuka Road site. N Crauford asked whether the design of the plant can be optimised to minimise the ecological impact. Management confirmed that there is potential for the design of the plant to be optimised to minimise impact. Once the option is chosen, the important next step will be to work with the community and to look for optimisation of the design of the plant. Watercare intends to minimise the footprint within the Significant Ecological Area.

B Green noted that Watercare is responsible for serving the people of Auckland, and creating the world's most liveable city. There are a lot of stakeholders that have a strong connection to the preferred site, including mana whenua. B Green asked whether those voices have come through during the consultation process. M Bourne noted the large amount of feedback received from members of the Oratia community. He also noted the depth of feedback from stakeholders in relation to the preferred site. This feedback indicates the importance of continuing consultation with the community if the preferred site is chosen.

The Chair asked whether there had been any political influence during the process. Karen Baverstock advised that the independent and objective subject matter experts were not swayed by political or other influences.

I Cronin-Knight queried the cost modelling, and how that differed between the long-list to the shortlist. M Bourne noted the maturity of the cost modelling that was undertaken by Beca. The costs were analysed separately from the subject matter experts who were not aware of the costs. The complex model has been validated externally.

J Hoare noted the weightings given to the technical and environmental aspects and asked how robust the analysis of the weightings were. Karen Baverstock and Bill Loutit explained the weightings, noting their collaborative approach which covered off technical ratings and relevant sections of the Resource Management Act.

The Chair asked the Chief Executive for comments. The Chief Executive explained that the Manuka Road and Parker Road North sites were similar on balance of technical, environmental and costs. He confirmed the process has been robust, and that Management has satisfied itself on the recommendation.

C Harland asked whether any of the subject matter experts had disagreed with the outcome. K Baverstock advised that it was not the role of the subject matter experts to agree or disagree.

C Harland noted that the report sets out that the next step is to seek statutory approval. C Harland asked for clarification as to whether Watercare would lodge an application with Auckland Council, or directly to the Environment Court. M Bourne advised that it is Watercare's practice to apply to Auckland Council on a publicly notified basis. Therefore, Watercare would apply to Auckland Council when seeking statutory approval in this case.

The Board resolved that:

1. The preferred site for the replacement Huia Water Treatment Plant be on the Watercare owned Manuka Road site, with reservoirs constructed on the Watercare owned Woodlands Park Road site avoiding wherever possible significant trees and significant ecological effects, undertake offset mitigation, and explore other opportunities set out in Section 7 of the paper;
2. The statutory approvals be sought to allow the Huia Water Treatment Plant replacement to proceed by way of application to Auckland Council; and
3. Set up a Community Liaison Group or similar and undertake consultation with stakeholders.

**(b) Statement of Intent 2017-2020**

C Harland noted a discrepancy in the dates for the additional take from the Waikato River on pages 16 and 18. Subject to the minor amendment of correcting these dates, the Board resolved that:

- The proposed response to the shareholders comments and the related proposed additions or amendments be approved; and
- The Board approves the submission of the amended SOI to Auckland Council by the deadline of 30 June.

	<p>The Board received a submission from Mr John McCaffery on behalf of the Coalition of Auckland Environmental Groups. Mr McCaffery expressed concern regarding overflows in the combined sewer system and, in his opinion, the underinvestment in stormwater infrastructure.</p> <p>Mr McCaffery requested that the Board:</p> <ol style="list-style-type: none"> <li>1. Use the SOI process to ensure that there is public consultation as part of the CANOPY process, in advance of the already planned public consultation process that forms part of the 2018-28 Long Term Plan and;</li> <li>2. Assist in building an enhanced relationship between Watercare and Auckland Council to address issues in the combined sewer system.</li> </ol> <p>The Chair thanked Mr McCaffery for his time, and advised that Watercare would review his submission. The Chief Executive agreed that it would be sensible for Watercare to invite representatives from the organisation to a workshop. Watercare can then feed this into CANOPY. He advised that the next CANOPY workshop would be held on the 15<sup>th</sup> of June, and therefore recommended that the Coalition should meet with Watercare before then. The Chair advised that the Board has high expectations of achieving an outcome from CANOPY, and therefore is encouraging active engagement with Auckland Council.</p> <p><b>(c) Chief Executive Delegations</b></p> <p>The Board resolved to approve the delegations to the Chief Executive attached to the Board report subject to an addition to the delegation policy which requires notification to the Board when the delegations are exercised. This reflects the current process.</p>
5.	<p><b>For Information</b></p> <p><b>(a) Health and Safety Report</b></p> <p>The Chief Executive noted that the Business Leaders Forum TFIFR benchmark data appears to be erroneous and therefore it has been removed from the graph in the report.</p> <p>The Chief Executive advised that Management are disappointed with the output of the WSAA benchmarking programme, and is engaging with WSAA over the coming weeks. Management will provide commentary on the report at the next Board meeting.</p> <p>Management noted a trend where excavators have been used to lift items. A policy has now been implemented to ensure that excavators are not used for lifting. All contractors involved in a significant near miss have been advised that they need to use an appropriate tool for lifting going forward.</p> <p>The Chief Executive advised of the ongoing issues with sub-contractors. A contractor forum has been convened to discuss safety issues and re-iterate the Company's expectations in respect of health and safety.</p> <p>The Chair referred to the table of inspections on page 32, and asked why zero inspections were undertaken by MSO. The Chief Executive advised that this was due to the Tasman Tempest.</p> <p>C Harland asked for comparator data to be included in the inspections table going forward.</p> <p>I Cronin-Knight asked for visibility of new metrics.</p> <p>The Directors who attended the session with Michael Tooma advised that they found it useful. Management will circulate the material provided by Michael Tooma to all Directors.</p> <p><b>(b) Chief Executive's Report and Scorecard</b></p> <ul style="list-style-type: none"> <li>• Auckland Regional Water Demand Management Plan</li> </ul> <p>The Chief Executive advised the Board that a successful workshop with Auckland Council had been held, and Management was working closely with Auckland Council on the plan.</p> <p>Management expected to be in a position to report back to the Board in July.</p> <ul style="list-style-type: none"> <li>• Financial Position</li> </ul> <p>J Hoare requested Management maintain a watching brief on the subvention payment.</p>

6.	<p><b>General Business</b></p> <ul style="list-style-type: none"><li>• C Harland updated the Board on her attendance at the Finance and Performance Committee Meeting.</li><li>• N Crauford updated the Board on her attendance at the Finance and Performance Workshop.</li><li>• The meeting closed at 1.10pm.</li></ul>
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CERTIFIED AS A TRUE AND CORRECT RECORD

Margaret Devlin  
**Chair**

# Huia Water Treatment Plant Replacement Watercare Board



# Business Need

- Strategically important plant
- 19% of regional supply
- Utilises western sources
- Supplies West Auckland and North Shore/Orewa
- Capacity Constrained
- Process issues associated with treating raw water taste and odour issues
- Aged Asset
- 1928 with civil upgrade 1960's

# Project Progress/History

- Existing designation would have allowed construction of new facility on Manuka Road site
- On notification of Unitary Plan, introduced a SEA overlay into the Regional Plan
- Consents required for vegetation clearance under the SEA overlay
- This required consideration of alternatives which would not have previously been needed



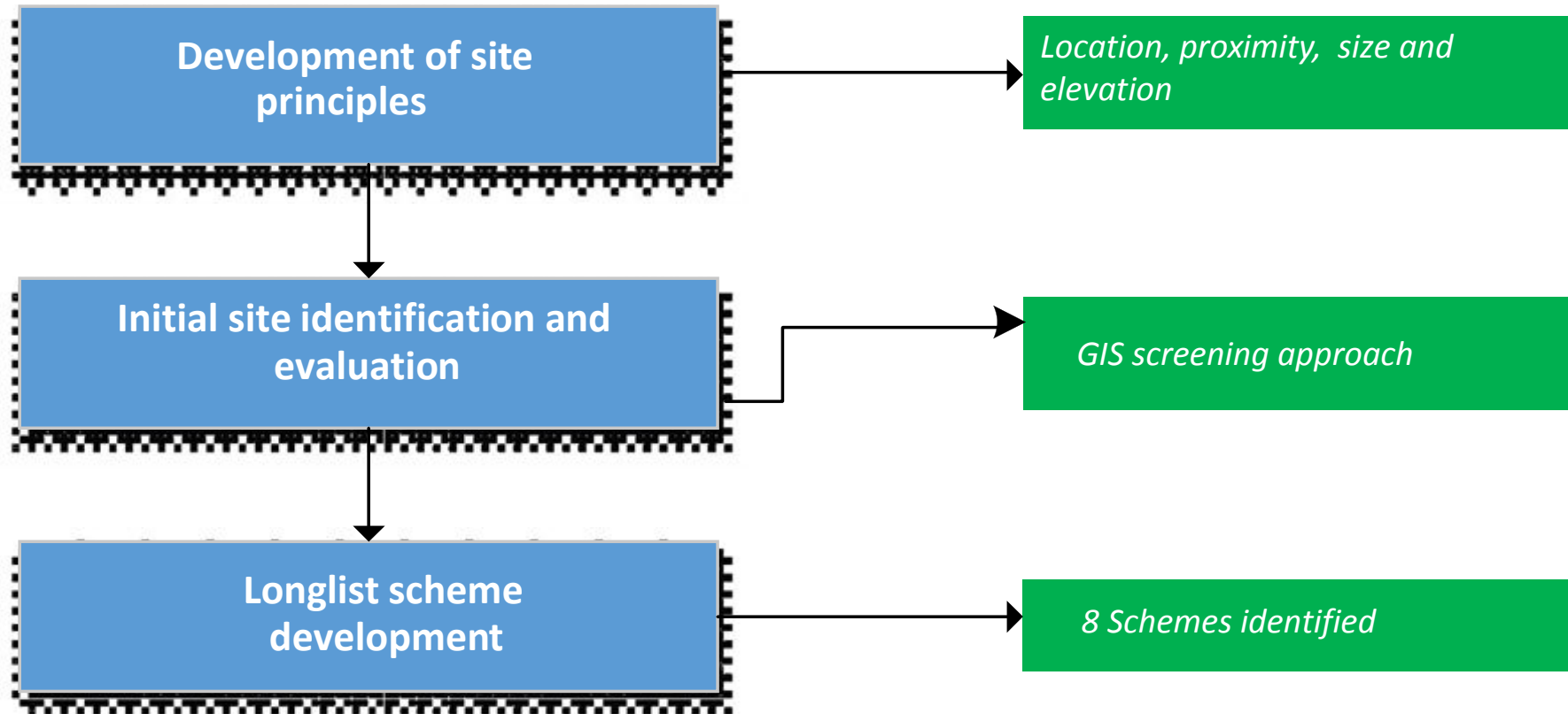
# The Law

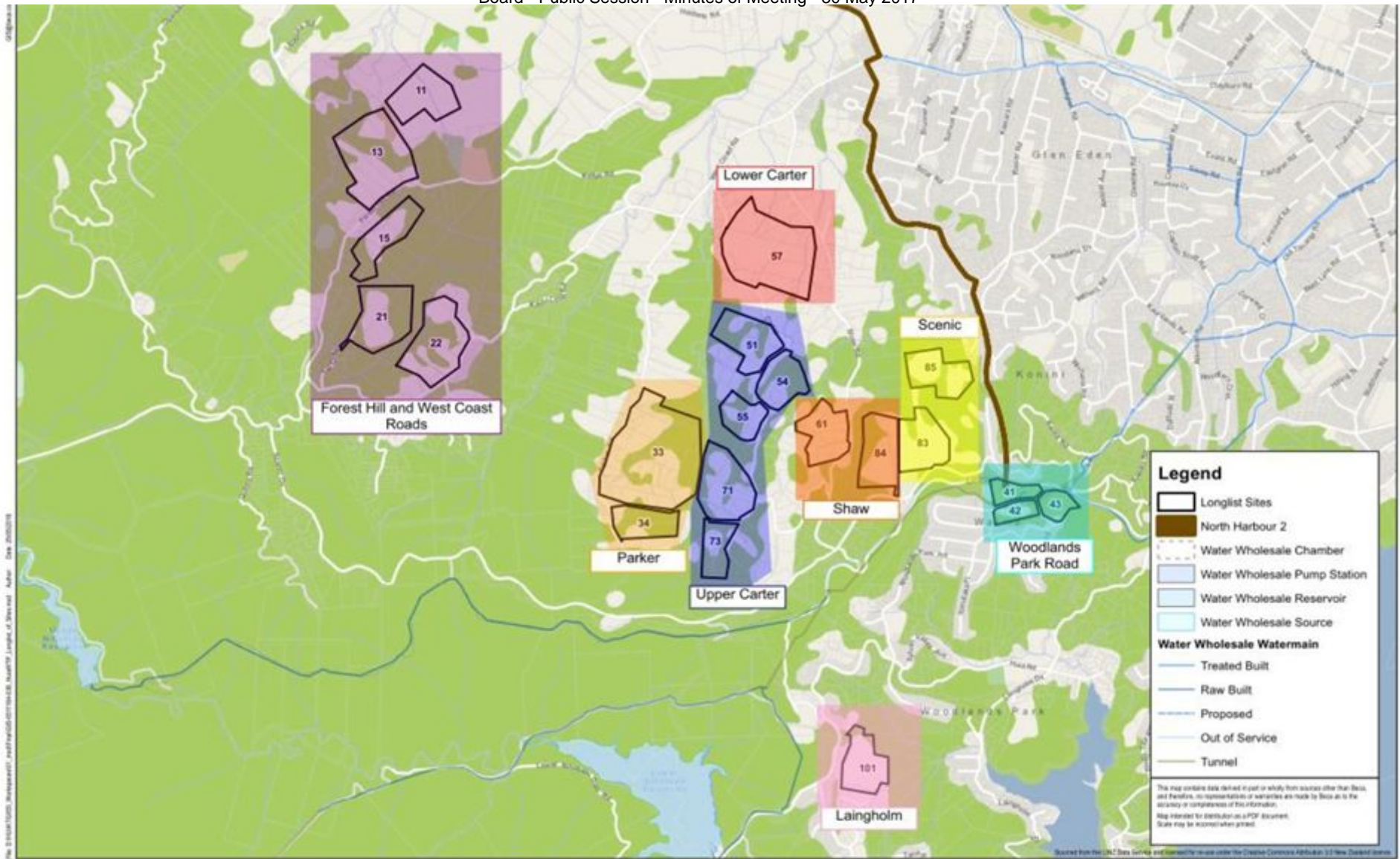
- Focus is on process not outcome
- Must be more than arbitrary or cursory consideration of alternatives
- Not a requirement to find the best
- Submitters views on a more suitable alternative are irrelevant
- Requiring authority makes the policy decision
- Not required to assess every alternative however speculative
- Not required to eliminate speculative or suppositious options
- No duty to consult

# The Process

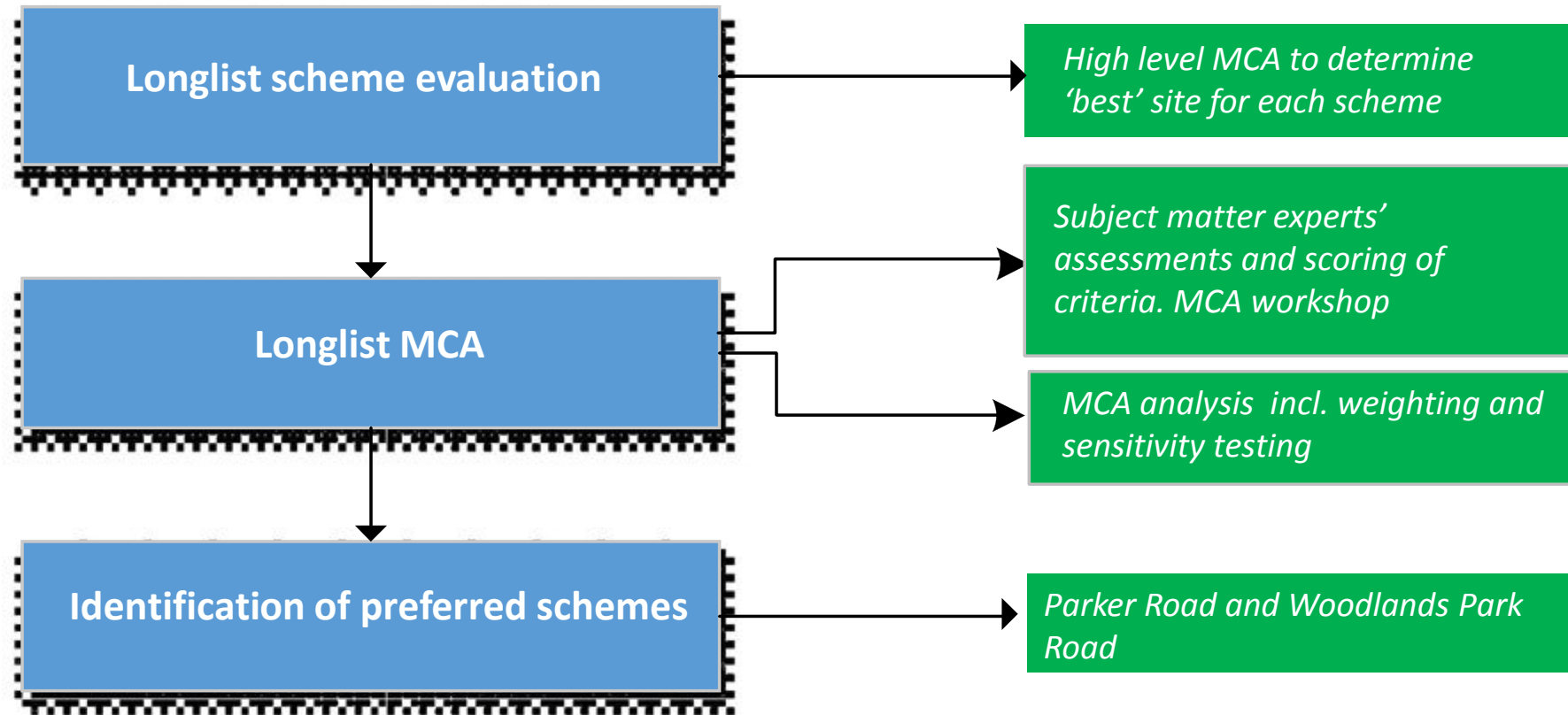
- Robust
- Undertaken by objective independent experts
- More than satisfies the legal requirements

# The Principles

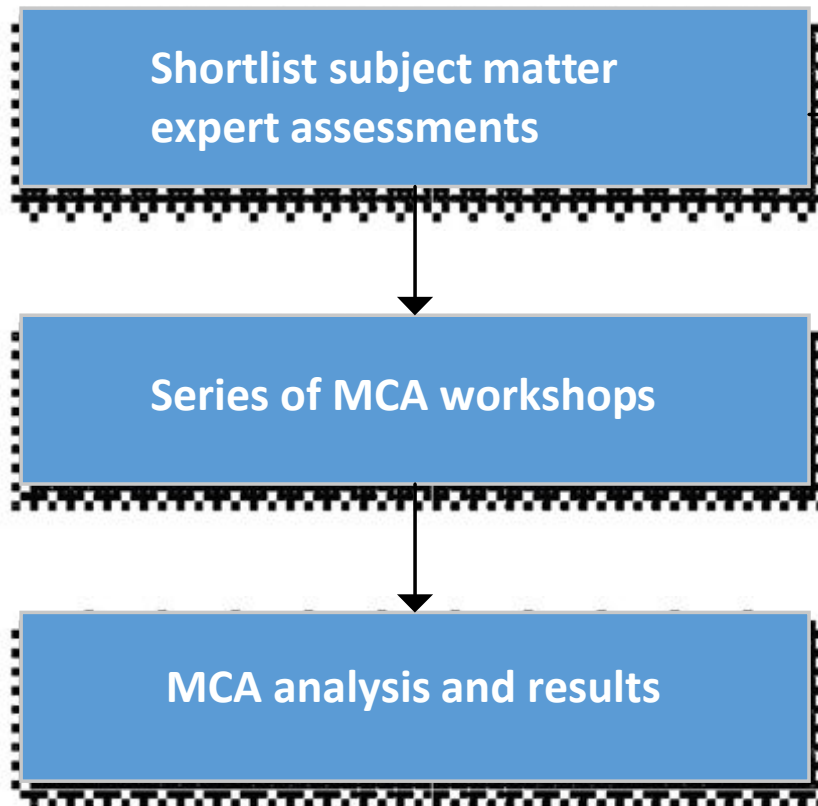




<p>Map Scale @ A3: 1:25,000</p>		<table border="1"> <thead> <tr> <th>Revision</th> <th>Author</th> <th>Checked</th> <th>Approved</th> <th>Date</th> <th>Title</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>107</td> <td>AS</td> <td>JK</td> <td>20/10/10</td> <td></td> </tr> </tbody> </table>	Revision	Author	Checked	Approved	Date	Title	1	107	AS	JK	20/10/10		<p><b>Long-list of Sites</b> Figure 7</p>	<p>Client: <b>Watercare Services Ltd</b></p> <p>Project: <b>Hula WTP Upgrade</b></p>		<p>Discipline: <b>GIS</b></p> <p>Drawing No: <b>GIS-6511164-038</b></p>
		Revision	Author	Checked	Approved	Date	Title											
1	107	AS	JK	20/10/10														



# The Process



- *Engineering considerations: key site characteristics, operability and constructability*
- *Noise*
- *Traffic*
- *Heritage and archaeology*
- *Landscape and visual*
- *Freshwater and terrestrial ecology*
- *Social impacts*

# MCA scores

Criteria	Manuka Road	Existing Site	Parker North	Parker South
TECHNICAL / ENGINEERING CRITERIA – RANKING	3	4	1	2
ENVIRONMENTAL CRITERIA – RANKING	1	3	2	4
OVERALL RANKING	1	3	2	4

Criteria	Manuka Road	Existing Site	Parker North	Parker South
OVERALL RANKING	1	3	2	4
TECHNICAL WEIGHTING	2	4	1	3
RMA WEIGHTING – SECTION 6 MATTERS OF NATIONAL IMPORTANCE	2	4	1	3
OVERALL RMA WEIGHTING – INCLUDING SECTIONS 5 AND 6	1	3	2*	4

\* Marginal difference between site and next highest ranked site.

# Consultation

- RMA no obligation to consult
- Watercare's practice is to consult with the community
- Public meetings – Oratia and Titirangi
- Open days at Huia WTP
- Emails – over 1500
- Interested Parties



# Consent Requirements

- Existing Site – OPW/Vegetation  
Removal/Earthworks/Stormwater/Off-sec water  
plus 10 consents for the second Waikato WTP
- Manuka Road – OPW/Vegetation  
Removal/Earthworks/Stormwater
- Parker Road North – Notice of Requirement  
Earthworks/Stormwater /Off-sec water
- Parker Road South – Notice of  
Requirement/Vegetation  
Removal/Earthworks/Stormwater/Off-sec water

# Costs

- Existing site has least favourable NPV (- \$1180m) due to need to bring forward construction of second Waikato WTP
- The other three sites are within \$9m over NPV of 35years
- Manuka Road site provides two treated water connections

# Other Considerations

- Exhibition Drive
- Clarks Bush
- Heritage buildings
- Existing WTP site
- Off-set mitigation

# Option Selection

- Parker Road North and Manuka Road very similar on balance of technical, environmental and costs
- Expert analysis identified:
  - Parker Road North site adverse effects on community's cohesion and way of life
  - Manuka Road effects primarily ecological

# Reasons

- Huia WTP is an established part of the community
- Watercare has long held designation on Manuka Road
- Designation signalled to community the potential that the site could at some stage be developed for WTP
- Potential to off-set ecological effects but not social effects on Parker Road North

# Preferred Option

- Manuka Road
- With reservoirs constructed on Woodlands Park Road

Board Planner 2017

		January	February	March	April	May	June	July	August	September	October	November	December
Meetings	Board	26 Jan <sup>^</sup>	1 Mar Newmarket	27 Mar Newmarket	20 Apr Newmarket	30 May* Parnell	28 Jun Newmarket	31 Jul <sup>^</sup> Newmarket	29 Aug Newmarket	21 Sep Newmarket	26 Oct* Newmarket	28 Nov Newmarket	20 Dec Newmarket
	Audit and risk committee	26 Jan (Before board meeting)			26 Apr Newmarket			31 Jul (Before board meeting)	18 Aug Newmarket		26 Oct (Before Board meeting)		
	Capital projects working group			6 Mar Newmarket		10 May Newmarket			9 Aug Newmarket			1 Nov Newmarket	
	Remuneration and appointments committee	26 Jan (After board meeting)			20 Apr (After board meeting)	30 May (After board meeting)			29 Aug (Before board meeting)		26 Oct (After board meeting)		
	Management Health & Safety Workshops			7 Mar Newmarket			29 Jun Newmarket			22 Sep Newmarket			21 Dec Newmarket
Governance	Charter reviews										Annual review of charters		
	Policy reviews										Treasury policy review (via A&R)		
	Delegations											Annual review of board delegations to CE	
	Quarterly risk				Risk report			Risk report			Risk report		
	Compliance	Statutory compliance			Statutory compliance			Statutory compliance			Statutory compliance		
	Shareholder interaction		27 Feb - CCO Q2 quarterly report due	21 Mar - Q2 briefing to F&P Committee		12 May - CCO Q3 quarterly report due			CCO Q4 quarterly report (due date to be advised)	5 Sept - Quarterly briefing to F&P Committee, Auckland Council's A&R Committee			
	H&S Quarterly report	Oct-Dec 16 Report			Jan-Mar 17 Report			Apr-Jun 17 Report			Jul-Sept 17 Report		
Board Training	Board training & development				H&S Due diligence refresher: 27 Apr								
Business strategy	Strategic planning			Strategy Workshop 7-8 March									
	Strategic programme updates						Non-revenue water	Business excellence / People & capability	Customer Focus	Financial responsibility		Customer focus	
Business planning	Key finance and business decisions	Approve half year accounts	a) approve financials for Draft SOI including projected 17/18 price increases, b) approve long term financials for Auckland Council modelling				28 June Approval of 2017/18 Budget		a) approve 2016/17 accounts, b) delegate final sign off of 2016/17 Annual Report			Auckland Council LTP - review Watercare input <sup>^</sup>	Auckland Council LTP - approve Watercare input <sup>^</sup>
	Statement of intent		Approval of Draft 2017-2020 SOI			Present shareholder SOI feedback at public meeting	Final 2017-2020 SOI issued to shareholder						2018/19 Letter of Expectation to be received

\* Statutory public Board meeting - deputations invited

> Timetable/Plan not yet available

<sup>^</sup> Extraordinary Audit & Risk and Board Meeting to meet shareholder half year and annual report timeline

## Report to the Board of Watercare Services Limited

**Subject:** Disclosure of Interests

**Date:** 21 June 2017

Section 140 of the Companies Act 1993 requires disclosure of interests of a director to the Board.

Set out below are the disclosures of interests received as at the date of this report.

<b>Director</b>	<b>Interest</b>
Margaret Devlin	<ul style="list-style-type: none"> <li>– Chairman, Harrison Grierson Limited</li> <li>– Chairman, WEL Networks</li> <li>– Director, City Care Limited</li> <li>– Director, Meteorological Services of NZ</li> <li>– Director, Waikato Regional Airport</li> <li>– Director, IT Partners Group</li> <li>– Independent Chair of Audit and Risk Committee, Waikato District Council</li> <li>– Chairman, Women in Infrastructure Network</li> </ul>
Catherine Harland	<ul style="list-style-type: none"> <li>– Director, McHar Investments Ltd</li> <li>– Director, Interface Partners Ltd</li> <li>– Trustee, One Tree Hill Jubilee Educational Trust</li> <li>– Member, Auckland Regional Amenities Funding Board</li> <li>– Member, Water Allocation Technical Advisory Group</li> </ul>
Tony Lanigan	<ul style="list-style-type: none"> <li>– Director and Shareholder, A G Lanigan &amp; Associates (2007) Limited</li> <li>– Director, Habitat for Humanity New Zealand Limited</li> <li>– Director and Shareholder, Lanigan Trustee Limited</li> <li>– Director and Chair, New Zealand Housing Foundation Limited</li> <li>– Director, Tamaki Makaurau Community Housing Limited</li> <li>– Member, Ministry of Health Hospital Redevelopment Partnership Group for Canterbury</li> <li>– Member, Ministry of Health Southern Partnership</li> </ul>
Julia Hoare	<ul style="list-style-type: none"> <li>– Director, AWF Madison Group Limited</li> <li>– Director, New Zealand Post Limited</li> <li>– Deputy Chairman, The a2 Milk Company Limited</li> <li>– Director, The a2 Milk Company (New Zealand) Limited</li> <li>– Director, Port of Tauranga Limited</li> <li>– Member, Auckland Committee, Institute of Directors</li> <li>– Member, Advisory Panel to External Reporting Board</li> <li>– Member, Institute of Directors National Council</li> </ul>
Nicola Crauford	<ul style="list-style-type: none"> <li>– Director, Environmental Protection Authority</li> <li>– Member of Electoral Authority - Cooperative Bank Limited</li> <li>– Senior Consultant - WorleyParsons New Zealand Ltd</li> <li>– Director and Shareholder - Riposte Consulting Limited</li> <li>– Director, Wellington Water Limited</li> <li>– Director, Orion New Zealand Limited</li> <li>– Chairman, GNS Science Limited</li> <li>– Deputy Chairman, Fire Services Commission</li> </ul>



David Thomas	<ul style="list-style-type: none"> <li>- Chairman, Ngati Whakaue Tribal Lands Inc</li> <li>- Chairman, Gypsum Board Manufacturers of Australasia</li> <li>- Shareholder / Employee, Fletcher Building Limited</li> <li>- Director, New Zealand Ceiling &amp; Drywall Supplies Limited</li> <li>- Director, Altus NZ Limited</li> </ul>
Brendon Green	<ul style="list-style-type: none"> <li>- Director, Kaitiaki Advisory Limited</li> <li>- Director, Tainui Kawhia Incorporation</li> <li>- Executive Director, Bay Dairy Limited</li> <li>- Executive Director, Advanced Biotech NZ</li> <li>- Executive, Te Runanganui o Ngati Hikairo</li> <li>- Contract with Mercury for stakeholder management of greenfield geothermal developments</li> </ul>

### RECOMMENDATION

That the report be received.

Approved by:



R Jaduram  
**Chief Executive**

## Report to the Board of Watercare Services Limited

**Subject:** Disclosure of Interests – Executive Management

**Date:** 21 June 2017

<b>Executive</b>	<b>Interest</b>
Raveen Jaduram	Trustee - Te Motu a Hiaroa (Puketutu Island) Governance Trust Steering Committee Member – Business Leaders' Health and Safety Forum Chair - Centre for Infrastructure Research at University of Auckland Director – J N Jaduram Corporation Limited (Fiji)
Rob Fisher	Deputy Chairman - Middlemore Foundation President - Auckland University Rugby Football Club Trustee - Watercare Harbour Clean Up Trust Trustee - Te Motu a Hiaroa (Puketutu Island) Governance Trust Director – Hunua Forests Ltd
Brian Monk	Deputy Chairman - MIT Chairman Audit and Compliance Committee - MIT Trustee - Watercare Harbour Clean Up Trust Trustee - Te Motu a Hiaroa (Puketutu Island) Governance Trust Director – EnterpriseMIT Ltd Director – Hunua Forests Ltd
Steve Webster	Director – Howick Swimgym Limited
Marlon Bridge	Trustee - Te Motu a Hiaroa (Puketutu Island) Governance Trust
Martin Smith	Director – Heatley Smith Limited
Shayne Cunis	Board Member – Water New Zealand
Adrienne Miller	Advisory Board Member – Women In Infrastructure Health & Safety Committee Member – Water New Zealand
Rebecca Chenery	Nil
David Hawkins	Nil
David Sellars	Nil

### RECOMMENDATION

That the report be received.

Approved by:



R Jaduram  
Chief Executive

## Report to the Board of Watercare Services Limited

**Subject:** Watercare Director Appointment Terms

**Date:** 21 June 2017

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Set out below is the end date of the current appointment term for the Watercare Board of Directors. Dates are current as at the date of this report.

<b>Director</b>	<b>Original Appointment Date</b>	<b>End of Term</b>
Margaret Devlin (Chair)	01 November 2016	31 October 2019
Julia Hoare (Deputy Chair)	01 November 2013	31 October 2019
Catherine Harland	21 April 2011	31 October 2019
Tony Lanigan	21 April 2011	31 October 2017
Nicola Crauford	01 April 2014	31 October 2019
David Thomas	01 November 2014	31 October 2020
Brendon Green	01 November 2016	31 October 2019

### RECOMMENDATION

That the report be received.

Approved by:



R Jaduram  
Chief Executive

## Report to the Board of Watercare Services Limited

**Subject:** Health and Safety Report – May 2017

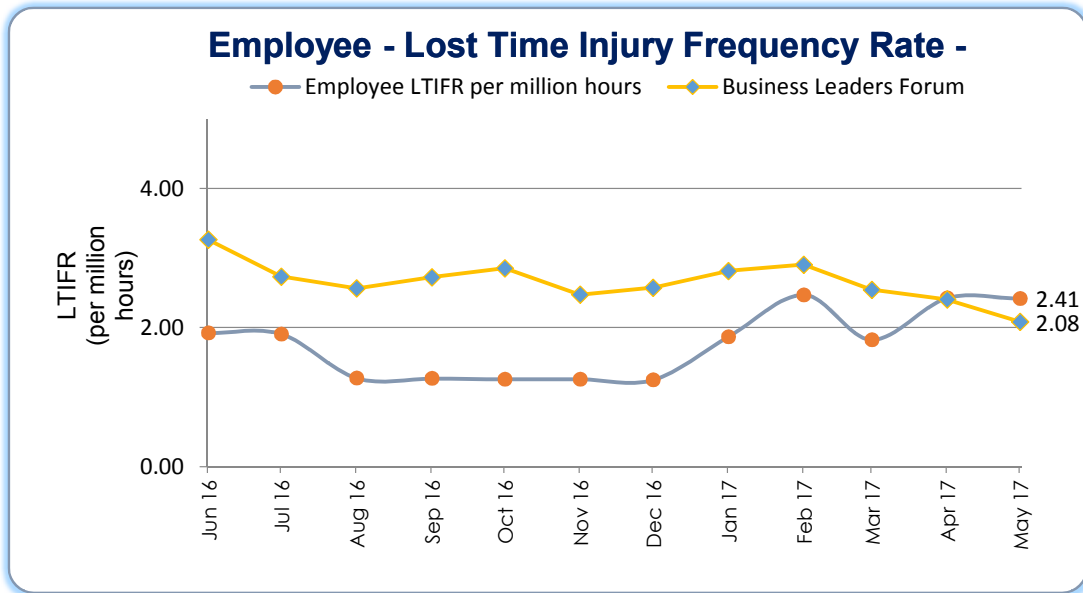
**Date:** 21 June 2017

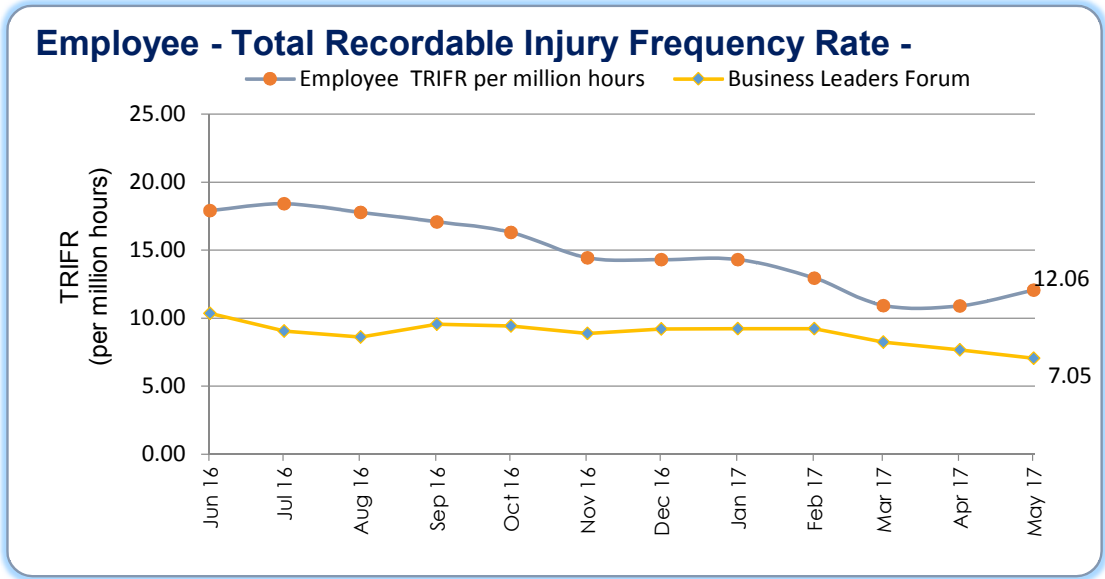
### 1. LAG INDICATORS

There were no Lost Time Injuries (LTI) involving Watercare employees during May.

As a result the rolling 12 month Lost Time Injury Frequency Rate (LTIFR) for employees has dropped slightly to 2.41 per million hours.

There were three Watercare employee Restricted Duties Injuries (RDI) this month and one Medical Treatment Injury (MTI). As a result the Watercare employee Total Recordable Injury Frequency Rate (TRIFR) has risen slightly to 12.06 per million hours. As can be seen from the MTI incident analysis below, the employee’s previous history and predisposition to infections in situations where others might not have a similar reaction, is under investigation medically. In terms of the RDI’s despite recent educative work and training that has been conducted around lifting techniques, two of these RDIs are related to manual handling which suggests further education is required.





(Note - the Business Leaders Forum comparator line has been re-inserted into the graphs above. Discussions in the context of the previous anomalies we had identified suggests that some members are not entering data monthly, thereby leading to historical aggregated results changing over time).

**2. WATERCARE EMPLOYEE INJURIES**

There was one MTI involving a Watercare maintenance employee who sustained a cut to the cheek when he bumped his head whilst hitching a trailer to a vehicle. The worker reacted to this minor injury and was treated to avoid infection. Blood tests have been arranged to establish underlying reasons for these reactions. The need for caution and awareness was communicated to all MSN teams.

There were three Watercare employee Restricted Duties Injuries (RDI) for the month;

A laboratory sampler came into contact with a small quantity of nitric acid on her hand during sample collection. The acid burn was assessed by a medical practitioner and the worker was placed on alternative duties for 3 days. Lab management have amended the procedure to include the use of gloves (previously considered to impede task completion) while undertaking such work, and communicated the change to all sampling teams. The possibility to reduce the acid concentration used in this type of sampling is also being investigated.

A lab sampler strained her neck whilst lifting 10L containers filled with water into the van. A medical assessment concluded that the injury was an exacerbation of a pre-existing condition not previously disclosed to Watercare. The worker was placed on restricted duties that exclude any heavy lifting. The task process was reviewed and communicated to fill the containers in the rear of the vehicles thereby eliminating the need to lift them from ground level. Workers were also reminded to declare all pre-existing medical conditions.

A maintenance worker sustained a shoulder muscle strain while manually loading pieces of concrete onto a truck and was assigned alternate duties for one week. While we have done training around correct manual handling practices the intention and preference is that hiabs are available they are used to lift material or aggregated loads, e.g. buckets. This will be communicated again.

### 3. CONTRACTOR WORKER INJURIES

There was one Lost Time Injury (LTI) in the month of May.

While carrying two bags of rubbish down a flight of stairs at Mangere, and not using the handrail a cleaner lost her balance and fell, resulting in a sprained ankle and bruising to the lower back. The worker was unfit for work for a period of 10 days. The contractor communicated the importance of care when ascending/descending stairs of maintaining three points of contact.

### 4. SIGNIFICANT HAZARD/NEAR MISSES

**Helicopter lifting operation:** A contractor using a helicopter to lift a load failed to apply an exclusion zone and adequate tag lines, resulting in the suspended load coming into contact with his support vehicle, causing damage to the vehicle. The pilot managed the situation and the lift was completed successfully. Watercare have requested the contractor to revise their written procedures incorporating all learnings from causal factors identified and to include lift plans for all future lifts. That implementation is underway and until complete no further helicopter work will be undertaken by that contractor.

**Mini digger overturned:** A 1.7 ton excavator overturning whilst off-loading a plate compactor from a truck in a manner differently than had been initially planned because of space constraint. Worksafe was notified of the incident but advised the contractor that they would not conduct any further investigations, and that the contractor could recover the excavator and resume work. The contractor is to revise its safe work procedures, conduct a re-assessment for the excavator operator and communicate all learnings to their work teams. Watercare have also issued a directive which informs all contractors and Watercare management that no lifting work can be undertaken using excavators except in the manner prescribed in the directive.

**High Voltage cable contact:** During backfilling operations an excavator bucket made contact with an 11kv cable causing it to arc and fail. The contractor secured the site and notified Watercare and Worksafe. There was an immediate stand down site-wide and the incident was communicated to all workers. Causal factors were found to include:

- Insufficient protection around services;
- Incorrect siting of excavator and safety watch resulting in limited operational visibility;
- Inadequate supervision;
- Worker complacency around live services;
- Recent operator change (3 days prior); and
- Diminishing control being applied towards end of works.

The contractor is progressively implementing remedial actions and the Watercare project manager is tracking and reviewing implementation of all actions.

**Electrical Isolation Breach:** A Watercare project manager observed a contractor undertaking electrical work without having carried out full isolation controls. The work was immediately halted and the contractor stood down from all Watercare site work until the incident had been discussed with all personnel and correct isolation procedures re-communicated. Watercare await a full investigation report from the contractor.

**Falling Load into Manhole:** Whilst manually lifting a bag of debris out of a manhole, the knot in the rope securing the load came undone and the bag fell to the bottom of the manhole. The risk of a load falling had been identified prior and a decision had been made to have the worker inside the manhole stand in a protection location. As a result there were no injuries. Worksafe was notified of the incident and cleared the site to reopen. The investigation continues. The Watercare contract manager will maintain engagement with the contractor to ensure all causal factors are identified and adequate remedial actions planned and implemented. If of broader significance they will be shared business wide.

## 5. INSPECTIONS

A table setting out Watercare business unit targeted versus completed inspections for May is appended as Appendix A.

Business units within Watercare are implementing improvements that have been identified by these inspections but have not reported any trends of significance arising from of these inspections that warrants reporting. The improved system categorisation options for those completing inspections (enabling those inputting data to pre-categorise matters so as to improve the granularity of automated reporting has not yet been fully implemented).

## 6. HEALTH AND SAFETY WORKSHOP FOR MANAGERS

Additional training sessions have been arranged for 13-14 September for the 39 employees who did not get to attend the previous EMA training workshop sessions due to the Tasman Tempest workloads.

## 7. WATER SERVICES ASSOCIATION OF AUSTRALIA (WSAA) HEALTH AND SAFETY BENCHMARKING PROGRAMME

When Watercare were invited to participate in the 2016 WSAA benchmarking project it was believed that it would assist us by:

- Reporting key health and safety indicators;
- Benchmarking health and safety indicators;
- Sharing leading practices;
- Promoting further collaboration; and
- Improving reporting capability.

As up to 25 WSAA members were planning on participating it was thought this would enable us to benchmark performance against other suitable similarly sized organisations, for example Sydney and Melbourne Water.

Participation in the WSAA benchmarking program was approved at a health and safety workshop in November 2016 and it was signalled at that stage that we would not be in a position to respond on all of the metrics, but it was considered that there was nonetheless value in participation.

We received an online questionnaire and responses and all applicable Watercare data were submitted online to WSAA by mid-January 2017.

Upon receipt of the report we were disappointed with the quality of the inputs and the level of insight and analysis provided.

With the exception of TRIFR which was well responded to, it's clear there were challenges for many of the contributors in providing data across all of the 15 indicators, with the level of responses for many being either incomplete or lacking in credibility.

On TRIFR the WSAA benchmark was 12.44 and Watercare's scoring was 11. The best respondent indicated a score of 0 with the worst being 56.1. In relation to the contractor data on TRIFR (to which only 14 participants responded) Watercare's result was 24.8, and the highest was 67.8.

Apart from the TRIFR indicator, one other indicator that received more than 80% response from participants was the Hazards vs Injury metric. Twenty one companies provided data and a WSAA benchmark of 11.52 was determined. Watercare was scored at 2.70, with the best respondent scoring 0.50 and the worst being 36.0. Only eight respondents provided contractor data for this indicator. Watercare scored at 0.95, with the best being 0 and the worst being 187.0

In some cases respondents had responded indicating 100% confidence/achievement levels which just did not seem credible on the basis of the questions asked.

Our review of the report overall indicated a need for further engagement with WSAA to clarify the basis on which certain measures were reported or measured by other participants and how benchmarks have been determined, as well as how regularly the member organisations will be asked to update the data and whether, like the Business Leaders Forum, a rolling tool is envisaged. Having now made contact with WSAA alerting them to our concerns we await their response.

We are not envisaging that it could in the short term be the replacement for the Business Leaders Forum metrics that we had been hoping for.

In saying that, some of the metrics proposed do potentially have merit as useful metrics that Watercare could adopt (in conjunction with TRIFR) and we recommend the following for consideration;

- Workplace inspections completed versus inspections planned
- Training completed versus training planned
- Incidents investigated in time (time frames clearly defined and *What happened, Where, Why, What is the learning...*)
- High Potential Incident Frequency Rate (HPIFR)

## 8. HEALTH AND SAFETY PLAN REVIEW

The current health and safety plan for the period April 2016 to June 2017 has been reviewed and a draft plan for the period 2017 to 2020 with detailed programmes for the next financial year 2017-2018 has been compiled. The new health and safety plan will be reviewed by the senior management team with sign-off by the Chief Executive.



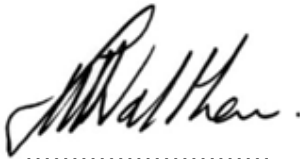
**9. INDEPENDENT AUDIT REVIEWS**

A health and safety management systems audit against the AS/NZ4801 standard is scheduled to be carried out by Telarc on 25-27 July which will include visits to various treatment plants, the lab and a construction project.

**10. RECOMMENDATION**

That the Board receives this report.

Prepared by:



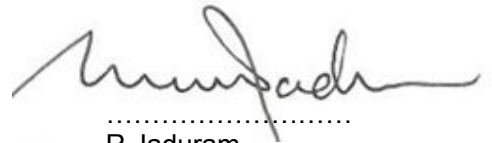
.....  
S Walthew  
**Corporate Health and Safety  
Manager**

Reviewed by:



.....  
A Miller  
**General Manager  
Corporate Services**

Approved by:



.....  
R Jaduram  
**Chief Executive**

## Appendix A

**Inspections** – Targets were set with business units for Health and Safety Inspections for the 2016-2017 financial year. In part this was done to identify new hazards and risk, but also as a way of embedding a culture of enquiry and vigilance around safety. The information below reflects a level of activity that indicates a positive ongoing culture of monitoring of activities and equipment.

	<b>Business unit</b>	<b>Target for Inspections in May</b>	<b>Actual completed</b>	<b>% Complete</b>
<b>Infrastructure Delivery</b>	<i>Construction Delivery</i>	<b>19</b>	<b>17</b>	<b>90</b>
	<i>Lab Services</i>	<b>8</b>	<b>11</b>	<b>139</b>
	<i>MSO</i>	<b>16</b>	<b>21</b>	<b>131</b>
	<i>MSN</i>	<b>14</b>	<b>15</b>	<b>107</b>
	<b>Total</b>	<b>57</b>	<b>64</b>	<b>112</b>
<b>Service Delivery</b>	<i>Networks</i>	<b>12</b>	<b>14</b>	<b>117</b>
	<i>Asset Protection &amp; Engineering Performance</i>	<b>3</b>	<b>2</b>	<b>67</b>
	<i>Water Supply</i>	<b>15</b>	<b>21</b>	<b>140</b>
	<i>Wastewater</i>	<b>18</b>	<b>23</b>	<b>128</b>
	<b>Total</b>	<b>48</b>	<b>60</b>	<b>125</b>
<b>Watercare Total for Inspections</b>		<b>106</b>	<b>124</b>	<b>117</b>

Board - Public Session - For Information

WATERCARE SCORECARD 2016/17																			
On budget, on time, within parameters		Unfavourable but within parameters			Major issue, needs attention														
		SOI	2016/17 Target	Amber Threshold	Red Threshold	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	
<b>1 Safe and Reliable Water</b>																			
1a	The extent to which the local authority's drinking water supply complies with part 4 of the drinking-water standards (bacteria compliance criteria)	☑	100%	n/a	<100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1b	The extent to which the local authority's drinking water supply complies with part 5 of the drinking-water standards (protozoal compliance criteria)	☑	100%	n/a	<100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1c	Percentage compliance with MoH drinking water standards		100%	n/a	<100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1d	Percentage of metropolitan water treatment plants achieving Grade A (annual measure)		100%	n/a	<100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1e	Percentage of metropolitan water supply reticulation achieving Grade A (annual measure)		100%	n/a	<100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1f	Percentage of non-metropolitan water treatment plants achieving Grade A (annual measure)		50%	n/a	<45%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1g	Percentage of non-metropolitan water supply reticulation achieving Grade A (annual measure)		50%	n/a	<25%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1h	Percentage of unplanned water shutdowns restored within five hours (12 mth rolling average)		≥95%	93% to <95%	<93%	95%	95%	95%	94%	94%	94%	95%	95%	96%	96%	96%	96%	95%	
1i	Number of unplanned water interruptions per 1000 connected properties (12 mth rolling average)		≤10	>10 to 12	>12	4.7	4.6	4.5	4.6	4.7	4.8	5.0	5.1	5.3	5.4	5.7	5.7	5.9	
1j	Unrestricted demand - metropolitan		Unrestricted	Subjective	Restrictions apply	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Subjective	Subjective	Unrestricted	
1k	Unrestricted demand - non-metropolitan		Unrestricted	Subjective	Restrictions apply	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	
<b>2 Healthy Waterways</b>																			
2a	Number of dry weather sewer overflows per 100km of wastewater pipe length per year (12 mth rolling average)		≤5	>5 to 7	>7	2.20	2.29	2.26	2.26	2.26	1.99	1.86	1.78	1.60	1.60	1.86	1.89	1.90	
2b	Average number of wet weather overflows per discharge location (transmission system)	☑	≤ 2 overflows per year per engineered overflow point	Low risk non-compliance	High risk non-compliance	0.69	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	
2c	The number of dry weather overflows from the territorial authority's sewerage system, expressed per 1000 sewerage connections to that sewerage system	☑	≤10	>10 - ≤15	>15	0.03	0.04	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
2d	Compliance with the territorial authority's resource consents for discharge from its sewerage system measured by the number of: a) abatement notices b) infringement notices c) enforcement orders d) convictions received by the territorial authority in relation to those resource consents	☑	a) ≤2 b) ≤2 c) ≤2 d) 0	n/a	>2 (for any)	0	0	0	0	0	0	0	0	0	0	0	0	0	
2e	Number of sewer bursts and chokes per 1000 properties (12 mth rolling average)		≤10	>10 to ≤ 12	>12	6.00	5.80	6.10	6.40	6.60	6.80	6.90	7.20	7.60	8.00	8.40	9.00	9.20	
2f	Percentage of wastewater discharged that is compliant with consent discharge requirements for metropolitan areas		100%	98 to <100%	<98%	100%	100%	100%	100%	100%	100%	100%	97%	100%	99%	100%	100%	100%	
2g	Percentage of wastewater discharged that is compliant with consent discharge requirements for non-metropolitan areas		35%	n/a	<35%	88%	88%	89%	94%	90%	87%	85%	86%	85%	85%	87%	86%	80%	
<b>3 Customer Satisfaction</b>																			
3a	Median response time for attendance for urgent call-outs: from the time that the local authority receives notification to the time that service personnel reach the site.	☑	≤ 60 mins	>60 - ≤90 mins	>90 mins	43 mins	44 mins	44 mins	43 mins	43 mins	43 mins	42 mins	42 mins	42 mins	41 mins	41 mins	41 mins	41 mins	
3b	Median response time for resolution of urgent call-outs: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption	☑	≤ 5 hours	>5 - ≤ 8 hours	>8 hours	2.8 hours	3.0 hours	3.0 hours	3.2 hours	3.2 hours	3.2 hours	3.2 hours	3.2 hours	3.2 hours	3.0 hours	2.9 hours	2.9 hours	2.8 hours	
3c	Median response time for attendance for non-urgent call-outs: from the time that the local authority receives notification to the time that service personnel reach the site	☑	≤ 3 days	>3 - ≤ 5 days	>5 days	2.9 days	3.0 days	3.0 days	2.9 days	2.9 days	2.7 days	2.1 days	1.9 days	1.4 days	1.2 days	1.1 days	1.0 days	1.0 days	
3d	Median response time for resolution of non-urgent call-outs: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption	☑	≤ 6 days	>6 - ≤ 8 days	>8 days	4.1 days	4.8 days	4.3 days	4.3 days	4.4 days	4.2 days	4.0 days	3.6 days	3.1 days	2.9 days	2.3 days	2.1 days	2.0 days	
3e	Percentage of customers surveyed satisfied with Watercare's delivery of water and wastewater services (12 mth rolling average)	☑	≥80%	≥75% to <80%	<75%	84.4%	84.2%	84.3%	80.8%	80.9%	81.4%	81.4%	81.4%	81.8%	82.1%	82.2%	82.2%	82.4%	
3f	The total number of complaints received by the local authority about any of the following: a) drinking water clarity b) drinking water taste c) drinking water odour d) drinking water pressure or flow e) continuity of supply f) the local authority's response to any of these issues expressed per 1000 connections to the local authority's networked reticulation system	☑	≤ 10	>10 - ≤ 15	>15	5.6	5.6	5.6	5.6	5.6	5.6	5.8	5.9	6.1	6.0	5.8	5.9	5.7	
3g	Attendance at sewerage overflows resulting from blockages or other faults: median response time for attendance - from the time that the territorial authority receives notification to the time that service personnel reach the site	☑	≤ 60 mins	>60 - ≤ 90 mins	>90 mins	45 mins	46 mins	47 mins	47 mins	48 mins	48 mins	48 mins	49 mins	49 mins	49 mins	49 mins	50 mins	50 mins	
3h	Attendance at sewerage overflows resulting from blockages or other faults: median response time for resolution - from the time that the territorial authority receives notification to the time that service personnel confirm resolution of the blockage or other fault	☑	≤ 5 hours	>5 - ≤ 8 hours	>8 hours	2.8 hours	2.9 hours	2.9 hours	2.9 hours	3.0 hours	3.0 hours	3.0 hours	3.0 hours	3.0 hours	3.0 hours	3.1 hours	3.2 hours	3.2 hours	
3i	The total number of complaints received by the territorial authority about any of the following: a) sewerage odour b) sewerage system faults c) sewerage system blockages d) the territorial authority's response to issues with its sewerage system expressed per 1000 connections to the territorial authority's sewerage system	☑	≤ 50	>50 - ≤ 75	>75	21.1	20.8	21.3	21.7	21.7	21.8	22.0	22.1	22.1	22.1	23.2	24.5	24.4	
3j	Number of water quality complaints (taste, odour, appearance) per 1,000 water supply connections (12 mth rolling average)		≤5	>5 to ≤ 5.5	>5.5	3.70	3.70	3.60	3.64	3.32	3.31	3.42	3.51	3.70	3.50	3.37	3.30	3.50	
3k	Percentage of complaints being 'closed and resolved' within 10 working days (12 mth rolling average)	☑	≥95%	≥90% to <95%	<90%	95.1%	93.50%	92.80%	92.20%	92.90%	92.90%	93.90%	94.10%	94.60%	95.9%	96.9%	97.6%	97.9%	
3l	Percentage of the 19 Iwi groups throughout Auckland that Watercare have entered into a Memorandum of Understanding with (target for end of FY16/17)	☑	≥60%					15.70%	15.70%	15.70%	15.70%	15.70%	15.70%	15.70%	15.70%	15.70%	15.70%	15.70%	

4.2

Board - Public Session - For Information

WATERCARE SCORECARD 2016/17																									
On budget, on time, within parameters		Unfavourable but within parameters		Major issue, needs attention		SOI	2016/17 Target	Amber Threshold	Red Threshold	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17			
<b>4 Health, Safety and Wellbeing</b>																									
4a	Lost-time injury frequency rate per million hours worked (12 month rolling average)	☑	≤5	5 - 7	>7		2.51	1.92	1.9	1.25	1.25	1.25	1.25	1.25	1.26	1.24	1.87	2.47	1.82	2.42	2.41				
4b	Percentage of total hours absent due to illness (12 mth rolling average)		≤2.5%	>2.5 to 3.5%	>3.5%		2.14%	2.18%	2.19%	2.15%	2.18%	2.19%	1.97%	2.08%	2.21%	2.19%	2.23%	2.28%	2.28%						
4c	Percentage of voluntary leavers relative to number of permanent staff (12 mth rolling average)	☑	≤12%	>12 to 14%	>14%		12.74%	12.92%	12.15%	12.54%	12.18%	11.19%	10.66%	10.70%	11.31%	10.67%	10.04%	10.76%	11.15%						
4d	Total recordable injury frequency rate per million hours worked (12 month rolling average)	☑	<20	>20 to <23	>23		14.42	23.02	23.48	22.85	18.35	16.94	14.45	14.3	14.31	12.95	10.93	10.9	12.06						
<b>5 Financial Responsibility</b>																									
5a	Minimum funds flow from operations to interest cover (FFO) before any price adjustment	☑	≥2.5	2.4 to <2.5	<2.4		3.71	3.71	3.89	3.94	3.92	3.91	3.98	3.92	3.95	4.02	3.99	3.92	3.91						
5b	Percentage of household expenditure on water supply services relative to the average household income	☑	≤1.5%	1.2 to <1.5	>1.5		0.86%	0.86%	0.86%	0.87%	0.87%	0.87%	0.87%	0.87%	0.88%	0.88%	0.89%	0.89%	0.89%	0.89%	0.90%				
5c	Water & wastewater revenue against budget YTD %		≥100%	≥98% to <100%	<98%		102%	102%	101%	101%	101%	101%	100%	101%	101%	101%	100%	101%	100%	100%	100%				
5d	Infrastructure growth charge revenue against budget YTD %		≥100%	≥95% to <100%	<95%		105%	108%	115%	125%	113%	110%	116%	122%	121%	127%	120%	112%	111%						
5e	Controllable costs against budget YTD %		≤100%	>100 to ≤102%	>102%		97%	99%	94%	97%	95%	95%	94%	95%	94%	95%	94%	96%	97%	98%					
5f	Total contribution against budget YTD (\$ millions)		+	-\$0.1m to -\$2m	> -\$2m		35.65	37.55	4.80	6.84	7.88	11.86	15.86	17.5	23.34	32.39	31.39	29.7	38.2						
5g	Net surplus / deficit before tax against budget YTD (\$ millions)		+	-\$0.1m to -\$2m	> -\$2m		-77.60	-108.02	-21.05	-23.37	-15.53	36.58	92.07	118.33	134.22	131.4	129.31	120.4	109.99						
5h	Total net borrowing against budget YTD (\$ millions)		Negative	\$0.1m to \$10m	> \$10m		-105.30	-92.00	10.60	14.70	9.80	6.70	4.10	14.20	0.70	-11.30	-20.70	-26.60							
<b>6 Fully Sustainable</b>																									
6a	The average consumption of drinking water per day per resident (gross PCC) (12 month rolling average)	☑	270 +/- 2.5%				273	272	272	273	273	273	272	272	272	271	271	272	272						
6b	Per capita consumption (litres / person / day) - Residential Monthly PCC		Information only				155	153	151	152	152	157	162	168	171	168	162								
6c	Non-Domestic Monthly Water Volume		Information only				3,137,157	2,970,236	2,910,688	2,911,727	2,906,628	2,984,463	3,044,237	3,152,566	3,267,842	3,091,670	3,223,550								
6d	Non-Revenue Water Percentage		Information only				16.6%	16.6%	16.6%	16.6%	16.7%	16.8%	16.8%	16.7%	16.8%	16.9%	16.9%								
6e	The percentage of real water loss from the local authority's networked reticulation system (rolling 12 mth average)	☑	≤13%	>13 to 13.2%	>13.2		13.0%	13.0%	12.9% *	13.0% *	13.1% *	13.2% *	13.1%	13.2%	13.1%	13.4%	13.4%								
6f	Percentage of annual potable water transmission system losses (12 month rolling average)		No specific target - information only				2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
6g	Percentage of annual potable water network losses (12 mth rolling average) - Urban as a percentage of total volume		No specific target - information only				10.6%	10.6%	10.6%	10.7%	10.8%	10.9%	10.9%	10.8%	10.9%	11.1%	11.1%								
6h	Percentage of annual potable water network losses (12 mth rolling average) - Rural as a percentage of total volume		No specific target - information only				0.38%	0.38%	0.37%	0.36%	0.35%	0.35%	0.34%	0.34%	0.34%	0.34%	0.34%								
6i	Percentage of annual potable water network losses (12 mth rolling average) - Rural as a percentage of rural volume		No specific target - information only				25.0%	24.9%	24.3%	24.0%	23.6%	23.3%	22.8%	22.6%	22.8%	22.4%	22.4%								
<b>7 Policy Compliance</b>																									
7a	Compliance with Treasury Policy		Within policy	Planned outside policy	Unplanned outside policy		Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy	Within policy

\* Transmission system losses corrected to 2%

4.2

## Watercare Services Limited

**Subject: Chief Executive Report – May 2017**

**Date: 21 June 2017**

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### 1. HEALTH AND SAFETY

There was one lost-time injury involving a Watercare employee during May. The rolling 12 month lost-time injury frequency rate (LTIFR) is 2.41 per million hours, below the Statement of Intent target maximum of 5.

The total recordable injury frequency rate (TRIFR) is 12.06 per million hours.

### 2. CUSTOMER FOCUS

Performance against Statement of Intent measures for May was good. All customer service performance metrics were above target for the month. The customer satisfaction score in May was 83.9% and the rolling 12 month average is 82.4%, against a target of 80%.

Complaint resolution was 100% for the ninth consecutive month. The rolling 12 month average is 97.9%, against a target of 95%.

### 3. INFRASTRUCTURE PROGRAMME

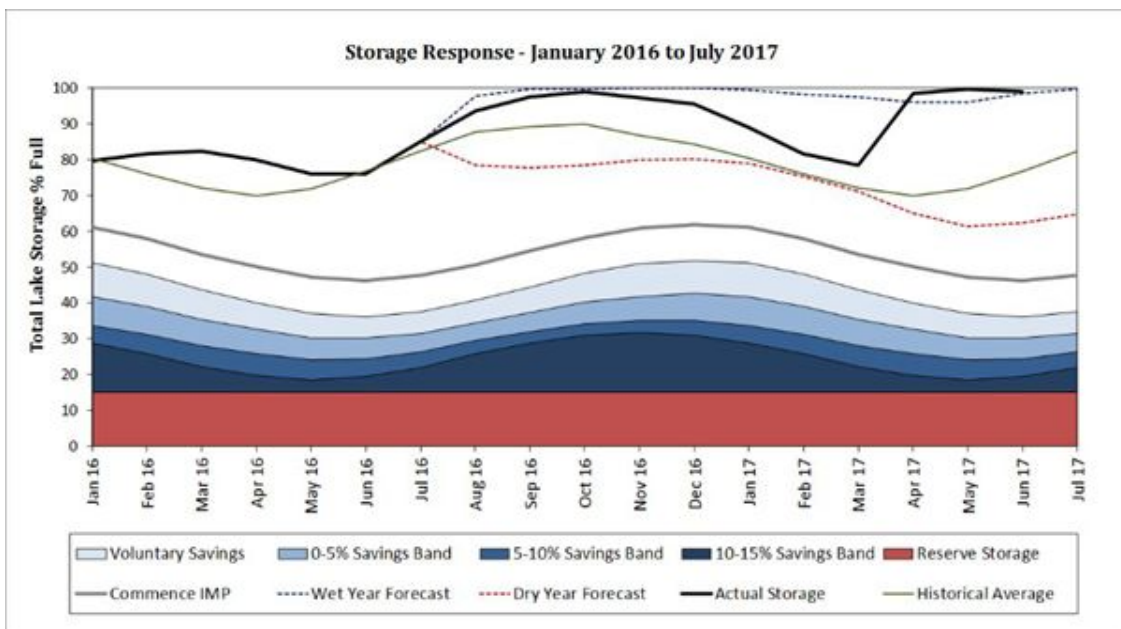
The infrastructure capital programme has delivered year to date \$252m against a budget of \$280m. The forecast to year end is to deliver \$274m against a budget of \$302m.

A Capital Expenditure Dashboard Report of all capital expenditure projects over \$15million is shown in Appendix C.

### 4. SERVICE DELIVERY

#### Rainfall and Water Resources

Rainfall in May across the Auckland region was average for the month. Metropolitan Total System Storage at month end was 98.9%, well above the historical average storage for this time of year (76.9%). All of the dams spilt water simultaneously for extended periods during May. The last time this occurred was June 2011.



The average water demand during May was 407MLD, in line with budgeted levels. For June-August 2017, the forecast is to favour extended periods of settled weather, with near normal rainfall.

Water quality in the Hunua lakes has shown a moderate improvement, which coupled with the improvements made at Ardmore Water Treatment Plant, has enabled greater utilisation of these sources.

**Process Improvements at Ardmore Water Treatment Plant**

A portable centrifuge has been installed at the Ardmore Water Treatment Plant (WTP) and is in operation, allowing the WTP to be operated at flows of 295 MLD for short periods. This enabled a major shutdown of the Waikato WTP, which was critical to the delivery of the 175MLD upgrade works, to proceed as planned. This has given confidence that Ardmore WTP will be in a position to meet higher demands over the coming summer.



*Portable Centrifuge in operation, Ardmore WTP*

### Commissioning of Triangle Road Water Pumping Station

Triangle Road Water Pumping Station was installed on the North Harbour No. 1 watermain to alleviate capacity constraints until the North Harbour No.2 watermain is installed (mid 2020s). The station will be commissioned on the night of 24 June, and involves accelerating flow along the North Harbour No.1 watermain. This has the potential to dislodge iron and manganese from the pipe wall, which may result in dirty water within the network. The potential area of impact is up to 60,000 people in West Auckland and the North Shore.

A detailed operating and communications plan has been developed and Watercare is confident that the impacts can be controlled such that the impact on our customers is minimised.

### Inflow and Infiltration

Inflow and Infiltration assessments have been completed in a number of sewerage catchments across Auckland. Identified defects are notified to the customer for correction and Auckland Council, who have the statutory power to enforce compliance. The assessments in Papatoetoe and Mellons Bay, which are areas with known wet weather overflow issues, have identified approximately 5% of the properties inspected having defects. Resolution of these defects will have a noticeable impact on reducing wet weather overflows.

## 5. FINANCE

### Financial Performance

	Current Month			Year to Date			Full Year		
	Actual	Budget	Var	Actual	Budget	Var	Forecast	Budget	Var
<b>Figures (\$millions)</b>									
Revenue	60.5	49.5	11.0	564.5	528.8	35.6	612.3	578.5	33.8
Operating Expenses	19.5	17.5	(2.1)	194.3	197.9	3.5	212.5	215.5	3.0
Depreciation	19.5	19.1	(0.4)	209.1	207.9	(1.2)	227.8	226.9	(0.9)
Interest expense	6.8	6.7	(0.1)	74.0	74.1	0.2	80.9	80.7	(0.2)
<b>Total Contribution</b>	<b>14.7</b>	<b>6.2</b>	<b>8.5</b>	<b>87.0</b>	<b>48.8</b>	<b>38.2</b>	<b>91.2</b>	<b>55.5</b>	<b>35.7</b>
Non-operating costs/(income)	1.2	0.6	(0.6)	8.3	7.4	(1.0)	8.9	8.0	(0.9)
Financial instruments revaluation - loss/(gain)	19.0	-	(19.0)	(70.4)	-	70.4	(70.4)	-	70.4
<b>Operating Surplus / (Deficit) Before Tax</b>	<b>(5.6)</b>	<b>5.5</b>	<b>(11.1)</b>	<b>149.2</b>	<b>41.5</b>	<b>107.7</b>	<b>152.7</b>	<b>47.5</b>	<b>105.2</b>
Deferred Tax - Expense/(Credit)	(2.6)	1.5	4.1	42.9	17.9	(25.0)	46.9	21.7	(25.2)
<b>Net Surplus / (Deficit) After Tax</b>	<b>(3.0)</b>	<b>4.0</b>	<b>(7.0)</b>	<b>106.3</b>	<b>23.6</b>	<b>82.7</b>	<b>105.8</b>	<b>25.8</b>	<b>80.0</b>
<b>FFO Ratio</b>				3.91	3.67		3.89	3.69	
<b>EBITDA</b>	29.8	30.4	(0.6)	323.5	312.6	10.9	351.6	343.0	8.5
<b>EBIT</b>	1.2	12.3	(11.1)	223.1	115.6	107.5	233.6	128.2	105.4
Leakage Allowance Granted	0.7	0.6	(0.1)	4.9	4.8	(0.1)	5.4	5.3	(0.1)

### Month – Total Contribution of \$14.7m - favourable variance to budget of \$8.5m

Total revenue was favourable \$11.0m to budget due to; vested asset revenue favourable \$9.5m, water and wastewater revenue favourable \$1.3m, with water volumes at an average of 397mld, 1.9% higher than budget.

Operating expenses were unfavourable to budget \$2.1m due to; ongoing higher Ardmore chemical costs \$0.3m, higher unplanned maintenance across all areas \$0.7m, higher planned

preventative maintenance \$0.6m, emergency repairs to the Huia aquifer \$0.2m and higher professional services.

Depreciation was unfavourable to budget \$0.4m and interest expense was unfavourable \$0.1m.

Net surplus after tax was unfavourable \$7.0m due to; the unfavourable revaluation of financial instruments of \$19.0m resulting from the decrease in medium to long term swap rates in May and the unfavourable non-operating cost variance of \$0.6m, partly offset by total contribution, favourable \$8.5m and tax expense favourable \$4.1m.

**Year to date – Total Contribution of \$87.0m - favourable variance to budget of \$38.2m**

Year to date revenue is \$35.6m favourable to budget with IGC revenue favourable \$6.7m. The IGC charges paid year to date are higher than budget by 10.8% driven primarily by large subdivisions at Hobsonville, Millwater and Flatbush and by retirement village and apartment developments particularly in Albany, Pukekohe and the CBD. Vested asset income is favourable \$28.3m; new developments revenue favourable \$1.1m. Water and wastewater revenue is favourable \$1.7m. Other revenue is unfavourable \$2.1m due to the reduction in FY16 subvention revenue from Auckland Council.

Operating expenses are \$3.5 m favourable to budget with favourable variances for asset operating costs, professional services and general overheads partially offset by unfavourable net labour due to beneath budget labour capitalisation/recoveries.

Depreciation is unfavourable \$1.2m and interest expense is favourable \$0.2m.

Net surplus after tax year to date is \$106.3m a favourable variance to budget of \$82.7m primarily due to; the favourable revaluation of financial instruments of \$70.4m resulting from the increase in medium to long term swap rates between September 2016 and January 2017 and the favourable total contribution variance of \$38.2m partly offset by higher tax expense of \$25.0m.

**Full year Forecast – Total Contribution of \$91.2m – favourable variance of \$35.7m**

Full year revenue is forecast at \$612.3m, favourable by \$33.8m largely due to higher than budgeted vested asset revenue favourable \$28.3m. New development revenues are expected to be favourable \$1.1m and water and wastewater revenue favourable \$1.7m partly offset by other revenue which is unfavourable \$2.9m primarily as a result of lower subvention revenue.

Operating expenses are expected to be favourable to budget \$3.0m with favourable variances for asset operating costs, professional services and general overheads partially offset by higher net labour due to lower labour capitalisation. The full year forecast includes \$2.4m of additional cost due to the extreme weather events in March.

Depreciation costs are forecast to be unfavourable to budget by \$0.9m at year end.

Interest expense is expected to be unfavourable to budget at year end by \$0.2m due to lower capitalised interest than budgeted. Gross interest is expected to be \$2.4m beneath budget.

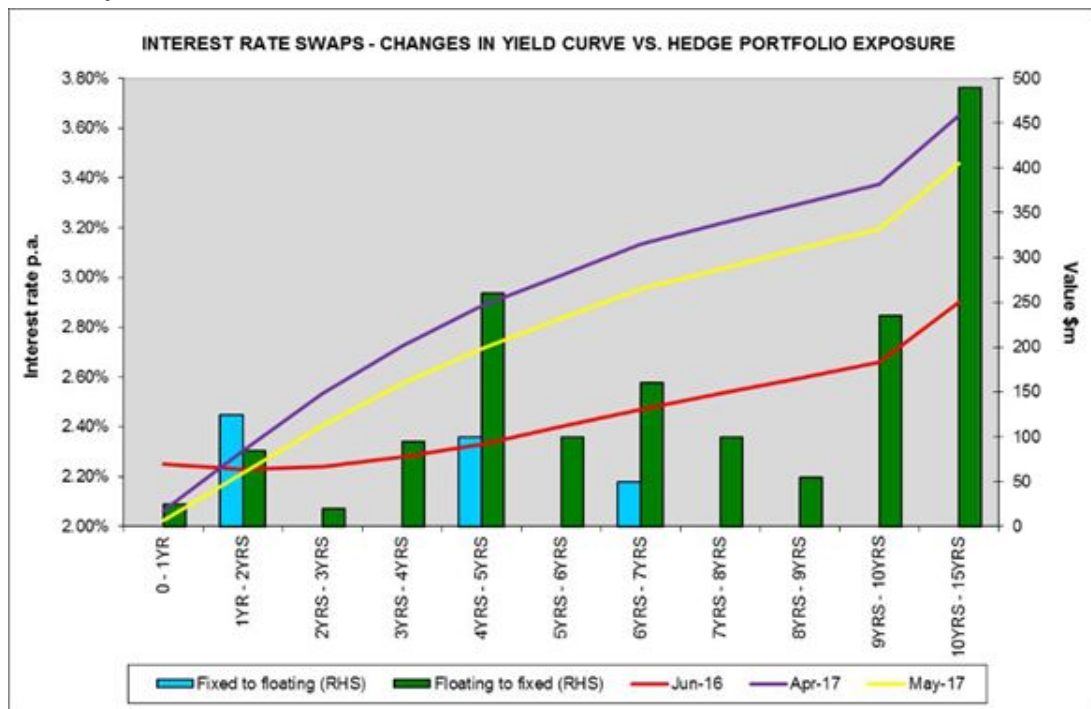


## Financial Position

Smillion	Actual Apr-17	Actual May-17	Monthly Movement	Budget May-17	Var from Budget
Non Current Assets	8,820.8	8,842.0	21.3	8,848.7	(6.7)
Current Assets	78.4	78.2	(0.1)	81.8	(3.6)
<b>Total Assets</b>	<b>8,899.1</b>	<b>8,920.3</b>	<b>21.1</b>	<b>8,930.5</b>	<b>(10.3)</b>
Other Liabilities	305.4	337.0	31.6	389.9	(52.8)
Deferred Tax Liability	1,043.7	1,041.1	(2.6)	1,025.7	15.4
Borrowings - Short Term	231.3	230.6	(0.7)	242.3	(11.7)
Borrowings - Long Term	1,375.9	1,371.7	(4.2)	1,386.6	(14.9)
Shareholders Funds	5,942.8	5,939.8	(3.0)	5,886.0	53.8
<b>Total Liabilities and Shareholders Funds</b>	<b>8,899.1</b>	<b>8,920.3</b>	<b>21.1</b>	<b>8,930.5</b>	<b>(10.3)</b>

The major movements in the Statement of Financial Position as at 31st May 2017 compared with 30th April 2017 were; the increase in non-current assets reflecting capital expenditure net of depreciation in the month, the movement on other liabilities due to the revaluation of derivative financial instruments and an increase in current liabilities. Compared with budget the material variances are largely in respect of, derivative financial instrument revaluations since July 2016, higher retained earnings and a different opening position on 1 July 2016 than that assumed when the budget was set and lower borrowings. Net debt at \$1,602.3m is \$26.6m below budget.

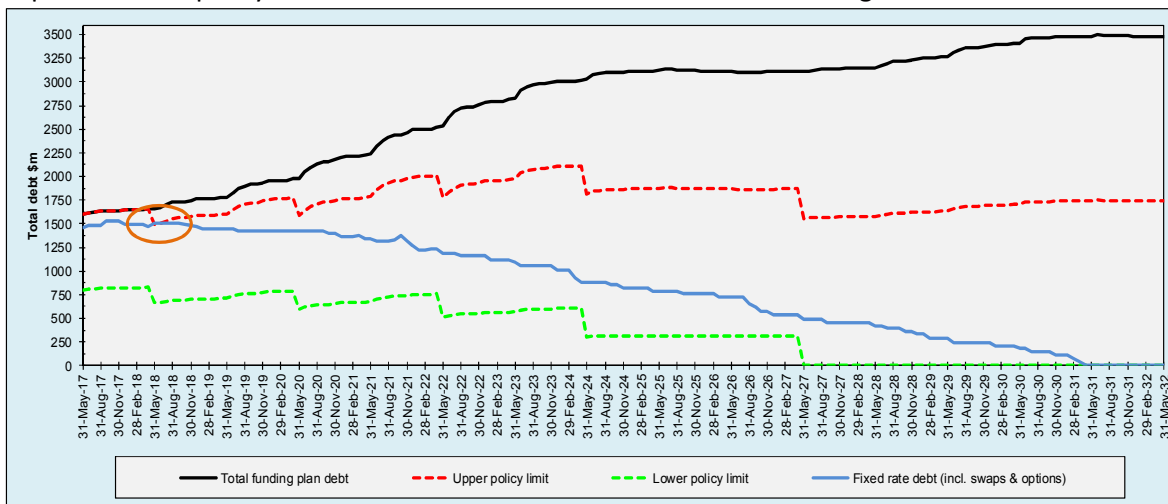
## Treasury



Watercare was in breach of its Treasury Policy upper limit for fixed interest rate risk as at the end of May.

The recent downward revision to short/medium-term forecast debt has seen a consequential decrease in the Treasury Policy fixed interest rate risk limits. As the fixed interest rate hedging profile was built up when forecast debt was much higher, the downward revision to forecast debt has caused the hedging profile to slightly exceed the upper risk limit around one years' time.

Given that current projections show the size of the breach to be relatively small when compared to total forecast debt (\$20m on \$1,655m of debt), and we are currently only out-of-policy in May and June of 2018, management recommend running with the out-of-policy position. The policy breach will correct itself as the risk limits 'shift right'.



Watercare was in compliance with all other Treasury policy parameters as at the end of May.

Interest Analysis \$million	Current Month			Year to date			Full Year		
	Actual	Budget	Var	Actual	Budget	Var	Forecast	Budget	Var
Interest as per Statement of Financial Performance	6.8	6.7	(0.1)	74.0	74.1	0.2	80.9	80.7	(0.2)
Capitalised Interest	1.0	1.2	0.3	8.8	11.0	2.2	9.6	12.2	2.6
Gross Interest	7.8	8.0	0.2	82.8	85.1	2.4	90.5	92.9	2.4
Less Interest Income	-	-	-	0.0	-	(0.0)	0.0	-	(0.0)
<b>Net Interest</b>	<b>7.8</b>	<b>8.0</b>	<b>0.2</b>	<b>82.7</b>	<b>85.1</b>	<b>2.4</b>	<b>90.5</b>	<b>92.9</b>	<b>2.4</b>

For the month of May, gross interest was \$0.2m favourable to budget and capitalised interest was unfavourable \$0.3m, resulting in interest charged to the Statement of Financial Performance being \$0.1m unfavourable to budget. Capitalised interest has been forecast at \$2.6m unfavourable to budget for the year, due largely to lower capital spend.

**Capital Expenditure**

Summary Capital Expenditure (Millions)	May-17			Year to Date			Full Year			Prior Month Forecast
	Actual	Budget	Var	Actual	Budget	Var	Forecast	Budget	Var	
Wastewater Projects										
Strategy & Planning	0.2	1.0	0.8	2.9	8.4	5.5	3.3	9.3	6.1	3.4
Infrastructure Delivery (excl Labs/MS)	13.7	14.2	0.5	163.3	171.0	7.7	175.8	183.9	8.1	174.9
Water Projects										
Strategy & Planning	0.1	0.8	0.7	3.9	6.9	3.0	4.2	8.1	3.9	5.0
Infrastructure Delivery (excl Labs/MS)	3.7	2.0	(1.6)	26.8	29.6	2.8	29.8	31.8	2.0	27.4
Service Delivery	6.1	5.1	(1.1)	51.7	59.8	8.1	55.7	63.9	8.2	54.9
Retail	0.2	0.9	0.6	10.9	10.9	0.0	12.0	11.8	(0.2)	13.5
Information Services	1.1	0.7	(0.3)	3.1	7.2	4.1	3.9	7.9	4.0	3.6
Other Projects	1.1	0.6	(0.4)	7.4	11.4	4.0	9.0	12.0	3.0	8.8
<b>TOTAL</b>	<b>26.1</b>	<b>25.3</b>	<b>(0.8)</b>	<b>269.8</b>	<b>305.1</b>	<b>35.3</b>	<b>293.7</b>	<b>328.8</b>	<b>35.1</b>	<b>291.5</b>
Includes Capitalised Interest of:										
Water Projects Capitalised Interest	0.2	0.3	0.1	1.5	2.4	0.9	1.7	2.7	1.0	1.6
Wastewater Projects Capitalised Interest	0.8	1.0	0.2	7.2	8.6	1.4	7.9	9.6	1.6	7.9
<b>Total Capitalised Interest</b>	<b>1.0</b>	<b>1.2</b>	<b>0.3</b>	<b>8.7</b>	<b>11.0</b>	<b>2.3</b>	<b>9.6</b>	<b>12.2</b>	<b>2.7</b>	<b>9.5</b>

Capital expenditure for the month was \$26.1m against a budget of \$25.3m. The full year forecast expenditure at \$293.7m is \$35.1m below budget primarily due to:

- Deferral or delayed start to projects including Massey and Swanson Siphon Replacement, Army Bay WWTP and Chelsea WW Pump Station;
- Programme delays to projects in construction including the Waikato Expansion, MSN vehicle and equipment purchases, the water pipe renewal and planned meter replacement programmes;
- Poor weather causing delays to projects including; Puketutu Phase 2 construction, Huia WTP Expansion and Ardmore WTP Resilience;
- Project efficiencies identified which will reduce forecast spend including the Rosedale Expansion project; and
- Reprioritisation of IS initiatives resulting in a deferral of budgeted projects.

These delays or deferrals have no material impact on current or future services provided by Watercare.

**6. BOARD CORRESPONDENCE**

There was no correspondence during the month.

**7. EXECUTION OF DOCUMENTS**

There were twenty six documents executed during May in accordance with the delegated authority provided to the Chief Executive by the Board in relation to deeds, instruments and other documents.

These included one surrender of a Watercare covenant over a private property, three surrenders of a Watercare easement over a private property, one woodsale harvest agreement over Watercare property, one compensation certificate in favour of Watercare over a private property, two covenants in favour of Watercare over private property, one interim WWTP to be located in part over a private property, 3 notices to acquire rights over private property, two Deeds of Grant for Watercare pipes under KiwiRail land, one disposal of Watercare land and section 40 Public Works Act exemption, one disposal of land and ten easements in favour of Watercare.

There were five Capex approvals totaling \$18.886m signed in accordance with the delegated authority provided to the Chief Executive by the Board in relation to Capex approvals below a threshold of \$15m.

Summary of Capital Projects approved by Chief Executive – May 2017		
C-12714-01-02-09	Wakeling Avenue & Fairlea Rd Te Atatu South - Watermain Renewal	\$197,200
C-12714-02-09	Panorama Road Mt Wellington Watermain Renewal	\$771,000
C-12843	DeltaV MD or MD Plus Controller Replacement for All Metro WTP and WWTP	\$2,048,527
C-12851	Lawson Creek Branch Sewer Duplication	\$3,100,000
C-12954	Ardmore Water Treatment Plant Sludge Handling Systems Upgrade	\$12,769,832

There was one contract over \$100,000 approved during May in accordance with the delegated authority provided to the Chief Executive by the Board in relation to Capex and Opex contract approvals.

Summary of Contract Awards – May 2017		
25/6/17	CH2M Beca	Pukekohe East Reservoir – PA Design
5/6/17	HEB Construction Ltd	Pukekohe East Reservoir – Advanced Planting
30/6/17	Fulton Hogan Ltd	North Shore Trunk Sewer 8 Upgrade
25/6/17	Cassidy Construction Ltd	Warkworth Wellsford (Hudson Rd) WTP – Construction
25/6/17	Filtec	Warkworth Wellsford (Hudson Rd) WTP - Filter Package

## 8. COMMUNICATIONS

### Media summary

Media interest in Watercare has continued during the period. Following a busy media month in April, May began with positive or neutral coverage including:

- Franklin's The Post – a story about the Runciman Road reservoirs;
- Papakura Courier – a story about Watercare's purchase of the Hunua forest;
- Manukau Courier – a story about a wet-weather overflow in a residential back yard;

- Rodney Times – a story about the sod-turning for the new Warkworth water treatment plant;
- Auckland Now and Stuff carried the story about Watercare’s decision to remove a proposed ventilation shaft from the Central Interceptor in Mangere Bridge;
- Howick & Pakuranga Times, Eastern Courier and Radio NZ Checkpoint covered Watercare’s Inflow and Infiltration pipe testing programme in Mellon’s Bay;
- Mahurangi Matters featured a story about Watercare’s investigations into new raw water sources for Wellsford; and
- The Central Leader quoted the Chief Executive in a story about the demolition of an obsolete water reservoir at Cornwall Park.

The coverage of the decision made at the 30<sup>th</sup> of May Board meeting regarding the site for the replacement Huia Water Treatment Plant was briefly neutral (Scoop: “Watercare Decision Should Spark Dialogue”). This turned negative with most outlets characterising the decision as a David and Goliath victory for a small community over Watercare (NZ Herald: “Watercare ditches plans for giant water plant at Oratia”).

Following the decision, efforts by the anti-tree felling protesters have not resulted in sustained media interest. While a protest outside the existing plant on the 5<sup>th</sup> of June generated television coverage, and vigorous discussion has continued online, the story died away almost immediately in all mainstream outlets except the Western Leader. Watercare continues to work with the Western Leader to strive for balanced reporting of the Huia development, as well as the inclusion of stories not related to Huia such as the Inflow and Infiltration programme in Te Atatu.

Other coverage includes a video interview with the Chief Executive in the National Business Review about infrastructure growth charges. The June/July issue of IPENZ Engineering Insight magazine has published an in-depth article on Watercare’s response to the Tasman Tempest, based on an interview with water supply manager Priyan Perera.

#### **Customer communications**

The table below outlines the indicative customer communications programme. This programme is dynamic and will be adapted as appropriate to align to the new strategic priorities and respond to current issues/areas of interest.

<b>Month</b>	<b>Activity</b>	<b>Status</b>
May	<p>FIXED WASTEWATER CHARGE PAYMENT OPTION</p> <p>A bill insert that explains how landlords can pay their fixed wastewater charge annually, is being sent to all domestic customers. Customers identified as landlords are also receiving targeted letters on the option to pay the fixed charge upfront.</p>	Complete

	<p>ARCH HILL WATERMAIN SHUTDOWN</p> <p>Arch Hill watermain trial shutdown – possible water discolouration notification by letter, public notices and website information</p> <p>INFLOW AND INFILTRATION INVESTIGATION</p> <p>‘Work to be carried out’ brochures distributed to 2,000 residents in Mellon’s Bay and info on website</p>	<p>Complete</p> <p>Complete</p>
June	<p>PRICE CHANGE</p> <p>Domestic and non-domestic customers will receive a letter about the price and / or planning changes with their bill</p> <p>A public notice was published in newspapers</p> <p>Website updated</p> <p>FRANKLIN UPGRADES</p> <p>Residents in Franklin will receive a Franklin Matters newsletter about water and wastewater investment in the area</p> <p>INFLOW AND INFILTRATION</p> <p>‘Work to be carried out’ brochures distributed to 600 residents in Te Atatu</p> <p>‘Fault found’ letters and reports for residents in Mellon’s Bay where a fault was found during May’s investigations</p> <p>TRIANGLE ROAD</p> <p>Public notices, information flyers, letters and website information about upcoming commissioning of Triangle Road pump station</p> <p>NEW WEBSITE</p> <p>Forms, diagrams and images are being developed for new website</p> <p>COMPLIANCE STATEMENTS</p> <p>Stakeholder update alerting industry groups to compliance and connections changes and ongoing communications support on this project</p>	<p>On-going</p> <p>On-going</p> <p>In development</p> <p>On-going</p> <p>In development (24 June)</p> <p>Ongoing</p> <p>Ongoing</p>

July	TAPPED IN Domestic and non-domestic customers will receive the winter issue of Tapped In. The primary focus will be on educating customers on how to avoid blockages in their pipes by correctly disposing of wet wipe products. This ties into a media campaign that will run at the same time, and reiterates price changes.	Planned
August	BILL INSERT Insert to domestic customers about water-efficient applications	Planned
September	TAPPED IN Tapped In (spring 2017) – outlining our energy efficiency strategy. Also featuring an updated ‘our projects’ spread for 2017.	Planned
October	BILL INSERT Insert to domestic customers about the Watercare Coastal Walkway.	Planned
November	BILL INSERT Insert to all customers with water saving tips.	Planned
December	TAPPED IN Tapped In – summer 2017 with a focus on water savings.	Planned
Mid-December	BILL INSERT Put fats, oils and grease in the bin this Christmas holiday season.	Planned

#### Internal communications

##### Completed:

- Executive roadshows held at Huia and Ardmore water treatment plants.

##### Underway:

- Ongoing communications support for the launch of the Health and Safety toolkit.
- Updating the Statement of Intent with amendments based on Auckland Council feedback.
- Communications support for the Girls in Hi-Viz event planned for the 15<sup>th</sup> of June.
- Planning and identifying theme and content for the 2017 Annual Report.

- Launching brand guidelines to the business.
- Looking at Annual Water Quality Report to make it more customer-friendly.

### **Stakeholder Communications**

#### **Watercare Education Programme:**

- The demand for lessons has been exceptionally high, and term two is oversubscribed.

#### **Projects:**

- Franklin Road wastewater/stormwater pipe separation project
  - Collaboration between Watercare, Auckland Transport (AT), Vector and Northpower continues. Work will enable AT to undertake future upgrades.
  - Weekly project and stakeholder team meetings and Community Liaison Group meetings continue to be productive.
- Glen Eden wastewater storage tank and network upgrades project
  - June update flyer to be distributed to keep local residents and interested stakeholders informed
  - Traffic management and diversions are working well with few complaints received.
- Huia Water Treatment Plant replacement project
  - Manuka Road, Waima, selected as the preferred site
  - Community flyer on decision being prepared
- Wynyard Quarter wastewater network upgrade project
  - Watercare is working closely with Panuku and AT to create artwork to be displayed on the pump station construction fence.
  - Halsey Street pipelaying will commence on 19 June. Initial works will involve road island removal and installation of new road layout.
  - Discussions with Halsey Street business owners to understand concerns regarding construction have taken place. Notification of how to access businesses in Halsey Street has been created for businesses owners to supply to their couriers and customers during construction.
  - Radio adverts, public notices, electronic motorway and road signs to advise the general public of road layout changes and restrictions are in place.
- Fred Thomas Drive wastewater storage tank and local network upgrade project
  - As the project progresses, temporary road layout changes are being modified. Notifications continue to be provided to local residents, schools and businesses.



- Work is progressing on the pump station with the roof now complete.
- Mellon's Bay Inflow and Infiltration project
  - Inflow inspections to identify illegal stormwater connections into the wastewater network completed. Results shared with community and local paper.
- Ponsonby pipeline upgrades
  - Upgrades to the pipe network surrounding Ponsonby Reservoir have started. The section of work within Ponsonby Road is due to start in mid-2017.
  - Works are underway within the reservoir complex area.

#### Coming up:

- Network Discharge Consent – information has been sent to the local boards on the development of the wastewater network strategy and presentations are underway.
- Replacement of the Wairau Road wastewater pipeline due to commence mid-2017.
- Triangle Road pump station commissioning 25 June. There is a possibility of water discolouration for residents in supply area.
- Huia 1 Watermain Upgrades
  - Planning underway for the most suitable pipeline route, taking into account social impact and construction methodology.
- Army Bay wastewater treatment plant outfall project
  - Construction work to start August 2017.
- Albany/Pinehill watermain and reservoir project
  - Construction works are due to begin September 2017
- Trunk Sewer 8 Northcote
  - Construction works are due to begin in October 2017

#### 9. WORKING WITH LOCAL BOARDS

The comprehensive Watercare staff newsletter "Your Source" was shared with local board members and local board services staff. While, an internal Watercare staff newsletter, the latest edition was very comprehensive and informative and included a review of the response to the Tasman Tempest weather event.

Information was shared with the Howick Local Board on the inflow inspections underway in Mellons Bay. Local Board representatives also visited the site as part of a media briefing on the work underway to smoke test drains for illegal or faulty connections. The findings of the inspections were shared with the Local Board and media. Similar inspections are now underway in Te Atatu and the Local Board has also been invited to join the crew and local media on site.

The Watercare price increase was shared with the Councillors and Local Board members prior to announcement in the media.

Local Board plans have been reviewed for information relevant to Watercare. The information has been shared with the relevant managers across the business.

Watercare staff briefed the Waitakere Ranges Local Board two days after the Watercare Board's decision to select Manuka Road, Waima as the preferred location for the replacement Huia Water Treatment Plant. Information was also shared with the Local Board on Watercare's weed control responsibilities in the Waitakere Ranges.

A full schedule of local board interactions over the month is appended as Appendix D.

#### **10. ARTICLE ON HAVELOCK NORTH WATER CRISIS**

Pauline Doyle and Ken Keys wrote an opinion article titled "Water crisis spreading". This article was published on the NZ Herald website on the 14<sup>th</sup> of June. The article discusses the Havelock North water crisis. A copy of the article is appended as Appendix E.

#### **11. MAYORAL HOUSING TASKFORCE**

The Office of the Mayor of Auckland sent the final report of the Mayoral Housing Taskforce on the 12<sup>th</sup> of June. Watercare will work with Auckland Council, Auckland Transport and other relevant agencies to give effect to the report.

A copy of the report has been uploaded into Boardbooks in the Resource Centre.

#### **12. LONG TERM PLAN 2018 – 2028**

Watercare is currently working with Auckland Council in relation to the Long Term Plan (LTP) for 2018-2028.

The timetable for the LTP for 2018-2028 is as follows:

- Early July: the Mayors intent for this LTP will be communicated, and the big picture context will be provided.
- July: political direction will be provided for infrastructure funding, including alternative financing, transport funding and growth related funding tolls (including HIF).
- August: political direction will be provided for i) infrastructure investment, including FULSS, Auckland Plan Development Strategy, CANOPY, ATAP, RLTP, ITP, PTP and Mass Transit business case, ii) other budget issues and policy issues which are yet to be identified.
- September: political direction will be provided for local boards projects and funding, including local board individual projects and governance funding review.
- Late September: political direction will be provided for service delivery and cost review, including section 17A Review, and budget guide.














- Early October: political direction will be provided for revaluations and rating policy, including revaluation data and rates modelling.
- October: political direction will be provided for local board advocacy on regional issues.
- Following the above, the Mayor will set out his proposal which includes issues he would like to consult on.
- Political consideration and decision making: this will include i) local board workshops and decision making for consultation content, ii) workshops and meetings will be held to discuss the Mayor's proposal, iii) local boards will meet to agree on content for consultation, and iv) consultation items will be agreed. The timing subject to discussions with the Mayoral office.
- In 2018, the governing body will meet to adopt a consultation document and supporting information.
- Feb – Mar 2018: the formal public consultation will run from early February to late March. Feedback events will be run during this time.
- April – May 2018: deliberations including i) local and regional workshops held to discuss consultation feedback, and ii) several workshops held to discuss budget issues, implications and trade offs.
- June 2018: finalise and adopt LTP 2018-2028 including i) finalise local boards agreements, budgets and LTP documentation, and ii) governing body to adopt the LTP 2018-2028 in late June.



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R Jaduram

**CHIEF EXECUTIVE**

**WATERCARE SERVICES LIMITED****May-17****4.2****Key Financial Indicators**

<b>Financial performance</b>	<b>YTD</b>	<b>Page Ref</b>
Total Revenue		A1
Operating Costs		A1
Interest expense		A1
Depreciation		A1
Net Contribution		A1
<b>Financial position</b>		
Net Borrowings		A4
<b>Cashflow</b>		
Operating cashflow		A2
Investing cashflow		A2
<b>Treasury policy</b>	<b>Compliance</b>	<b>Page Ref</b>
Committed facilities (liquidity risk)		A5
Fixed interest rate risk		A5
Credit risk		A6
Funding risk		A6, A7
Foreign exchange risk		A7

**Key to Financial performance, Financial position and cashflow measures**

Favourable variance - actual result on or above budget for total revenue, net contribution, operating cash flow and actual result below budget for operating expenses, interest, depreciation, net borrowings and operating and investing cash flow



Unfavourable variance - actual result below budget for total revenue, net contribution, operating cash flow and actual result above budget for operating expenses, interest, depreciation, net borrowings and operating and investing cash flow



**Depreciation** - depreciation is above budget due to higher accelerated depreciation on assets identified for disposal.

**Key to Treasury policy compliance**

Full compliance



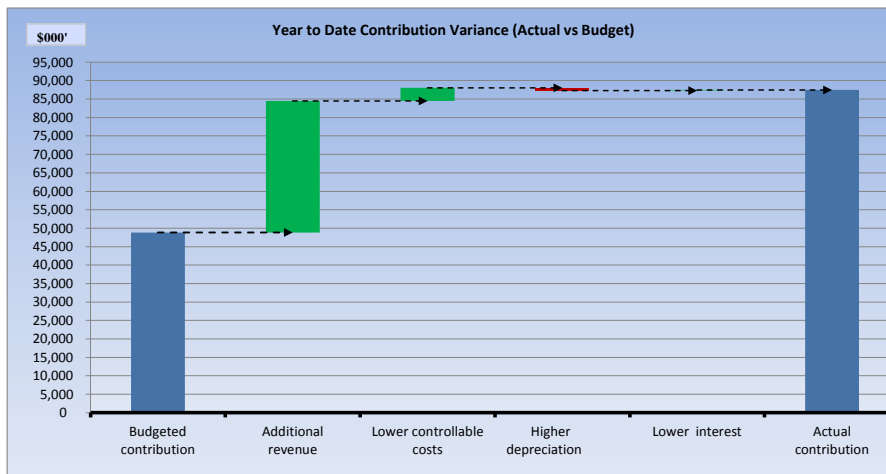
The recent downward revision to short/medium-term forecast debt has seen a consequential decrease in the Treasury Policy fixed interest rate risk limits. As the fixed interest rate hedging profile was built up when forecast debt was much higher, the downward revision to forecast debt has caused the hedging profile to slightly exceed the upper risk limit around one years' time.

Given that current projections show the size of the breach to be relatively small when compared to total forecast debt (\$20 million on \$1,655 million of debt), and we are currently only out-of-policy in May and June of 2018, management recommend running with the out-of-policy position. The policy breach will correct itself as the risk limits 'shift right'.

<b>WATERCARE SERVICES LIMITED</b>												<b>May-17</b>
<b>STATEMENT OF COMPREHENSIVE REVENUE AND EXPENSE</b>												<b>(\$000's)</b>
	Current Month				Year to Date				Full Year			
	Actual	Budget	Variance	Result	Actual	Budget	Variance	Result	Forecast	Budget	Variance	Result
Wastewater revenue	27,350	26,185	1,165	✓	292,364	290,921	1,442	✓	317,818	316,025	1,793	✓
Water revenue	12,331	12,151	180	✓	136,490	136,140	350	✓	147,682	147,682	0	✓
Infrastructure growth charge revenue	7,612	7,647	(35)	✗	68,645	61,940	6,705	✓	75,987	70,282	5,705	✓
Other revenue	2,077	1,884	193	✓	20,342	21,474	(1,132)	✗	22,571	24,543	(1,972)	✗
Revenue from exchange transactions	49,369	47,867	1,502	✓	517,841	510,476	7,364	✓	564,059	558,533	5,526	✓
Vested assets revenue	11,140	1,667	9,473	✓	46,611	18,333	28,278	✓	48,278	20,000	28,278	✓
Revenue from non-exchange transactions	11,140	1,667	9,473	✓	46,611	18,333	28,278	✓	48,278	20,000	28,278	✓
<b>Total revenue</b>	<b>60,509</b>	<b>49,534</b>	<b>10,975</b>	<b>✓</b>	<b>564,452</b>	<b>528,809</b>	<b>35,642</b>	<b>✓</b>	<b>612,337</b>	<b>578,533</b>	<b>33,804</b>	<b>✓</b>
Labour	7,570	7,047	(522)	✗	75,873	74,372	(1,501)	✗	82,980	81,489	(1,491)	✗
Contract labour	206	194	(12)	✗	1,781	2,530	750	✗	2,023	2,717	694	✓
Oncosts	293	311	18	✓	2,828	3,341	513	✓	3,139	3,653	514	✓
Labour recoveries	(3,682)	(3,530)	152	✓	(33,054)	(35,771)	(2,718)	✗	(36,896)	(39,186)	(2,289)	✗
Net labour	4,386	4,022	(364)	✗	47,428	44,472	(2,956)	✗	51,245	48,673	(2,572)	✗
Materials & cost of sales	230	183	(47)	✗	1,947	2,013	66	✓	2,125	2,196	70	✓
Planned maintenance	1,707	972	(735)	✗	14,804	16,163	1,359	✓	16,003	17,348	1,345	✓
Unplanned maintenance	3,521	2,603	(919)	✗	31,396	28,911	(2,485)	✗	34,279	31,505	(2,774)	✗
Asset operating costs - chemicals	1,189	859	(330)	✗	10,197	10,361	164	✓	11,162	11,202	40	✓
Asset operating costs - energy	1,512	1,745	233	✓	15,883	16,412	528	✓	17,637	18,175	538	✓
Operating costs - other	3,312	3,458	145	✓	34,790	38,586	3,796	✓	38,454	42,015	3,561	✓
Depreciation and amortisation	19,492	19,139	(354)	✗	209,099	207,941	(1,159)	✗	227,773	226,852	(921)	✗
Asset operating costs	30,734	28,775	(1,960)	✗	316,170	318,374	2,204	✓	345,307	347,096	1,789	✓
Communications	156	167	11	✓	1,670	1,917	246	✓	1,821	2,082	261	✓
Professional services	1,219	1,087	(132)	✗	11,093	12,099	1,006	✓	12,256	12,992	736	✓
Interest	6,793	6,737	(56)	✗	73,981	74,145	164	✓	80,866	80,663	(203)	✗
General overheads	2,307	2,371	64	✓	25,131	26,955	1,824	✓	27,507	29,311	1,805	✓
Overheads	10,475	10,362	(113)	✗	111,876	115,116	3,241	✓	122,449	125,048	2,599	✓
<b>Total expenses</b>	<b>45,825</b>	<b>43,342</b>	<b>(2,484)</b>	<b>✗</b>	<b>477,420</b>	<b>479,975</b>	<b>2,555</b>	<b>✓</b>	<b>521,127</b>	<b>523,013</b>	<b>1,886</b>	<b>✓</b>
<b>Total contribution/(loss)</b>	<b>14,683</b>	<b>6,192</b>	<b>8,491</b>	<b>✓</b>	<b>87,031</b>	<b>48,834</b>	<b>38,197</b>	<b>✓</b>	<b>91,210</b>	<b>55,520</b>	<b>35,689</b>	<b>✓</b>
Gain/loss on disposal of fixed assets and other costs	1,217	646	(571)	✗	8,305	7,354	(951)	✗	8,936	8,000	(936)	✗
Gain/loss on revaluation of financial instruments	19,050	-	(19,050)	✗	(70,429)	-	70,429	✓	(70,429)	-	70,429	✓
Non operating costs/(revenue)	20,267	646	(19,621)	✗	(62,124)	7,354	69,478	✓	(61,493)	8,000	69,493	✓
Net surplus/(deficit) before tax	(5,584)	5,546	(11,130)	✗	149,156	41,480	107,675	✓	152,703	47,520	105,183	✓
Income Tax Expense/(benefit)	-	-	-	-	-	-	-	-	-	-	-	-
Deferred tax	(2,596)	1,525	4,121	✓	42,905	17,920	(24,985)	✗	46,896	21,698	25,197	✓
Net surplus/(deficit) after tax	(2,988)	4,020	(7,008)	✗	106,251	23,561	82,690	✓	105,807	25,822	79,985	✓

**Key: Financial performance result**

- ✓ Favourable variance - actual income on or above budget and actual expenditure on or below budget
- ✗ Unfavourable variance - actual income below budget and actual expenditure above budget

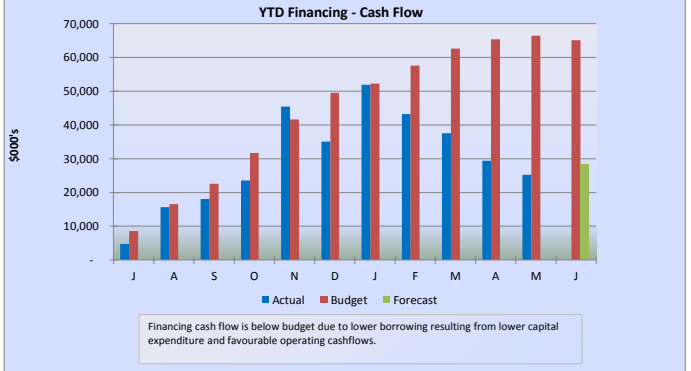
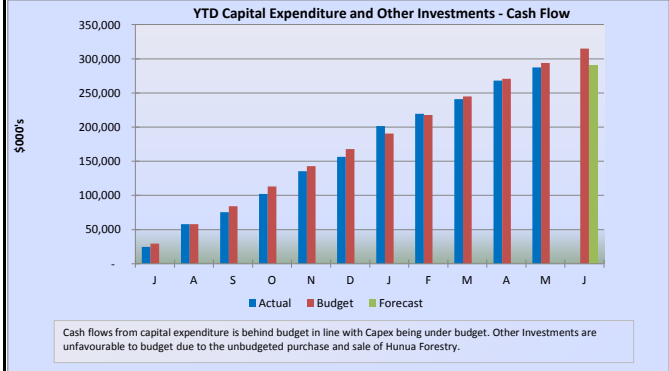
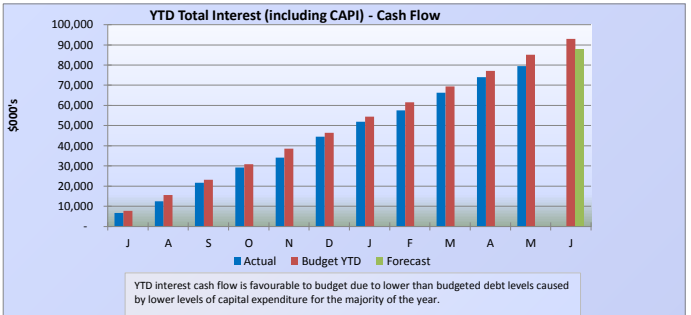
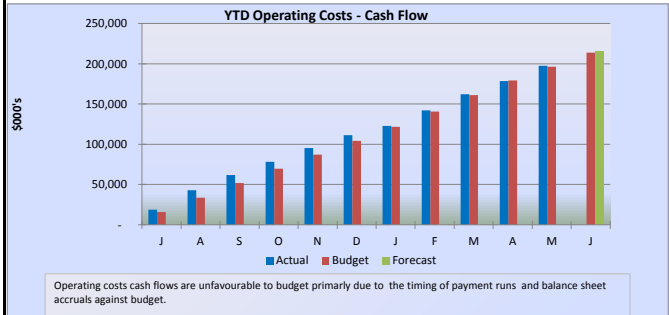
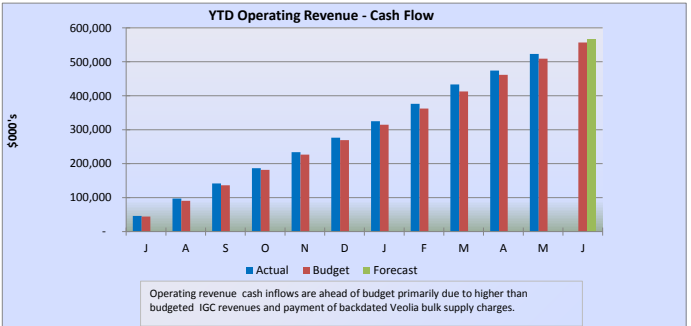


**WATERCARE SERVICES LIMITED**  
**STATEMENT OF CASH FLOWS** May-17  
(\$000's)

NZ \$000s	Current Month				Year To Date				Full Year			
	Actual	Budget	Variance	Result	Actual	Budget	Variance	Result	Forecast	Budget	Variance	Result
<b>Operating Cash flow:</b>												
Operating Revenue	48,942	47,603	1,339	✓	523,175	509,334	13,841	✓	567,248	556,737	10,511	✓
Operating Costs	(19,222)	(17,247)	(1,975)	✗	(197,632)	(196,542)	(1,090)	✗	(215,101)	(213,925)	(1,176)	✗
Interest Paid	(4,536)	(6,737)	2,201	✓	(70,755)	(74,145)	3,390	✓	(78,460)	(80,663)	2,203	✓
<b>OPERATING CASH FLOW</b>	<b>25,185</b>	<b>23,619</b>	<b>1,566</b>	<b>✓</b>	<b>254,787</b>	<b>238,646</b>	<b>16,141</b>	<b>✓</b>	<b>273,687</b>	<b>262,149</b>	<b>11,538</b>	<b>✓</b>
<b>Investing Cash flow:</b>												
Capital Expenditure	(19,398)	(23,486)	4,088	✓	(269,327)	(294,106)	24,779	✓	(290,207)	(315,057)	24,850	✓
Other Investments	-	-	-	↔	(1,500)	-	(1,500)	✗	(1,500)	-	(1,500)	✗
Capitalised Interest	(961)	(1,230)	269	✓	(8,773)	(11,004)	2,231	✓	(9,645)	(12,243)	2,598	✓
<b>INVESTING CASH FLOW</b>	<b>(20,359)</b>	<b>(24,716)</b>	<b>4,357</b>	<b>✓</b>	<b>(279,600)</b>	<b>(305,110)</b>	<b>25,510</b>	<b>✓</b>	<b>(301,351)</b>	<b>(327,300)</b>	<b>25,949</b>	<b>✓</b>
<b>Financing Cash flow:</b>												
Bonds/Term Debt Issued/(Repaid)	-	-	-	✓	(150,000)	(150,000)	-	✓	(150,000)	(150,000)	-	✓
Short Term Advances/(Repaid)	(4,000)	(4,000)	-	✓	6,500	6,500	-	✓	6,500	6,500	-	✓
Commercial Paper Issued/(Repaid)	(8)	(8)	-	✓	159	159	-	✓	159	159	-	✓
Auckland Council Borrowings/(Repaid)	(165)	5,105	(5,270)	✓	168,558	209,805	(41,247)	✓	171,589	208,492	(36,903)	✓
<b>FINANCING CASH FLOW</b>	<b>(4,173)</b>	<b>1,097</b>	<b>(5,270)</b>	<b>✓</b>	<b>25,217</b>	<b>66,464</b>	<b>(41,247)</b>	<b>✓</b>	<b>28,248</b>	<b>65,151</b>	<b>(36,903)</b>	<b>✓</b>
<b>Net Increase (Decrease) in Cash and Cash Equivalents</b>	<b>653</b>	<b>-</b>	<b>653</b>	<b>✓</b>	<b>404</b>	<b>-</b>	<b>404</b>	<b>✓</b>	<b>584</b>	<b>-</b>	<b>584</b>	<b>✓</b>
Opening Cash Balance/(Overdraft)	(833)	-	(833)	✗	(584)	-	(584)	✗	(584)	-	(584)	✗
<b>Ending Cash Balance/(Overdraft)</b>	<b>(180)</b>	<b>-</b>	<b>(180)</b>	<b>✗</b>	<b>(180)</b>	<b>-</b>	<b>(180)</b>	<b>✗</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>✓</b>

**Key: Financial performance result**  
 ✓ Favourable variance - actual income above budget or actual expenditure below budget  
 ✗ Unfavourable variance - actual income below budget or actual expenditure above budget

Reconciliation Operating Cashflow (\$000's)					
	Current Month		Year To Date		
	Actual	Budget	Actual	Budget	Variance
Net Surplus (Deficit) After Tax	(2,988)	4,020	106,251	23,561	82,690
Add back non cash items:					
Depreciation and amortisation	19,492	19,139	209,099	207,941	1,159
Financial instruments revaluation	19,050	-	(70,429)	-	(70,429)
Vested assets revenue	(11,140)	(1,667)	(46,483)	(18,333)	(28,150)
Other non-operating exp/(inc)	1,205	646	8,093	7,354	739
Income Tax Expense/(Benefit)	(2,596)	1,525	42,905	17,920	24,985
Movements in Working Capital	2,162	(44)	5,352	204	5,147
<b>OPERATING CASH FLOW</b>	<b>25,185</b>	<b>23,619</b>	<b>254,787</b>	<b>238,646</b>	<b>16,141</b>

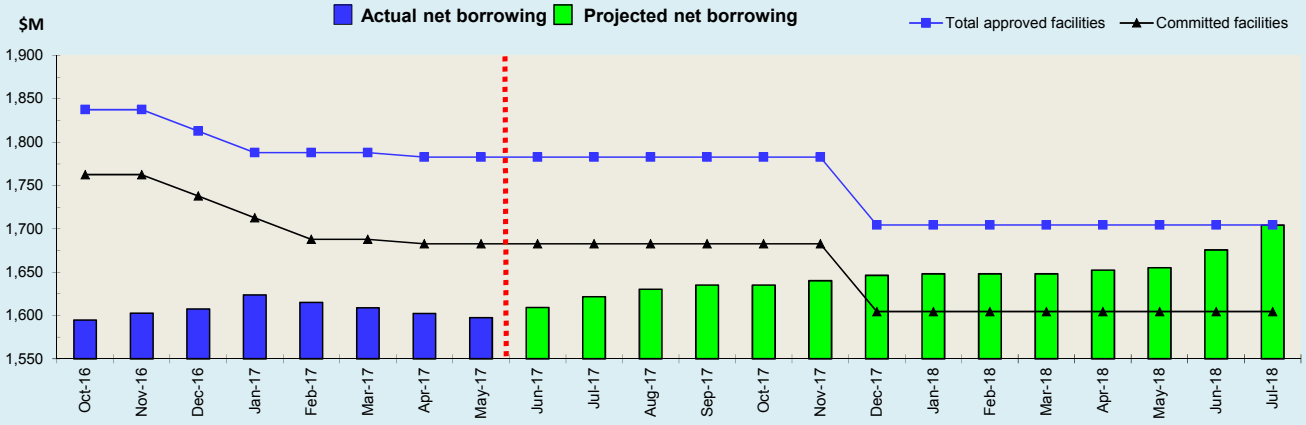


		<b>WATERCARE SERVICES LIMITED</b>						<b>May-17</b>	
		<b>STATEMENT OF FINANCIAL POSITION</b>						<b>(\$000's)</b>	
<b>June 2016 Actual</b>	<b>April 2017 Actual</b>		<b>May</b>			<b>June 2017</b>			
			<b>Actual</b>	<b>Budget</b>	<b>Variance</b>	<b>Forecast</b>	<b>Budget</b>	<b>Variance</b>	
		<b>Current assets</b>							
-	-	Cash and cash equivalents	-	-	-	-	-	-	
47,137	41,275	Trade and other receivables from exchange transactions	44,145	48,000	(3,855)	44,137	49,500	(5,363)	
20,871	22,181	Unbilled revenue accrual	19,377	20,667	(1,289)	21,531	19,822	1,709	
3,332	3,159	Prepaid expenses	2,418	3,641	(1,223)	2,263	3,415	(1,152)	
5,895	6,102	Inventories	7,196	5,736	1,460	7,749	5,818	1,931	
3,206	5,634	Derivative financial instruments	5,109	3,793	1,315	5,109	3,793	1,315	
<b>80,440</b>	<b>78,351</b>	<b>Total current assets</b>	<b>78,245</b>	<b>81,838</b>	<b>(3,593)</b>	<b>80,788</b>	<b>82,348</b>	<b>(1,560)</b>	
		<b>Non-current assets</b>							
8,430,699	8,691,868	Property, plant and equipment	8,718,432	8,747,425	(28,993)	8,740,954	8,827,174	(86,219)	
454,247	458,621	Construction/work-in-progress	472,363	454,751	17,612	474,751	455,852	18,899	
(230,843)	(411,759)	Provision for depreciation	(430,356)	(438,310)	7,954	(448,452)	(60,603)	(387,849)	
<b>8,654,103</b>	<b>8,738,731</b>	<b>Total property, plant and equipment</b>	<b>8,760,439</b>	<b>8,763,866</b>	<b>(3,427)</b>	<b>8,767,253</b>	<b>9,222,422</b>	<b>(455,169)</b>	
42,714	43,158	Intangible assets	43,001	44,616	(1,615)	43,124	44,659	(1,536)	
23,244	22,870	Prepaid expenses	22,834	23,245	(411)	22,797	23,245	(448)	
4,373	8,515	Inventories	7,370	4,356	3,014	7,370	4,356	3,014	
15,138	7,485	Derivative financial instruments	8,368	12,590	(4,222)	8,368	12,590	(4,222)	
<b>8,739,572</b>	<b>8,820,760</b>	<b>Total non-current assets</b>	<b>8,842,011</b>	<b>8,848,673</b>	<b>(6,662)</b>	<b>8,848,910</b>	<b>9,307,272</b>	<b>(458,361)</b>	
<b>8,820,012</b>	<b>8,899,110</b>	<b>Total assets</b>	<b>8,920,256</b>	<b>8,930,511</b>	<b>(10,255)</b>	<b>8,929,698</b>	<b>9,389,620</b>	<b>(459,921)</b>	
		<b>Current liabilities</b>							
582	833	Bank Overdraft	180	-	180	-	-	-	
149,067	149,234	Commercial paper	149,226	149,071	155	149,226	149,071	155	
-	289	Bonds	291	279	12	291	279	12	
150,000	-	Term loan	-	-	-	-	-	-	
81,883	80,923	Auckland council loan	80,881	92,959	(12,078)	80,881	95,431	(14,549)	
<b>381,532</b>	<b>231,280</b>	<b>Total debt current</b>	<b>230,579</b>	<b>242,309</b>	<b>(11,730)</b>	<b>230,399</b>	<b>244,780</b>	<b>(14,382)</b>	
17,047	11,527	Trade and other payables for exchange transactions	16,875	18,898	(2,023)	18,359	20,398	(2,039)	
10,614	11,546	Interest accrued	13,820	11,255	2,565	13,000	11,337	1,663	
52,582	47,772	Other accrued expenses	52,181	59,747	(7,566)	54,886	59,747	(4,861)	
8,314	7,593	Provision for staff benefits	7,776	7,463	313	7,776	7,463	313	
906	166	Other provisions	246	545	(299)	246	545	(299)	
33,276	37,536	Derivative financial instruments	37,564	31,189	6,375	37,564	31,189	6,375	
<b>504,271</b>	<b>347,419</b>	<b>Total current liabilities</b>	<b>359,040</b>	<b>371,406</b>	<b>(12,366)</b>	<b>362,229</b>	<b>375,459</b>	<b>(13,230)</b>	
		<b>Non-current liabilities</b>							
75,000	75,000	Bonds (26/10/18)	75,000	75,000	-	75,000	75,075	(75)	
50,389	50,151	Bonds (26/10/18)	50,122	50,297	(175)	50,122	50,290	(168)	
19,000	29,500	Bank revolving credit facility	25,500	29,500	(4,000)	25,500	-	25,500	
1,051,816	1,221,222	Auckland council loan	1,221,099	1,231,794	(10,695)	1,224,111	1,257,442	(33,331)	
<b>1,196,205</b>	<b>1,375,873</b>	<b>Total debt non-current</b>	<b>1,371,721</b>	<b>1,386,591</b>	<b>(14,869)</b>	<b>1,374,733</b>	<b>1,382,807</b>	<b>(8,074)</b>	
14,301	14,644	Other accrued expenses	14,606	18,066	(3,460)	14,301	18,116	(3,815)	
3,470	3,619	Other Provisions	3,539	3,619	(80)	3,539	3,569	(30)	
1,291	1,304	Provision for staff benefits	1,304	1,532	(228)	1,304	1,532	(228)	
268,697	169,734	Derivative financial instruments	189,113	237,552	(48,439)	189,113	237,552	(48,439)	
998,200	1,043,701	Deferred tax liability	1,041,105	1,025,726	15,379	1,045,096	1,156,289	(111,192)	
<b>2,482,165</b>	<b>2,608,875</b>	<b>Total non-current liabilities</b>	<b>2,621,389</b>	<b>2,673,087</b>	<b>(51,698)</b>	<b>2,628,086</b>	<b>2,799,865</b>	<b>(171,778)</b>	
<b>2,986,436</b>	<b>2,956,294</b>	<b>Total liabilities</b>	<b>2,980,429</b>	<b>3,044,493</b>	<b>(64,064)</b>	<b>2,990,315</b>	<b>3,175,324</b>	<b>(185,008)</b>	
		<b>Equity</b>							
260,693	260,693	Issued capital	260,693	260,693	-	260,693	260,693	-	
1,839,927	1,837,356	Revaluation reserve	1,837,239	1,851,332	(14,093)	1,837,239	2,177,348	(340,109)	
3,800,122	3,735,528	Retained earnings	3,735,644	3,750,433	(14,789)	3,735,644	3,750,433	(14,789)	
(67,166)	109,239	Current year earnings after tax	106,251	23,561	82,690	105,807	25,822	79,985	
<b>5,833,576</b>	<b>5,942,816</b>	<b>Total equity</b>	<b>5,939,827</b>	<b>5,886,018</b>	<b>53,809</b>	<b>5,939,383</b>	<b>6,214,296</b>	<b>(274,913)</b>	
<b>8,820,012</b>	<b>8,899,110</b>	<b>Total equity and liabilities</b>	<b>8,920,256</b>	<b>8,930,511</b>	<b>(10,255)</b>	<b>8,929,698</b>	<b>9,389,620</b>	<b>(459,921)</b>	

# TREASURY RISKS AND INTEREST RATE PERFORMANCE

May-17

4.2



### Interest rates

	Actual YTD	Benchmark YTD	Year end forecast
Weighted averages (excl. fees and margins)	4.78%	4.13%	4.79%
Weighted averages (incl. fees and margins)	5.80%	N/A	5.82%

### Committed facilities

- Westpac Revolving Credit facility	\$60 million
- Medium term notes	\$125 million
- Auckland Council CP Standby facility	\$150 million
- Auckland Council loans	\$1,348 million
<b>Total committed facilities as at 31 May</b>	<b>\$1,683 million</b>

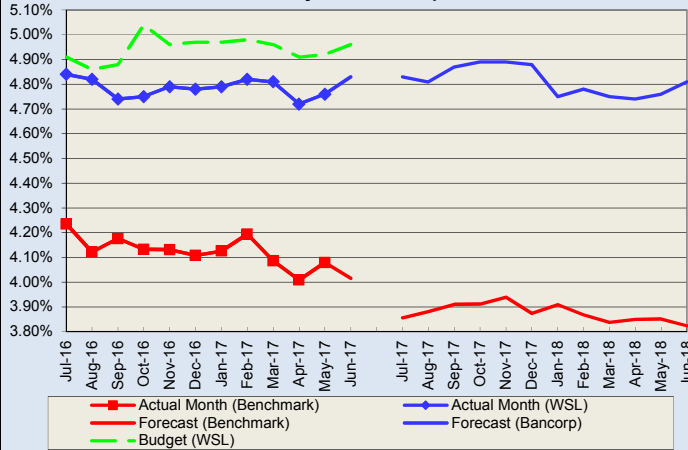
### Debt (\$m)

	Actual	Budget	Variance
Short-term borrowings	230.4	242.3	(11.9)
Long-term borrowings	1,371.7	1,386.6	(14.9)
<b>Total gross debt</b>	<b>1,602.1</b>	<b>1,628.9</b>	<b>(26.8)</b>
Bank overdraft / (cash & deposits)	0.2	-	0.2
<b>Total net borrowing</b>	<b>1,602.3</b>	<b>1,628.9</b>	<b>(26.6)</b>

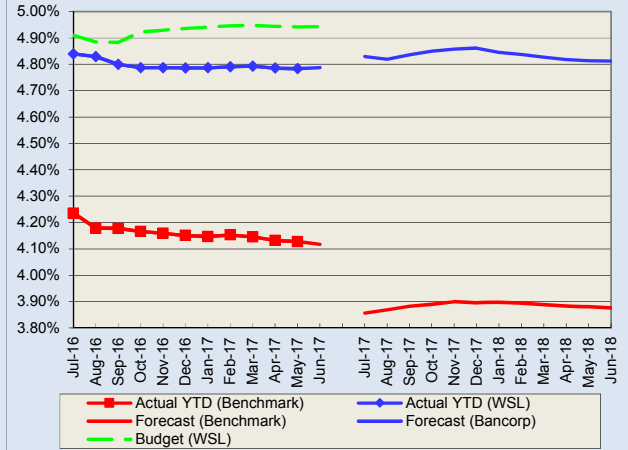
### Additional approved facilities

- Approved CP issuance, over and above CP Standby facility	\$100 million
<b>Total approved facilities as at 31 May</b>	<b>\$1,783 million</b>

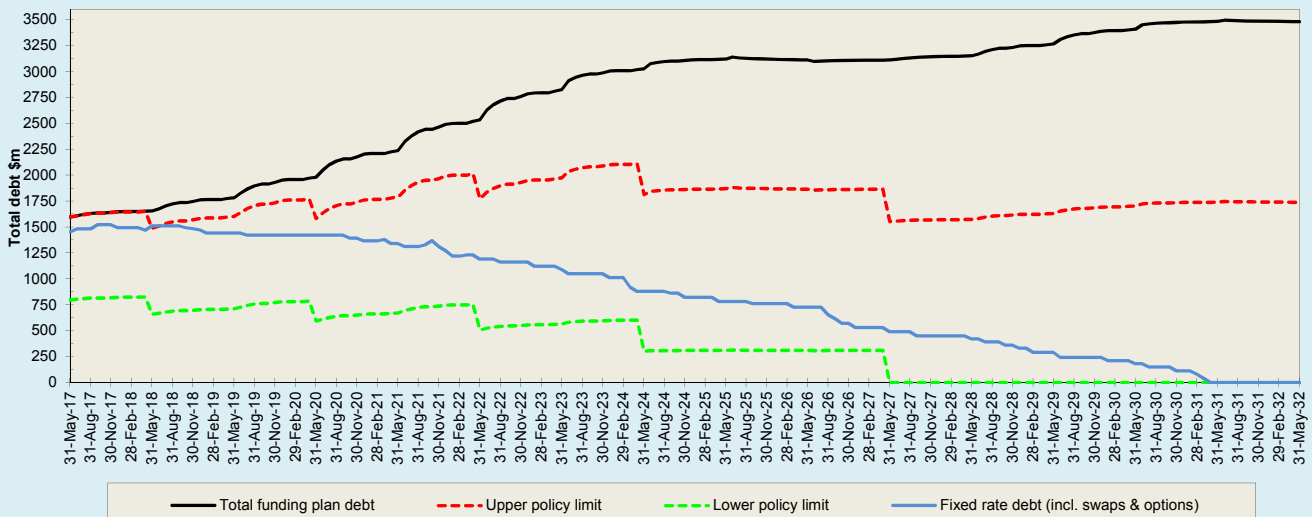
### Monthly interest rate performance



### Year to date interest rate performance



### Forecast total debt profile





COUNTERPARTY EXPOSURES, DEBT CONCENTRATION & COVENANT COMPLIANCE						May-17		
<b>Counterparty exposures</b>	<b>S&amp;P credit rating Short / long term</b>	<b>Face value \$000</b>	<b>Credit exposures \$000</b>	<b>Limit \$000</b>	<b>Limit OK / exceeded</b>			
<b>Obligations of registered banks</b>								
ANZ Bank	A1+ / AA-	580,275	275	100,000	Limit OK	✓		
Bank of New Zealand	A1+ / AA-	615,000	15,632	100,000	Limit OK	✓		
Commonwealth Bank of Australia	A1+ / AA-	65,000	373	100,000	Limit OK	✓		
Kiwibank	A1 / A	75,000	1,175	50,000	Limit OK	✓		
Westpac Institutional Bank	A1+ / AA-	565,000	0	100,000	Limit OK	✓		
		<b>1,900,275</b>	<b>17,454</b>					
<i>Note: Credit exposures are the aggregate of direct exposures, 10% of the 'face' value of forward foreign exchange contracts, 15% of the 'face' value of electricity hedging contracts, and the sum of the MTM value of interest rate derivative contracts plus a 3% 'risk' factor (if this produces a positive value).</i>								
<b>Debt concentration \$000</b>								
<b>Committed debt facilities</b>	<b>Maturity</b>	<b>0-12 months</b>	<b>12-24 months</b>	<b>24-36 months</b>	<b>36-48 months</b>	<b>48-60 months</b>	<b>&gt; 60 months</b>	<b>Total</b>
Westpac Revolving Credit facility	30/11/18		60,000					60,000
Medium-term notes	26/10/18		125,000					125,000
Auckland Council CP Standby facility	30/06/20				150,000			150,000
Auckland Council loans	Various	78,368	82,243	200,000	132,243	5,000	850,000	1,347,854
<b>Total committed debt facilities</b>		<b>78,368</b>	<b>267,243</b>	<b>200,000</b>	<b>282,243</b>	<b>5,000</b>	<b>850,000</b>	<b>1,682,854</b>
<b>Treasury policy - total committed debt facilities</b>		<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>		
Treasury policy compliance		✓	✓	✓	✓	✓		
Approved CP issuance, over and above CP Standby							100,000	100,000
<b>Total committed and approved debt facilities</b>		<b>78,368</b>	<b>267,243</b>	<b>200,000</b>	<b>282,243</b>	<b>5,000</b>	<b>950,000</b>	<b>1,782,854</b>
<b>Drawn bank facilities</b>	<b>Maturity</b>	<b>0-6 months</b>	<b>6-12 months</b>	<b>12-18 months</b>	<b>18-24 months</b>	<b>24-30 months</b>	<b>&gt; 30 months</b>	<b>Total</b>
Westpac Revolving Credit facility (\$60m)	30/11/18			25,500				25,500
		0	0	25,500	0	0	0	25,500
<b>Treasury policy for drawn bank facilities</b>		<b>&lt;= 250,000</b>	<b>&lt;= 250,000</b>	<b>&lt;= 250,000</b>	<b>&lt;= 250,000</b>	<b>&lt;= 250,000</b>	<b>&lt;= 250,000</b>	
Treasury policy compliance		✓	✓	✓	✓	✓	✓	
<b>Other facilities</b>								
BNZ overdraft	On demand	2,000						2,000
		<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000</b>
<b>Counterparty exposure in relation to borrowing facilities</b>		<b>ANZ</b>	<b>BNZ</b>	<b>CBA</b>	<b>Kiwibank</b>	<b>Westpac</b>		
Revolving credit facility						60,000		
		0	0	0	0	60,000		
<b>Treasury policy</b>		<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>	<b>&lt;= 500,000</b>		
Treasury policy compliance		✓	✓	✓	✓	✓		
<b>Compliance with financial covenants and ratios under the Negative Pledge Deed and Guarantee Facility Deed</b>								
<b>Covenant / ratio</b>	<b>Benchmark/target measure</b>			<b>Outcome</b>		<b>Compliance</b>		
Security interests / total tangible assets - maximum	5%			0.00%		✓		
Total liabilities / total tangible assets - maximum	60%			33.57%		✓		
Total liabilities (including contingent) / total tangible assets - maximum	65%			33.57%		✓		
Shareholders funds - minimum (\$000)	500,000			5,939,827		✓		
EBITDA : funding costs ratio - minimum	1.75			4.37		✓		
Funds from operations : interest cover ratio - minimum	2.00			3.91		✓		
Total tangible assets of borrowing group / total tangible assets - minimum	90%			100.00%		✓		
Loans, guarantees etc to related companies / total tangible assets - maximum	5%			0.00%		✓		
External debt maturing in less than 5 years - minimum	50%			100.00%		✓		
								Page A6

FOREIGN EXCHANGE, COMMERCIAL PAPER & ELECTRICITY HEDGING							May-17					
<b>Foreign currency exposures (NZ\$000) including hedging for chemical purchases</b>							<b>USD</b>	<b>Total</b>				
Total exposure to be hedged							0.0	0.0				
Foreign exchange hedging							0.0	0.0				
Percentage cover							100%	100%				
<b>Treasury policy</b>							<b>100%</b>	<b>100%</b>				
Treasury policy compliance							✓	✓				
<b>Hedging for chemical purchases (US\$000)</b>					<b>Sep-17</b>	<b>Mar-18</b>	<b>Sep-18</b>	<b>Mar-19</b>	<b>Total</b>			
Chemicals forward foreign exchange hedging									0			
<b>Treasury policy</b>									0			
Treasury policy compliance									<= 5,000			
									✓			
<b>Commercial paper maturities</b>												
<b>Issue #</b>	<b>\$000</b>	<b>BKBM</b>	<b>Interest rate</b>	<b>Bid cover (x)</b>	<b>Term (days)</b>	<b>Maturity date</b>						
302	50,000	1.960%	2.013%	2.94	94	12-Jun-17						
303	50,000	1.978%	2.032%	1.47	94	31-Jul-17						
304	50,000	1.980%	2.038%	1.23	92	18-Aug-17						
	<b>150,000</b>		<b>2.027%</b>									
<i>Note: BKBM is the banks' mid-rate for bank bills of a similar term on the CP issue date.</i>												
					<b>Jun-17</b>	<b>Jul-17</b>	<b>Aug-17</b>	<b>Sep-17</b>	<b>Oct-17</b>	<b>Nov-17</b>	<b>Beyond Nov-17</b>	<b>Total</b>
Outstanding CP				50,000	50,000	50,000	0	0	0	0	0	150,000
Uncommitted short-term debt												0
				<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>150,000</b>
<b>Treasury policy for maximum amount of CP outstanding</b>											<b>&lt;= 250,000</b>	
Treasury policy compliance											✓	
<b>Undrawn committed standby facilities</b>				<b>1 month</b>	<b>1-2 months</b>	<b>2-3 months</b>	<b>3-4 months</b>	<b>4-5 months</b>	<b>5-6 months</b>	<b>&gt; 6 months</b>		
Undrawn committed standby facility - CP facility				150,000	150,000	150,000	150,000	150,000	150,000	150,000		
50% of CP and other short-term debt repayable within 60 days				50,000	50,000	25,000	0	0	0			
<b>Treasury policy:</b> Undrawn standby facilities >= 50% of outstanding CP and other uncommitted short-term debt repayable within 60 days												
<b>Treasury policy compliance</b>				✓	✓	✓	✓	✓	✓			
<b>Electricity hedging (NZ\$000)</b>				<b>0-6 months</b>	<b>6-12 months</b>	<b>12-18 months</b>	<b>18-24 months</b>	<b>24-30 months</b>	<b>30-36 months</b>	<b>36-42 months</b>	<b>42-48 months</b>	
Contract maturity												
Contract length												
<b>Total value of outstanding contracts</b>				<b>0</b>								
<b>Treasury policy for maximum value of outstanding contracts</b>				<b>&lt;= 10,000</b>								
Treasury policy compliance				✓								

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# WATERCARE SERVICES LIMITED

## Management Report

May-17

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- Statistics**
  - Monthly Statistics Update

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*Confidential*

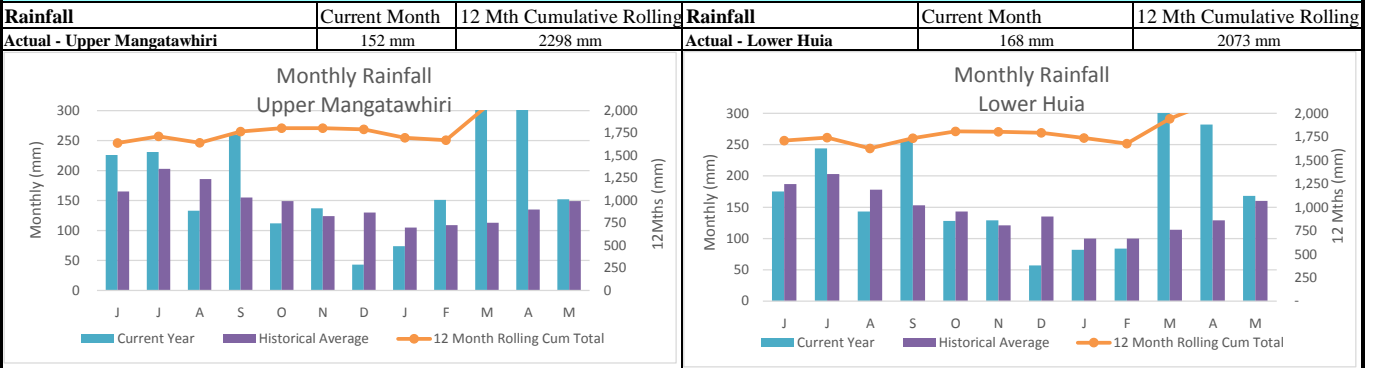
**Management Report**  
**Monthly Statistics Update**

**WATERCARE SERVICES LIMITED**

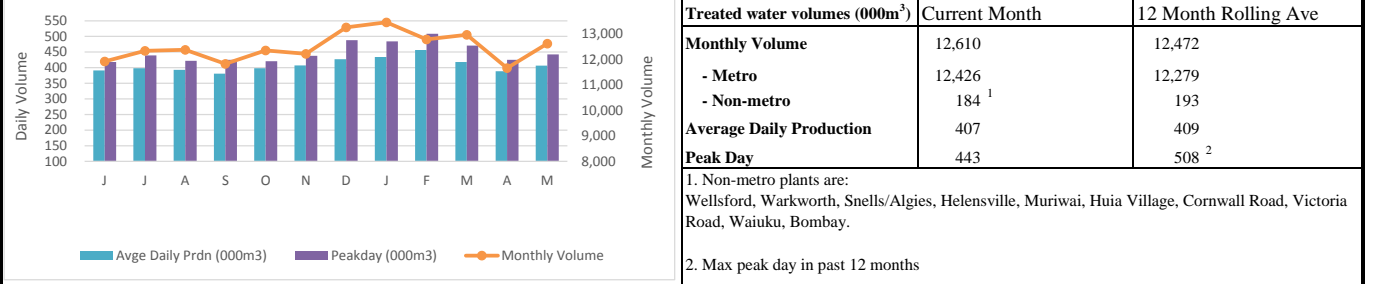
**May-17**

**4.2**

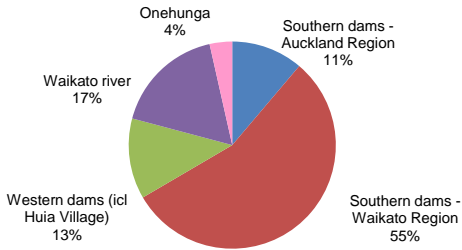
**Rainfall**



**Water Production - Total Supply**



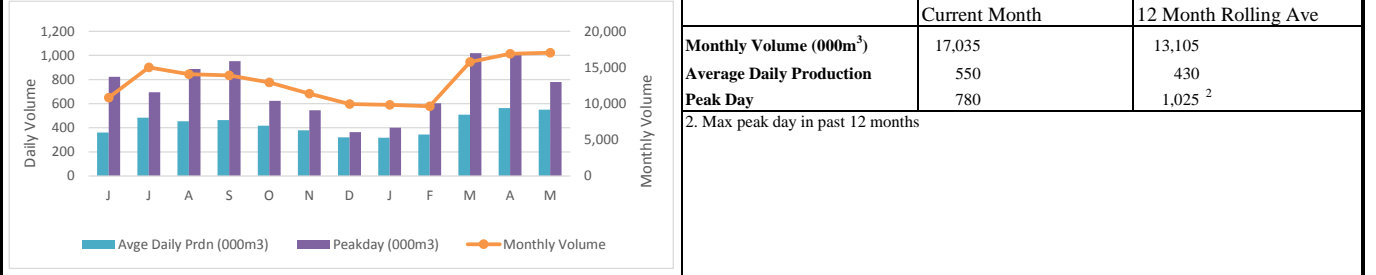
**Treated water volumes for the month**



Treated water volumes (000m <sup>3</sup> )	Current Month		Year to Date			
	Actual	%	Budget	Actual	%	Budget
Southern dams - Auckland Region	1,391	11%	1,192	21,271	15%	15,775
Southern dams - Waikato Region	6,880	55%	5,390	65,404	47%	53,021
Western dams	1,563	12%	2,251	23,262	17%	24,123
Waikato river	2,154	17%	2,387	22,660	16%	36,240
Onehunga aquifer	437	3%	560	4,012	3%	6,159
Rodney	105	0.8%	103	1,278	0.9%	1,228
Franklin	79	0.6%	81	808	0.6%	951
<b>Total</b>	12,610	100%	11,965	138,695	100%	137,498

Lake levels at month end was 98.9%

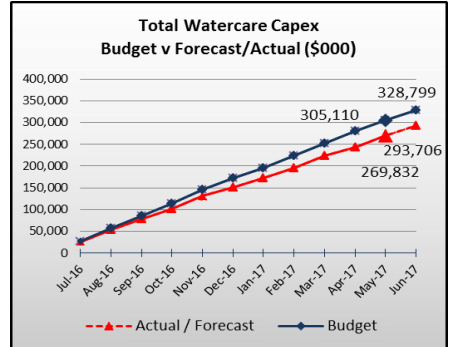
**Wastewater Treatment - Metropolitan Treatment**



# WATERCARE PUBLIC REPORT CAPITAL EXPENDITURE



TOTAL WATERCARE EXPENDITURE	Year to Date		Annual Performance	
	Actual	Budget	Actual + Forecast	Budget
Strategy & Planning	6,779	15,313	7,464	17,435
Infrastructure Delivery	185,212	193,761	200,116	208,007
Service Delivery	51,680	59,802	55,722	63,936
Retail	10,903	10,910	12,020	11,808
Information Services	3,061	7,151	3,899	7,943
Other	3,490	7,169	4,907	7,428
Capitalised Interest	8,708	11,004	9,580	12,243
<b>Watercare Total</b>	<b>269,832</b>	<b>305,110</b>	<b>293,706</b>	<b>328,799</b>



Project / Programme Infrastructure Related Projects (Phase: Design / Execution)	Project	Annual Performance		Status	
	Current Forecast	Forecast	Budget	Time	Cost
<b>Water Projects &gt;\$15 Million</b>					
Albany Pinehill WM & PS	15,700	1,008	2,258		
North Harbour Watermain Duplication	54,300	2,463	4,651		
Hunua No 4 Programme	371,806	13,507	12,427		
Ardmore WTP Treated Water Resilience	31,524	1,981	3,840		
Pukekohe East Reservoir	55,231	798	265		
Waikato 175MLD Expansion Stage Ultimate	31,505	12,736	16,240		
<b>Wastewater Projects &gt;\$15 Million</b>					
Mangere WWTP BNR Capacity	141,040	48,252	48,000		
Mangere WWTP Solids Stream Upgrade	48,814	13,111	12,900		
Central Interceptor Feasibility Design	60,880	9,604	7,654		
Northern Interceptor - Stage 1	107,931	3,622	3,541		
Pukekohe WWTP Upgrade	65,817	1,160	2,040		
Pukekohe Trunk Sewer Upgrade	45,986	30,015	27,854		
Rosedale WWTP Expansion Project	62,295	(273)	3,966		
East Coast Bays Link Sewer Upgrade Prjct	27,200	2,230	0		
Army Bay WWTP Outfall Upgrade	38,850	1,152	3,824		
Wairau Wastewater Pump Station	21,387	115	480		
Fred Thomas Drive WW PS & Storage Tank	27,721	15,076	10,310		
Snells Algies WWTP Ocean Outfall	3,995	523	22		
Glendowie Branch Sewer Upgrade	28,771	1,282	805		
Glen Eden Storage & Pipe Upgrade	16,068	9,547	10,131		
<b>Shared Services &gt;\$15 Million</b>					
Networks Controls Upgrade	19,944	3,432	3,900		
<b>Capex Programme (Design / Execution)</b>					
>\$15 Million	1,276,765	171,342	175,108		
>\$2 Million <\$15 Million	147,818	35,872	42,133		
<\$2 Million	44,205	9,022	11,868		
<b>TOTAL</b>	<b>1,468,789</b>	<b>216,236</b>	<b>229,109</b>		

<b>Watercare Services Ltd</b>
<b>Financial Summary</b> 2016-17
<b>Report Period</b> May 2017
<b>Infrastructure Related Projects:</b> Strategy & Planning / Infrastructure Delivery / Service Delivery

**Traffic Light Key:**  
On target / No adverse Service Delivery impact  
Short to medium term issues that may impact on outcomes or targets / Minor Service Delivery Impacts  
Medium to long term issues that are impacting on outcomes or targets / Risk of significant Service Delivery Impact  
Underspend on the project approval (-10%)

## Appendix D - Local Board Interaction (As at 12 June 2017)

Local Board	Chair	Deputy Chair	Apr 17	May 17	June 17
Albert - Eden	Peter Haynes	Glenda Fryer	Notice of works in Ponsonby and potential for discoloured water (27 Apr).	Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
Devonport - Takapuna	Grant Gillon (26 October 2016 to 22 April 2018) George Wood (23 April 2018 to the end of the 2016-2019 political term)	George Wood (26 October 2016 to 22 April 2018) Grant Gillon (23 April 2018 to the end of the 2016-2019 political term)		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May). Response to question on Watercare's response to watermain breaks on the north shore.	Announcement of Watercare price increase (6 June)
Franklin	Angela Fulljames	Andy Baker	Update on wastewater main break at Omana (3 Apr). Meeting at Town Hall regarding wastewater servicing in Beachlands and Maraetai (10 Apr). Notice of Waytemore Forest Group Purchase by Watercare (27 April)	Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May). Response to drainage issue raised by Brendon Compton – forwarded to Healthy Waters (24 May). Liaison with Deputy Chair over project escalation – Buckland (30 May)	Announcement of Watercare price increase (6 June)
Great Barrier	Izzy Fordham	Luke Coles		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
Henderson - Massey	Shane Henderson	Peter Chan		Information shared with Phil Twyford on Te Atatu wastewater overflows was also sent to the Local Board for information (8 May). Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June). Information on inflow inspections at Te Atatu Peninsula (6 June).
Hibiscus and Bays	Julia Parfitt	Janet Fitzgerald	Local Board landowner approval granted for works in Hauraki Heights Park (3 Apr). Shared information on land encroachment notices sent to private property owners on Pine Hill (27 Apr).	Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
Howick	David Collings	Katrina Bungard	Update on wastewater main break flowing in Howick following storm event (6 Apr). Notification of inflow inspections about to get underway in Mellons Bay (27 April)	John Spiller joined staff and media to view smoke testing underway in Mellons Bay (5 May). Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June). Information on Mellons Bay inflow findings sent to John Spiller (8 June).
Kaipatiki	Danielle Grant (2 Nov 2016 to 28 Feb 2018) John Gillon (1 March 2018 to the end of the 2016-2019 political term)	John Gillon (2 Nov 2016 to 28 Feb 2018) Danielle Grant (1 March 2018 to the end of the 2016-2019 political term)		Feedback on Lake Road works (10 May). Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)

Local Board	Chair	Deputy Chair	Apr 17	May 17	June 17
<b>Mangere - Otahuhu</b>	Lydia Sosene	Walter Togiama		Photo opportunity for article on Central interceptor (8 May). Media release shared with the Local Board including quotes (9 May). Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
<b>Manurewa</b>	Angela Dalton	Rangi McLean		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
<b>Maungakiekie - Tamaki</b>	Josephine Bartley - until 22 April 2018, to be replaced by Chris Makoare on 23 April 2018.	Don Allan - until 29 October 2017. Debbie Burrows - 30 October 2017 to 28 October 2018. Bernie Driver – 29 October 2018 until end of the term.		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
<b>Orakei</b>	Colin Davis - After 18 months Kit Parkinson will Chair.	Kit Parkinson - After 18 months Carmel Claridge will be Deputy Chair		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
<b>Otara - Papatoetoe</b>	Lotu Fuli	Ross Robertson		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
<b>Papakura</b>	Brent Catchpole	Felicity Auva'a		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
<b>Puketapapa</b>	Harry Doig	Julie Fairey		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May)	Announcement of Watercare price increase (6 June)
<b>Rodney</b>	Beth Houlbrooke	Phelan Pirrie	Response to questions from Local Board on Rodney water and wastewater (11 April). Invitation to site blessing for Warkworth water treatment plant (26 April)	Sanderson Road site blessing – chair attending (1 May). Local Board briefing on Wellsford water and wastewater consents (4 May). Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May). Response to information on water quality at Point Wells (22 May).	Announcement of Watercare price increase (6 June)
<b>Upper Harbour</b>	Lisa Whyte (31 October 2016 to 1 June 2018) Margaret Miles (2 June 2018 to the end of the 2016-2019 political term)	Margaret Miles 31 October 2016 to 1 June 2018) Lisa Whyte (2 June to the end of the 2016-2019 political term)	Response to enquiry on forestry operations in dam catchments (13 Apr). Joint presentation with NZTA, Parks and Watercare regarding Northern Corridor Development (27 April)	Joint presentation with NZTA, Parks and Watercare regarding Northern Corridor Development (4 May). Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May). Local Board meeting on NZTA Northern Corridor project and local board leases (18 May).	Announcement of Watercare price increase (6 June)
<b>Waiheke</b>	Paul Walden (26 October 2016 to Sunday, 22 April 2018) Cath Handley (23 April	Cath Handley (26 October 2016 to Sunday, 22 April 2018) Paul Walden (23 April 2018 to the		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May).	Announcement of Watercare price increase (6 June)

Local Board	Chair	Deputy Chair	Apr 17	May 17	June 17
	2018 to the end of the 2016-2019 political term)	end of the 2016-2019 political term)			
<b>Waitakere Ranges</b>	Greg Presland	Saffron Toms	Update on Plant Open Days and temporary closure of Exhibition Drive (11 Apr)	Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May). Notification of pending Watercare Board decision on site selection for replacement of the Huia Water Treatment Plant (26 May). Notification of Watercare Board decision on Huia Water Treatment Plant replacement (30 May)	Local Board briefing on Watercare decision over Huia Water Treatment Plant (1 June) Information to Sandra Coney on weed management in the Waitakere Ranges (6, 12 June). Announcement of Watercare price increase (6 June).
<b>Waitemata</b>	Pippa Coom	Shale Chambers	Notice of works in Ponsonby and potential for discoloured water (27 Apr).	Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May).	Notice of meeting with John McCaffery regarding wastewater overflows (6 June). Announcement of Watercare price increase (6 June)
<b>Whau</b>	Tracey Mulholland	Susan Zhu		Shared "Your Source" Watercare's staff newsletter with interesting stories (18 May).	Announcement of Watercare price increase (6 June)



## Appendix E

NZ Herald  
[OPINION](#)

### Pauline Doyle, Ken Keys: Water crisis spreading

14 Jun, 2017 6:00am



Pauline Doyle - Hawkes Bay Today

Safe drinking water costs money.

But because the Hastings District Council got its priorities wrong 5500 people ended up drinking poisoned water in Havelock North last August.

People made the mistake of drinking water from the kitchen tap thinking that the council's most important role is to provide safe drinking water.

The district council was given 10 years in 2008 to find a new town supply for Havelock North and move from the Brookvale aquifer.

A \$4.9 million project was approved in 2009, titled "New Source at Whakatu & Rising Main to Havelock North" - Project # 202091.

A year later the sum of \$100,000 was budgeted to get started.

But in 2012 the whole project was cancelled, and that's when things started to go wrong.

Brookvale bore 3 was contaminated in 2015 and had to be shut down. The council swapped to Brookvale bores 1 and 2.

Then the whole town supply for Havelock North collapsed last year because those two bores were contaminated with campylobacter. The council then swapped to Hastings bores which couldn't keep up and, as a result, we had a water crisis.

As an interim measure, the council swapped back to Bore 3, adding an \$800,000 UV treatment and filtration plant and disinfecting the water with chlorine - described as a "belts and braces" approach at the recent water inquiry.

The council has known since 2008 it needed to move, but it has done nothing, and its consent to use the Brookvale aquifer expires on May 18 next year.

Now the council wants a new consent to continue using Brookvale.

The local community objected to the council's consent in 2008 because the locals knew the aquifer could not meet the needs of a population of 15,000 people.

The council's water manager knew that the water pumped from Brookvale "had a direct link to the Mangateretere Stream". [*Hawke's Bay Today*, February 20, 2013.]

The council's consultants advised that funding a new source from Havelock North was "not a sound investment" and it was "more efficient" to build on what it already had.

The council's priority was to keep rates down. District mayor Lawrence Yule even challenged the regional council in 2013 over its requirement that HDC upgrade its water systems, saying: "When I look at the implications for spending millions of dollars on upgrading bores, I am struggling to understand why we have to do this." [*Hawke's Bay Today*, February 20, 2013.] And he insisted that regional council staff be called to the next council meeting "to explain".

Who decided to cancel Project 202091? Was it the chief executive? Was it the mayor? Was it a decision of all the councillors at Hastings District Council? And was it based on advice from council's water team?

Hastings District Council signed an agreement with Ngati Kahungunu in May 2008 committing to moving to another bore field. The council failed to do so and now wants another consent to stay at Brookvale.

The HDC now has a year left to drill a new bore for Havelock North. Will the council honour the agreement signed with Ngati Kahungunu in 2008?

HDC is again facing off with the regional council, pleading for consent to continue using Brookvale, even though everyone knows that water pumped from the council's bores have a direct link to the Mangateretere Stream.

The public hearings were useful - we discovered that HDC's water manager didn't even understand the difference between an artesian source [in Napier] and a non-artesian source [Brookvale]. He didn't know that it is impossible for the bugs on the surface to "swim against the tide" where you have strong artesian pressure, and that their bores in a non-artesian source like Brookvale are vulnerable to surface contamination.

This would explain why HDC never raised its boreheads above ground level. Bores 1 and 2 are sunk nearly 3 metres underground, which creates serious risks of contaminated surface water getting sucked into the bore itself and pumped to kitchen taps all over Havelock North. Remember, these bores were extremely vulnerable on August 6 when we had a storm coupled with the two power failures.

Add into the mix the sheep faeces carried in through groundwater from the paddocks and nearby polluted pools of water, and also from the roadside drains overflowing around the "dry" well chambers that sit on top of the boreheads - and you have a disaster waiting to happen.

We have serious concerns that Hastings District Council is calling the shots in the Water Safety Joint Working Group and that the whole region is heading off in the wrong direction. Mandatory chlorination is NOT the answer.

But because the inquiry panel gave the district council's dye-test a higher rating than the regional council's water-tightness test of the "dry" well chambers, we've ended up with a "stamp of approval" for short-term fixes which do not solve our critical water problems.

In a show of solidarity, HDC councillors recently rallied in support of their chief executive, but some councillors are now realising that spending \$7m on treatment plants in Hastings and Havelock North fixes nothing.

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[http://www.nzherald.co.nz/opinion/news/article.cfm?c\\_id=466&objectid=11875532](http://www.nzherald.co.nz/opinion/news/article.cfm?c_id=466&objectid=11875532)

# Non Revenue Water (NRW) Strategic Programme Update

# What is Non-Revenue Water

4.3

- The difference in volume between what is produced and what is sold to customers.
- Non-revenue water is made up of losses and unbilled authorised consumption
- Losses can be
  - real losses through leaks
  - apparent losses through unauthorised consumption, unbilled consumption or metering inaccuracies
- Significant number of assumptions built into the calculation
- Result is expressed as a 12 month rolling %

# Water Balance

4.3

Water Produced <b>150.1</b>	Wholesale Water <b>7.5</b>	Wholesale Water (Papakura, Waikato DC) <b>7.5</b>		Revenue Water <b>124.7</b>
	Authorised Consumption <b>118.2</b>	Billed Authorised Consumption <b>117.1</b>	Billed Metered Consumption <b>117.1</b>	
			Billed Unmetered Consumption <b>0</b>	
		Unbilled Authorised Consumption <b>1.1</b>	Unbilled Unmetered Consumption <b>1.1*</b> (0.5% of BSP + Assessed Operational Usage)	Non Revenue water <b>25.4</b> <b>16.9%</b>
			Apparent Losses <b>4.2</b>	
	Water Losses <b>24.3</b>	Real Losses <b>20.1</b> <b>13.4%</b>	Customer Meter Under-registration <b>3.6*</b> (3% of Customer Sales)	
			Leakage on Transmission Mains <b>3.0</b>	
			Leakage on Retail network <b>17.1</b>	

Values million m<sup>3</sup> for 12 months to March 2017

Target is <13%

# Focus Areas to Achieve Improvement

4.3

- Monitoring and Reporting
  - Waiuku Smart metering project
- Renewals and Maintenance
  - Meter replacement programme
  - Watermain renewals
  - Response to faults
- Network Management and Operation
  - District Metering
  - Pressure Management
  - Proactive Leak Monitoring

# Monitoring and Reporting

4.3

- The Waiuku smart meter project indicates meter error of >3% (greater than the assumed value)
- This can be applied across our meter fleet
- While not reducing NRW in the short term, it would reduce real losses
- The higher the error, the greater the cost benefit for meter replacement programmes
- High level of growth is likely to have a higher level of unauthorized use, eg fire hydrants
- Looking at alternate measures for NRW such as volume/connection/day or volume/km of pipeline

# Renewals and Maintenance

4.3

- Meter replacement programme
  - Working towards 25,000 planned replacements per year
  - Approximately 6,000 unplanned meter replacements per year
  - Upgrade of WTP outlet flowmeters
- Programme of watermain renewals based on asset condition history
  - Method of procurement allows for rapid replacement if condition warrants
- Significant focus on Contractor performance with regards to responses to leaks
  - Improved metrics



# Network Management and Operation

4.3

- District Metering
  - Strategy being developed
  - Will take 5 – 10 years to fully implement across the region
  - Greater use of data to identify increase in real losses
- Pressure Management
  - Identifying areas that can have a reduction in pressure without compromising service levels
- Proactive Leak Monitoring
  - Ground surveys in areas of known real losses
  - New technology for predictive leak detection being trailed in CBD