



Waitakere City Council  
*Te Taiao o Waitakere*

## NOTICE OF MEETING

# TE TAUMATA RUNANGA

I hereby give notice that a Meeting of Te Taumata Runanga will be held on:-

**DATE:** Monday, 11 December 2006 **TIME:** 5.00 pm

**VENUE:** Waitakere Central, 6 Henderson Valley Road, Henderson, Waitakere

to consider the business as set out herein and to take any necessary action connected therewith.

6 December 2006

Ngareta Delamere  
**COMMITTEE SECRETARY**

Telephone (09) 836 8000 extn 8552

### MEMBERSHIP:

#### Representative

TW Taua, MNZM (Chairman)  
M Te Huia (Deputy Chairman)  
To Be Advised  
S Livingstone  
W Hetaraka  
P Northcroft  
K Parata  
E Taumaunu  
A Hudson  
R Waititi  
Cr LA Cooper  
Cr JP Lawley

#### Alternative Representative

To Be Advised  
M Wellington  
Rev J Cooper  
W Mark  
A Lauese  
T Moanaroa  
T Tangihaere  
J Mariu  
To Be Advised  
N Glavish  
Te Kawerau A Maki  
Te Atatu  
Hoani Waititi Marae  
Kakariki Marae  
Te Piringatahi O Te Maungarongo Marae  
Te Roopu Kaumatua O Waipareira  
Te Roopu Puawai O Waitakere  
Te Roopu Wahine Maori Toko I Te Ora  
Te Runanga O Ngati Whatua  
Te Whanau O Waipareira Trust  
Council  
Council

Mayor RA Harvey, QSO, JP (ex officio)  
Deputy Mayor CA Stone (ex officio)

(Quorum 6 members)

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(The reports and recommendations contained in all agendas are reports and recommendations only and are not to be construed, in any way, as Council policy until adopted.)

**AGENDA FOR A MEETING OF TE TAUMATA RUNANGA TO BE HELD AT  
WAITAKERE CENTRAL, 6 HENDERSON VALLEY ROAD, HENDERSON,  
WAITAKERE, ON MONDAY, 11 DECEMBER 2006,  
COMMENCING AT 5.00 PM.**

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**TABLE OF CONTENTS**

<b><u>ITEM</u></b>	<b><u>PAGE NO.</u></b>
<b>OPENING KARAKIA</b>	<b>1</b>
<b>MIHIMIHI</b>	<b>1</b>
<b>1 APOLOGIES</b>	<b>1</b>
<b>2 CONFIRMATION OF MINUTES</b>	<b>1</b>
<b>3 URGENT BUSINESS</b>	<b>1</b>
<b>4 PUBLIC FORUM</b>	<b>2</b>
<b>5 COMMITTEE MEMBERS' REPORTS</b>	<b>2</b>
<b>6 CHIEF EXECUTIVE OFFICER'S REPORT</b>	<b>3</b>
<b>7 COMMITTEE SECRETARY'S REPORT</b>	<b>3</b>
<b>8 WAITAKERE WASTEWATER MASTER PLAN</b>	<b>3</b>
<b>9 PRESSURE STANDARDISATION PROGRAMME</b>	<b>8</b>
<b>10 NEXT MEETING</b>	<b>12</b>

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**OPENING KARAKIA**

**MIHIMIHI**

E nga waka, e nga mana e nga karangatangamaha, tena koutou, tena koutou, tena koutou. E nga mate i tautini, he mihi aroha tenei ki a koutou, haere, haere, haere. E te hunga ora, rau rangatira ma tenei te kakano ka rua nei a morimoritia kia puawai ai. Hei aha? Hei maunga ringa ma nga whakaturanga, kia kaha, kia manawanui, kia u. Kia mau hoki ki te whakapono, te tumanako me te aroha.

**1 APOLOGIES**



**2 CONFIRMATION OF MINUTES**

Meeting Minutes - Monday, 13 November 2006

**RECOMMENDATION**

That the minutes of the Meeting of Te Taumata Runanga held on Monday, 13 November 2006, as circulated, be taken as read and now be confirmed.



**3 URGENT BUSINESS**

Section 46A(7) of the Local Government Official Information and Meetings Act 1987 provides that where an item of business is not on the agenda, it may only be dealt with at the meeting if:

- (i) the Committee by resolution so decides; and
- (ii) the Chairman has explained at the beginning of the meeting (when open to the public) that the item will be raised for discussion and decision, why the item is not on the agenda, and why it cannot be delayed until a subsequent meeting.

The Committee may make a decision on a matter determined to be urgent.

**NOTE:** Urgent Business need not be dealt with now and may be delayed until later in the meeting.



#### 4 **PUBLIC FORUM**

For guidance of Te Taumata Runanga Members, the Council's Standing Orders have the following provisions in regard to Public Forum.

- (i) members of the public wishing to address the Committee in Public Forum shall furnish their names to the Chairman at the beginning of the meeting; and
- (ii) the Chairman shall determine the order of speakers, and allow five minutes for speaking time;
- (iii) questions by members are to be confined to obtaining information or clarification on matters raised by the speaker.

Section 46(7) and (7A) of the Local Government Official Information and Meetings Act 1987 provides that no resolution, decision, or recommendation may be made in respect of any specific item of business not on the agenda except to refer the items to a subsequent meeting for further discussion. Therefore, no decision may be made on matters raised in Public Forum. However, written reports on matters raised may be requested from the Chief Executive Officer.



#### 5 **COMMITTEE MEMBERS' REPORTS**

Provision has been made on this agenda for Committee Members should they so wish to submit a report on their activities during the month in regard to matters within the scope and delegations of the Committee. However, to comply with the provisions of the Local Government Official Information and Meetings Act 1987, no decision may be made on matters raised in Committee Members' reports.

##### **TE TAUMATA RUNANGA APPOINTMENTS**

<b>OUTSIDE ORGANISATIONS</b>	<b>APPOINTMENT</b>
Keep Waitakere Beautiful	Rev J Cooper
West Coast Plan Liaison Group	Mihi Te Huia
Safe Waitakere Alcohol Project	Poata Northcroft
Safe Waitakere Injury Prevention Board	Poata Northcroft Mihi Te Huia
West Education Sector Trust	Awa Hudson Carol Ngawati
Waitakere Arts and Cultural Development Trust	Rev J Cooper
Child and Youth Advocate	Mihi Te Huia
Waitemata Harbour Foreshore Reserves Management Plan Joint Subcommittee	Evelyn Taumaunu
Te Pai Park Reserve Management Plan Advisory Group	Awa Hudson
<b>COUNCIL COMMITTEES</b>	
Community Sport Fund Allocation Subcommittee	Evelyn Taumaunu Wayne Knox
City Development Committee	Mihi Te Huia





**6 CHIEF EXECUTIVE OFFICER'S REPORT**

Provision has been made for the Chief Executive Officer, or his nominated representative, to report on the progress of other matters considered to be of significance to Te Taumata Runanga, including organisation and representation issues.



**7 COMMITTEE SECRETARY'S REPORT**

Issue	Comments	Reporting Council Officer
Waitakere Outrigger Canoe Club – Finding an Appropriate Site  Public Forum  10 April 2006  Resolution No. 624/2006	Council officers are waiting to find out the outcome of the court hearing which is set to take place in December 2006/January 2007. Once this decision is known, Council officers will have a clearer picture of how Council can best assist the Waitakere Outrigger Canoe Club	Robert McGee  836 8000 Ext: 8558

REPORTS PENDING			
Subject	Date Requested	Report Due	Reporting Officer
Workshop Between Te Taumata Runanga and the Waitakere Pacific Board	14 August 2006  Resolution No. 1564/2006	19 February 2007	Cheryl Talamaivao  836 8000 Ext: 8930

**RECOMMENDATIONS**

That the Committee Secretary's Report for 11 December 2006 be received.

Report prepared by: Ngareta Delamere, Committee Secretary.



**8 WAITAKERE WASTEWATER MASTER PLAN**

**PURPOSE OF THE REPORT**

The purpose of this report is to provide Te Taumata Runanga with an update of the joint wastewater planning work carried out with Watercare Services Limited including a summary of the Waitakere Wastewater Master Plan completed in March 2006.

## **BACKGROUND**

Wastewater services to properties in the urban area of Waitakere are provided jointly by Council and Watercare Services Limited (Watercare). Council provides the local collector systems including 47 pumping stations, and Watercare provides bulk wastewater transmission via trunk sewer lines including the main Western Interceptor and major pumping stations, treatment at its Mangere Wastewater Treatment Plant, and discharge of treated effluent into the Manukau Harbour.

The two wastewater networks are therefore inextricably linked, and any wastewater planning initiatives need to be carried out jointly if cost effective and efficient long term solutions for wastewater servicing are to be developed successfully.

In July 2005, Council and Watercare commenced a medium term wastewater strategy for meeting the City's new objective arising from the Water and Sanitary Services Assessment, of reducing the number of wastewater overflows by 50% by 2025. It was envisaged under this 20-year strategy that Watercare and Council would be able to successfully plan and provide for growth as well as addressing local issues and joint planning initiatives. The initial 20-year strategy was chosen as it represented a reasonable medium term planning horizon and enabled coordination with the annual Asset Management Plan being published by Watercare and the Metropolitan Urban Limit shift applications.

Following on from this work, in September 2005, Council and Watercare agreed to jointly develop a Waitakere Wastewater Master Plan that would address the longer-term issues and requirements of wastewater infrastructure and servicing of Waitakere. The design horizon for this study was 2050, which is consistent with other regional planning initiatives throughout the Auckland region. This report summarises the outcomes of this study.

The current Three Waters Project is an even longer term planning project being undertaken, covering integrated management all three waters; water supply, wastewater and stormwater, from a regional perspective.

## **STRATEGIC CONTEXT**

The Three Water's strategic objective of Council is that Waitakere will be a centre of innovative management of the three waters which includes wastewater services.

## **ISSUES**

### **Objectives of the Waitakere Wastewater Master Plan**

The 50-year strategic master plan was designed to address the following objectives:

- Reduction / mitigation of wastewater overflows from designed overflow structures and manholes;
- Meeting the requirements of local, legislative and regional drivers;
- Reduction in the adverse effects of inflow and infiltration through control methods;
- Allowance for growth to 2050 (flow based assessment);
- Optimisation of existing infrastructure; and
- Provision of wastewater treatment and disposal options for the City.

### **Key Issues**

The population of Waitakere is projected to increase from 170,000 people in 2006 to over 300,000 people by 2050. This increase in population will place additional pressure on the existing wastewater system that will need to be managed effectively.

This issue has been compounded by the proposed Air Land Water Plan, which moves to place limitations on the amount and size of discharges from wastewater systems throughout the region.

Previous analysis of the wastewater system confirmed that:

- The existing wastewater system is adequate for the City's current and future (2050) dry weather flow needs;
- There are some places within the City where the wastewater system is not meeting current wet weather flow needs and becomes overloaded. This will get worse as the City continues to grow;
- The main reason the wastewater system is not meeting Council's needs is due to:
  - Increased demands placed on the system through stormwater entering the wastewater system (infiltration and inflow);
  - Increasing environmental demands; and
  - Increase in wastewater generated.

A combined network model, initially developed in 1999, was used to identify the points in both the Watercare and Council networks where the system overflows during a rainfall event. The model allows for stormwater inflow and infiltration. Calibration of the model is achieved using recorded flow gauged information at critical points in the network, and hence areas with high inflow and infiltration have been identified over time based on actual flow gauged data.

### Assumptions

The key assumptions made for the purposes of the study are:

- A 'containment standard' target of no more than two spills per year was adopted, based on the proposed Air Land and Water Plan;
- The system must provide capacity for all dry weather flows through to 2050 allowing for the forecast increased population, including growth in the NORSGA area; and
- Treatment of wastewater occurs at the Mangere Wastewater Treatment Plant site, although some options include treatment of wet weather peak flows at new treatment facilities located in the City.

### Network Performance Objectives

A review of current council policies including local and regional policies together with a review of previous studies provided the basis for the development of the 50-year Wastewater Master Plan. A series of key system performance objectives were determined to allow the development of a planning process to meet these 50-year goals. The decision making process included the following performance objectives for consideration:

- **Reduction in Manhole Overflows:** An objective to aim for reduction of manhole overflows, to protect public health;
- **Environment Custodian:** A commitment to improve the environmental performance of the system in line with RMA principles;
- **Allowing for Growth:** Provision of adequate network capacity and wastewater treatment to ensure that growth within the City is not restricted;
- **Community Education:** A community that is informed and educated on water usage and the water cycle to reduce wastewater volumes at source;
- **Control on Inflow and Infiltration:** Controlling storm inflows entering into the wastewater system;

- **Efficient Asset Renewal:** Efficient programming for the renewal of the wastewater assets within the City;
- **Effective Operation and Maintenance:** Provision of an effective network operation and maintenance programme;
- **Engineering Goals:** Motivation to improve the system performance and definition of an achievable level of service;
- **System Performance Monitoring:** Development of a long-term programme for monitoring flow and environmental indicators to ensure the objectives are being met and to provide a baseline for measuring improvements.

### Wet Weather Flow Capacity

The following summarises the findings from the modelling analysis undertaken with respect to the existing scenario with regards to wet weather flow capacity:

- The calibration exercise showed that the system suffers from a high level of groundwater infiltration particularly in Glen Eden, West Harbour, New Lynn, Massey and Henderson Valley;
- Nine overflows operated at least once during the system performance assessment using the 12 significant rainfall events from the 1999 typical year chosen. Three of these were Watercare overflows, the rest being high level Council network overflows;
- Predicted surcharging is most prominent in the Glen Eden, New Lynn and Swanson catchments.

### Wastewater Option Types

There are three main methods for arresting flows at any point in a wastewater network to reduce overflows, they are:

- **Flow reduction** – This involves reduction of flows entering the wastewater system and solutions can address the dry weather or wet weather flow components. Examples of these types of options include demand management and inflow/infiltration control;
- **Attenuation** – Flows can be attenuated thereby reducing peak flows at sensitive points in the networks, thereby reducing overflows. Such solutions can include storage of excess flows until peaks in the wastewater system have subsided. These solutions often result in increased total conveyance volumes but at reduced flow rates over longer durations;
- **More Conveyance Capacity** – Provide more conveyance capacity downstream through upsizing of existing pipelines on existing liens or diverting existing flows down new pipelines.

The ultimate option is to provide an alternative treatment facility for Waitakere other than Mangere Wastewater Treatment Plant. This could be in the form of a new wet weather treatment plant, high rate treatment at the source or an alternative regional Wastewater Treatment Plant or a combination of.

### Options Considered

The following options were considered as part of development of the master plan:

- Best Management Practices (operations based);
- Storage at overflow points;
- Inflow/ Infiltration Control;
- Rationalised Wet Weather Treatment;
- Storage at Woodbay;
- Rationalised Storage Tanks (includes storage tank at The Concourse);

- New Pipeline to Kelston;
- Glen Eden Tunnel Diversion;
- Diverting Rosebank flows to Avondale;
- The Concourse Storage Tank plus Duplication of Watercare Pump Station 25;
- Duplication of Major Trunk Sewers;
- Project Boost (Additional Watercare pump station and trunk sewer).

A1 A summary of the costs for the seven main options is presented in graphical form as attached at page A1.

### Report Recommendations

The report recommends that the most effective solution for Waitakere involves a hybrid combination of storage and/ or wet weather treatment, plus a targeted inflow and infiltration control programme. Rationalised storage with inflow and infiltration control is the preferred option at this time. Furthermore, the following projects are recommended for detailed investigation with a view to implementing projects based on priority super catchments:

- The Concourse storage tank;
- Upgrades of the South Lynn, New Lynn and Titirangi Branch sewers and local downstream storage;
- Upper Glen Eden Branch sewer upgrade and local rationalised storage; and
- Lower Glen Eden Branch sewer upgrade and local rationalised storage.

A2 The overall 50-year wastewater strategy recommended in the report is attached at page A2.

The report states that the plan should be implemented and reviewed in line with the outcomes of detailed investigations and results of further analysis undertaken. This should include development of a joint flow monitoring programme and joint modelling studies with Watercare over the next two years. It is also recommended that all asset renewal programmes should be accompanied by an initial investigation into the source and extent of inflow/infiltration problems, and should be targeted in areas of hydraulic and structural deficiency; and that Council should continue to encourage education into water usage, to maintain an environmentally responsible and sustainable approach to water and wastewater management. It will also be necessary to address the issue of infiltration and inflow from private drains and this will be reported back to Te Taumata Runanga.

### Decision Making

A3 A simple quadruple bottom line assessment of each option was carried out as part of the study, with scoring against social and cultural benefits, economic benefits and environmental benefits is included in the attachment at page A3. All options included inflow and infiltration control as this programme is fundamental to managing wet weather peak flows.

The top ranked citywide option under this simplified quadruple bottom line assessment is to provide rationalised storage tanks with a targeted inflow and infiltration control programme, which includes implementation of The Concourse storage tank.

### RESOURCES

There are no resource implications arising from this report. Detailed cost estimates will be prepared once the strategy has been adopted in principle and reported back to Council for approval.

## CONCLUSION

In September 2005, Council and Watercare agreed to jointly develop a Waitakere Wastewater Master Plan that would address the longer-term issues and requirements of wastewater infrastructure and servicing of Waitakere. The design horizon for this study was 2050, which is consistent with other regional planning initiatives throughout the Auckland region. This report summarises the outcomes of this study.

The Waitakere Wastewater Master Plan states that the most effective solution for Waitakere involves a hybrid combination of storage and/ or wet weather treatment, plus a targeted inflow and infiltration control programme. Rationalised storage with inflow and infiltration control is the preferred option at this time. This includes the construction of a storage facility at The Concourse and in the New Lynn area. The report recommends that the plan should be implemented and reviewed in line with the outcomes of detailed investigations and results of further analysis undertaken. This should include development of a joint flow monitoring programme and joint modelling studies with Watercare over the next two years.

The proposed 50-year strategic plan recommended in the report outlines a programme to meet the key objectives outlined above in this report. The outcome confirmed current thinking, and is considered to be entirely appropriate and a sensible approach in moving forward. The outcome also confirmed earlier studies and work on the subject matter.

Further detailed reports will be submitted to the City Development Committee, Planning and Regulatory Committee, and Community Boards on various stages and implementation, including the following:

- Construction of storage tanks of the Concourse and New Lynn;
- Addressing infiltration and inflow from private drains.

## RECOMMENDATIONS

1. That the Waitakere Wastewater Master Plan report be received.
2. That progress reports be submitted to Te Taumata Runanga at critical stages of the implementation programme of the Waitakere Wastewater Master Plan.

Report prepared by: Richard Taylor, Assets and Network Manager, EcoWater.



## 9 PRESSURE STANDARDISATION PROGRAMME

### PURPOSE OF THE REPORT

The purpose of this report is to advise Te Taumata Runanga of plans to implement the second stage of a programme to standardise water pressure throughout the City.

### BACKGROUND

One of the Council's long term strategic tasks in promoting Council as an "eco city" is to further reduce water demand in the City and to maintain a low level of water losses from the aging water distribution system.

As part of the Council's Water Cycle Strategy that promotes demonstrating sustainable water management solutions at a local level, Council successfully implemented the first stage of a pressure standardisation programme during the period from 1996 to 1999. Due to the success of this programme and other water loss initiatives, Waitakere City Council is recognised as one of the industry leaders in demonstrating good water management practice, particularly in the fields of pressure management and leak reduction programmes. Pressure management is now recognised as one of the fundamental elements of any innovative water demand and asset management strategy. This is due to numerous benefits which can be achieved by implementing pressure management. The benefits include:

- Demand Management - Less consumption from pressure related uses of water;
- Demand Management - Reduced leakage and fewer new leaks;
- Asset Management - Extended useful life of infrastructure due to lower system pressure;
- Asset Management – Reduced maintenance costs due to reduced frequency of main breaks;
- Customer Service - Better service due to less water supply interruptions.

In order to build on the successes achieved, it is proposed to implement a second stage of the pressure management programme.

### **STRATEGIC CONTEXT**

The Council's Three Waters strategic platform aims to establish Waitakere as a centre of innovative water management. One of the measures to achieve this is to further reduce domestic water use by 25% by 2025.

### **ISSUES**

Pressure reduction once introduced has immediate benefits of reduced leakage and reduced number of water main breaks and bursts due to lower pressures. Water usage from taps is also reduced.

Active pressure control should be considered more as an ongoing, long term activity rather than as a one-off project. Since introducing the first stage of the City's pressure management programme in the late 1990's, it is recognised that there are further opportunities across the city for introducing pressure management, through a wider implementation of the initial programme, by improving existing schemes, and by introducing newly developed technologies. It is proposed to carry out a second stage of the pressure management programme over the next three years.

### **Wider Implementation of the Initial Programme**

In the existing water distribution system there are still many parts of the network where service pressure is higher than 1,000 kPa. Due to the harmful effects of such excessive pressure on the network and customers' plumbing systems, in many countries the maximum allowable pressure is limited to 800 or 900 kPa. An acceptable minimum pressure is 250 kPa.

Areas of the City's network where pressures are still high and where pressure standardisation can be introduced are:

- Sturges Road Supply Zone where service pressure in the lower part of the zone is higher than 1,000 kPa. By splitting the sub zone into two parts, pressures in the lower part could be reduced;

- Oratia Kaurilands Supply Zone where service pressure around the lower part of West Coast Road exceeds 1,000 kPa. Pressure in the lower serviced area could be reduced by having the trunk 250 mm line at West Coast Road used for service connections as well as a transit line;
- Titirangi Supply Zone where service pressures at lower levels, close to the coastline is between 1,000 and 1,300 kPa. By splitting the zone into two parts, pressure in the lower area could be significantly reduced;
- Glendene Supply Zone where service pressure close to the coast line is higher than 950 kPa. The zone could be split into two parts and pressure reduced in the lower part;
- Huia Village Supply Zone where along Huia Road and Foster Avenue the pressure is higher than 900 kPa.

### **Improving Existing Operational Regimes**

In parts of the City, the number of new customers has been growing more rapidly than in the rest of the system, and the actual size of these water supply zones is larger than optimal for efficient management of the network.

Water supply zones which provide service to more than 5,000 households should be further divided into smaller, better manageable sub-zones, where more efficient pressure regimes can be established, such as:

- Lincoln – Swanson Supply Zone which will serve more than 7,000 households. The zone could be split into two parts mainly along Swanson Rd, and on the eastern side, service pressure could be readjusted. Two additional automatic back up supply points could be established at Don Buck and Triangle Rd for improving security of supply to the overall area, and allowing better utilisation of the Massey Reservoir particularly during emergencies.
- New Lynn Supply Zone which currently provides water supply to approximately 5,000 households. The zone is expected to grow rapidly in the near future so it could be further subdivided and in the lower part close to the Whau estuary, pressure could be readjusted.

It is proposed to carry out the changes suggested above as part of the second stage of the pressure standardisation programme.

### **Introducing Newly Developed Pressure Management Technologies**

Newly developed technologies for optimising the operational management of the water supply system are now available. These need to be carefully employed by applying a “field pilot test approach” prior to being permanently implemented in the Council’s network. Such technologies, mainly related to dynamic operational management of the network, can bring additional asset management benefits in the day-to-day operation of the system as well as reducing Council’s future capital expenditure for upgrading the network. Implementation is based on utilising pressure reducing controllers at the supply points for modulating pressure in the network on an hourly basis, aiming to maintain required levels of service at the critical points in the system. By introducing such measures, the following additional benefits can be achieved:

- Reducing the requirements for upgrading the capacity of distribution system – less need for constructing new pipelines to increase the capacity of the system;
- Reduction in leakage flow rates from the system by lowering pressure during the night;
- Improving security of supply in emergencies by allowing the on-line controlling of the level of service pressure as a contingency measure.

Due to the topography of the city, this advanced asset management technique could be potentially widely implemented in more than 60% of the system, particularly in New Lynn, Henderson, Lincoln - Swanson, West Harbour, and in the northern part of the city at Hobsonville Peninsula and Whenuapai. It is envisaged that the new technology will be introduced in three or four areas over the next three years as part of this second stage pressure standardisation programme.

### **Customer Relations and Fire Sprinkler Systems**

The existing minimum level of service of 250 kPa pressure and 25 litres/minute flow at the meter to all customers will remain unchanged with this programme of pressure standardisation. The aim is to reduce excess supply pressure in the supply network and to properties. The proposed measures will be carefully planned using dynamic hydraulic modelling of the City's network, and implemented on a staged basis.

The programme will be communicated to properties where changes are proposed as a 'pressure standardisation programme' as with the first stage of the programme. A letter with information about pressure management and the planned measures will be delivered to all affected customers. Public notification of the supply changes will also be made. Any customer complaints received relating to the programme will be promptly dealt with.

Throughout the implementation of the first stage of the programme, which affected around 40,000 properties, less than 1% of affected customers contacted Council with a pressure related complaint. All of these complaints were followed up promptly, with most fixed almost immediately. There were no outstanding issues that could not be resolved.

To ensure that existing fire sprinkler systems remain compliant after the pressure changes are made, a specialist fire engineer will be engaged to assess the impact of reduced pressures on the affected fire sprinkler systems. Where a problem exists, the Council will arrange the most cost effective means of overcoming the problem.

### **RESOURCES**

The proposed programme can largely be implemented by Council water supply staff as part of the ongoing works programme. These staff have developed expertise and professional experience in implementing pressure management during the first stage of the pressure standardisation programme. There will be minimal engagement of external consultants.

It is proposed to implement the programme progressively over the next three years. Funding for the programme was identified and included in the Long Term Council Community Plan 2006–2016. The proposed budget for the programme over the next three years is shown below.

<b>Budget</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>
Pressure Standardisation – Stage 2	\$90,000	\$85,000	\$95,000

### **CONCLUSION**

Pressure management is now recognised as one of the fundamental elements of any innovative water demand and asset management strategy.

In order to build on the successes achieved from the pressure standardisation programme carried out from 1996 to 1999, it is proposed to implement a second stage of the pressure management programme.

Implementing this second stage pressure standardisation programme as outlined above will further contribute to reducing water demand for the City, by reducing water consumption and reducing leakage from the aging network. It will be a further step towards Council achieving its strategic objectives relating to demand management while also promoting the practice of sustainable water management at a local level.

The proposed measures will be carefully planned, communicated and implemented progressively as a staged defined programme over a three year period. Funding for the programme was identified and included in the Long Term Council Community Plan 2006–2016.

### **RECOMMENDATIONS**

1. That the Pressure Standardisation Programme report be received.
2. That progress reports be submitted to Te Taumata Runanga at critical stages of the implementation of the Pressure Standardisation Programme.

Report prepared by: Richard Taylor, Assets and Network Manager, EcoWater.



## **10 NEXT MEETING**

The next meeting of Te Taumata Runanga will be held in the Civic Centre, on Monday, 19 February 2007, commencing at 5.00 pm.

A representative is invited to present Te Taumata Runanga report at the next meeting of Council to be held in the Civic Centre, on Thursday, 14 December 2006, commencing at 5.30 pm.

