Notice is given that the meeting of the Masterton District Council Infrastructural Services Committee will be held on 4 October 2017 at REAP House, Queen St, Masterton commencing at 3.00pm.

RECOMMENDATIONS IN REPORTS ARE NOT TO BE CONSTRUED AS COUNCIL POLICY UNTIL ADOPTED

29 September 2017
AGENDA:

1. CONFLICTS OF INTEREST (Members to declare conflicts, if any)
2. APOLOGIES
3. PUBLIC FORUM
4. LATE ITEMS
5. PUBLIC EXCLUDED ITEMS
   Items to be considered under Section 48(1)(a) of the Local Government Official
   Information and Meetings Act 1987.

FOR INFORMATION

6. COMMUNITY FACILITIES & ACTIVITIES UPDATE (192/17)  Pages 311-314
7. WELLINGTON REGION WASTE MANAGEMENT AND MINIMISATION PLAN JOINT
   COMMITTEE MINUTES (195/17)  Pages 315-322
8. WATER CONSERVATION MANAGEMENT PLAN (196/17)  Pages 323-330
9. INFRASTRUCTURE UPDATE
   To be circulated separately
To: Infrastructural Services Committee
From: Andrea Jackson, Manager Community Facilities and Activities
Endorsed by: Pim Borren, Chief Executive
Subject: Community Facilities & Activities Infrastructure Update
Date: 4 October 2017

FOR INFORMATION

Recommendation:
That the Infrastructural Services Committee receives the update on progress from Community Facilities and Activities in report 192/17.

Purpose
The purpose of this report is to provide the Infrastructural Services Committee with an update on key Community Facilities & Activities projects that sit within the scope of activity for this committee.

Updates
- **Sports Facilities**
  - *Douglas Villa, ACM, Pioneer Club Rooms, Memorial Park Grandstand*
    The detailed seismic assessment will be completed by the end of September which will inform future work required.

    We are working with committee members at Douglas Villa to explore moving the No.1 pitch approximately 10m to the south which will mean the pitch avoids a wet area, and also provides more suitable run off at the northern end near the rock wall.

- **Senior Housing and Rental Properties**
  Unit 13 at Panama Village received an upgrade following a tenant vacating after 15 years. This included a full internal paint, new lino, new toilet and shower plumbing.

    Energy Smart have completed audits on almost all properties for insulation and where necessary insulation will be installed or topped up by the end of October. All of Bodmin and Truro is currently insulated to required standard, and we have compliance certificates issued. Laurent Place units are being assessed 29th September but we believe after an initial inspection on one unit, that they will all be up to standard with no work required. At Panama we have compliance certificates for the four double units. All other units at Panama have shown insulation to be present in the narrow roof cavity, however, we are unable to ascertain if the insulation is up to required thickness until we re-roof when necessary. A roofing report is due shortly, however initial indications are that there will be little roofing replacement work required.

    Three of our rental properties have compliance certificates and the remaining four will be insulated this month.
A successful residents’ meeting was held at Panama Village with a good turnout. This will be a regular quarterly event, and next time residents from other complexes will be invited. Their main concern is lack of resident parking and we are currently pricing up 6 additional carparks.

New alarm systems have been installed in the gardener’s shed at Queen Elizabeth Park, and our rental property in Park Avenue due to multiple break-ins.

A new awning at the Lakehouse Café which is currently being made and will be installed this month.

- **Trust House Recreation Centre**
  Our structural engineer is currently completing designs on strengthening the bracing for overhead ducting. We have had one quote for the work required on the corrosion issue on the hydro slide stairs, and awaiting a second quote. The change to the chlorine delivery (self-generation) is receiving positive feedback.

  We are considering options for the outdoor pool to manage the leak.

- **Public Conveniences**
  The Economic Development team put in an application to MBIE for upgrading the Castlepoint Toilets. We should find out if we are successful at the end of November. If successful we would plan to start work in autumn 2018.

  We also plan to upgrade Henley Lake toilets this year. This will also involve finding a solution to ongoing drainage issues. We may consider putting in a dump station.

- **Mawley Park**
  A tender document is currently being prepared for the construction of security fence along the boundary of the park. Depending on contractor availability we would hope to get this installed prior to the busy summer season.

  The barrier arm installation and associated groundworks will start later in September. Lino has been replaced in the kitchen block, and new lighting has been installed outside some of the units.

  The park has suffered damage to grounds due to ongoing wet weather and we will need to plan some roading/pathway upgrades prior to winter next year. We have been working closely with GWRC on plans along the Waipoua, behind Mawley Park, and this section will be cleared once the area dries out a little, with a view to planting and developing over the coming years.

- **Queen Elizabeth Park Rejuvenation Project update**
  The project team continue to work on the final design stage of the project. Once this is completed a resource consent application will be lodged with District Council planners. The project tendering process, for the physical works stage, will start in October.

- **Wellington Regional Trails**
  The Regional Trails Framework has now been signed off at an operational level. The framework was endorsed by all Mayors following the presentation at the Mayoral forum on 25 August. A Regional Coordinating Committee is now being formed, and a Coordinator
will be recruited (0.5 FTE and 0.5 FTE on Rimutaka Cycle Trail). The Coordinator will be based at WREDA and report to the WREDA General Manager.

- **Rural Trails Network Plan**
  Consultation on this document closes on 21st September. Feedback will be collated and will help inform decisions and planning in the next few months.

- **Riversdale Northern Reserve**
  Some replanting has taken place on the northern reserve where mature pine trees have been removed. This will be continued next autumn when ground conditions are conducive to planting.

- **Water Take Resource Consent Renewal**
  Work continues around renewing water take consents for both Henley Lake and Queen Elizabeth Park Lake. Further discussion with Greater Wellington has indicated that the renewal of Henley Lake water take consent will be a publicly notified process. The consent for Queen Elizabeth Park Lake will require approval from effected parties only. For example, Iwi, Fish and Game and the Department of Conservation.

- **Queen Elizabeth Park Lake**
  Staff are investigating options to remove silt build up from Queen Elizabeth Park Lake. This was last done fifteen years ago and disrupted the lake bed considerably creating an issue with water retention.

- **Street trees**
  Street Trees at the south end of High Street have been replaced. The species replaced, Plane trees, have not thrived, which is a trend we are seeing throughout the district with this species. The street tree advisory committee, therefore, approved a change in tree species to Liquid Amber. We have mature species of these trees in Pownall Street that have done well, in the restrictive street environment.

- **Hood Aerodrome**
  **Operational**
  - Singapore Airforce F16s are operating from Ohakea with some flights over the Wairarapa, the public may from time to time hear jets operating along the coast near Castlepoint.
  - The grass areas of the airfield have been rolled following the very wet winter and spraying and other spring maintenance is under action.
  - Quotes are being obtained to repaint the main runway and engineers have advised rescaling is not required until at least 2019.
  - Wellington and Kapiti Coast Aero club will be hosting an annual flying event at the aerodrome on the 23rd September.
  - Upgrading and replacement of signs for security to minimise the risk of people and vehicles going onto aircraft operational areas
  **Projects**
  - The draft Passenger Service Strategy has been completed
  - Requirements for a survey of the Manaia Road precinct has been provided to the surveyors
  - The ground lease review has been completed
  - The Hood Aerodrome Management Plan draft is being prepared
Positive meeting between the National Aviation Centre Trust (NAC) and MDC and there is an active dialogue between the NAC and Vintage Aviator management in Wellington. This remains an important strategic priority for Hood Aerodrome.
To: Infrastructural Services Committee  
From: David Hopman, Manager Assets and Operations  
Endorsed by: Pim Borren, Chief Executive  
Date: 4 October 2017  
Subject: Wellington Region Waste Management and Minimisation Plan Joint Committee Minutes 18 September 2017

FOR INFORMATION

Recommendation:
That the Infrastructural Services Committee receives the minutes of the Wellington Region Waste Management and Minimisation Plan Joint Committee meeting held on 18 September 2017.

Purpose
To provide the Infrastructural Services Committee with the minutes of the Wellington Region Waste Management and Minimisation Plan Joint Committee Meeting held 18 September 2017.

Background
Under the Waste Minimisation Act 2008 territorial authorities were required to develop a Waste Management and Minimisation Plan (WMMP) by 2012. In 2011, 8 Councils in the greater Wellington region adopted the first regional WMMP. The Councils agreed that a Joint Committee should be established to oversee the implementation of the WMMP. Since then a review process has been undertaken and the new WMMP was adopted by Masterton District Council on 28 June 2017.

Joint Committee meetings are held as required and Councillor Peterson is Masterton District Council’s representative on the Committee.

The minutes of the last Joint Committee meeting are attached for the Infrastructural Services Committee’s information.
ORDINARY MEETING

OF

WELLINGTON REGION WASTE MANAGEMENT AND MINIMISATION PLAN JOINT COMMITTEE

MINUTES

Time: 9:30am
Date: Monday, 18 September 2017
Venue: Committee Room 1
Ground Floor, Council Offices
101 Wakefield Street
Wellington

PRESENT
Councillor Bridson (Chair)
Councillor Craig
Councillor Elliott
Councillor Gaylor
Councillor Greathead
Councillor McLeod
Mayor Tana
Councillor Pannett
Councillor Peterson
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1 Meeting Conduct

1.1 Apologies

Moved Councillor Bridson, seconded Councillor Pannett.

Resolved
That the Wellington Region Waste Management and Minimisation Plan Joint Committee:

1. Accept the apology for lateness from Mayor Tana.

CARRIED

1.2 Conflict of Interest Declarations

No conflict of interests were declared.

1.3 Confirmation of Minutes

Moved Councillor Bridson, seconded Councillor Craig.

Resolved
That the Wellington Region Waste Management and Minimisation Plan Joint Committee:

1. Approve the minutes of the Wellington Region Waste Management and Minimisation Plan Joint Committee Meeting held on 10 July 2017, having been circulated, that they be taken as read and confirmed as an accurate record of that meeting.

CARRIED

1.4 Deputations

There were no deputations.

1.5 Items not on the Agenda

There are no items not on the agenda.

2 General Business

2.1 A Starting Point for WMMP Implementation

Moved Councillor Bridson, seconded Councillor Pannett.

Resolved
That the Wellington Region Waste Management and Minimisation Plan Joint Committee:

1. Receive the information.
2. Agrees the immediate regional Waste Management and Minimisation Plan (WMMP) implementation focus comprises of:
   - The development and implementation of a regional waste bylaw, or suite of
     regionally consistent district level bylaws; and
   - The implementation of the National Waste Data Framework.

3. Notes that Regional Waste Reduction Targets at the District Level will continue to be refined to inform implementation strategies at the Territorial Authority (TA) level, taking into account associated Long-term Plan (LTP) and Annual Plan (AP) processes over the next 10 years and that the TAs will regularly report back to the Wellington Region Waste Management and Minimisation Plan Joint Committee on progress on implementing their plans.

4. Request officers to provide a report in December 2017 that outlines the business as usual plan and completed actions from each TA to reach the WMMP targets.

5. Agree to request officers to report back with a preliminary implementation plan for the next 3 years for the WMMP with costings by February 2018 and earlier if necessary with respective TAs.

6. Request officers to report back with reporting requirements for WMMP including a requirement for the territorial authorities to come back to the Committee with an annual report.

4. Agree that the meetings of Joint WMMP Committee be scheduled on a four monthly reporting basis, unless otherwise required.

CARRIED

The meeting concluded at 10.40am.

Confirmed: ____________________________________________
               Chair
INFORMATION

Recommendations:
That the Infrastructural Services Committee receives the Water Conservation Management Plan for information.

Purpose
The purpose of this report is to inform the Committee of the updated Water Conservation Management Plan.

Summary
As part of the renewal of the water take consent for Masterton’s drinking water supply, staff have reviewed and expanded the Water Conservation Management Plan (The Plan).

The purpose of the Plan is to ensure that the water supply is used as efficiently as possible so that our take from the Waingawa River is reasonable and does not impact on the river health.

An important component of the revised Plan is the linkage between water consumption and the impact on the river. The Plan therefore includes public education measures to be taken when the river is under stress.

Water conservation measures are normally in place over the summer months in the form of water restrictions, and the Masterton public are familiar with them. This Plan seeks to link the restrictions to the impact on the river in order to help people better appreciate the value of the restrictions.

The Greater Wellington Regional Council officers have been consulted as part of this Plan. Agreement has been reached to ensure that a consistent message is conveyed to the public and consultation will be undertaken with them prior to the implementation of any restrictions.

Additionally, the Plan sets out a range of actions that Council will undertake, including improving the efficiency of the system and enforcing the Bylaw where necessary.

The plan includes an ambitious target for water conservation, and will require Council to be a leader in water conservation measures for its own facilities.

Recommendations
That the Committee resolves to:
• Receive the Water Conservation Management Plan for information
Masterton District Council
Water Conservation Management Plan

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Executive Summary

There are many benefits to implementing a Water Conservation Management Plan. Water conservation can have a positive impact on the environment by reducing depletion of water resources (surface and groundwater); reducing expenditure on energy, chemical use and operating costs as well as potentially reducing Council capital expenditure by delaying infrastructure upgrades required to meet increases in water demand.

In Masterton, approximately 64% of water is used by domestic consumers, 6% by commercial and industrial consumers with the balance comprising unaccounted for water including network leakage. The Masterton District Council itself is the largest water user accounting for 3% by volume of the Town’s water consumption.

Council constantly invests in measuring water consumption by means of bulk water meters and carrying out night demand surveys. Average residential household water consumption has been generally declining as a result of lower household occupancy and more efficient water use appliances.

Additionally, Council is active in reducing water use through a range of strategies including investment in significant and on-going water network renewals and through the provision of volumetric metering of the largest water users.

The Water Conservation Management Plan outlines specific initiatives to support additional reductions in water consumption and to maintain high levels of water use efficiencies.

**Initiative 1. Improve the efficiency of the distribution system**
**Initiative 2. Enforce regulation to control consumption**
**Initiative 3. Public Awareness**
**Initiative 4. Leadership in conservation management**
**Initiative 5. Installation of Domestic Water Meters**

Council intends to measure the success of the Water Conservation Management Plan by assessing the average per capita water usage over a five year rolling average.

Council will review the Water Conservation Management Plan every three years to assess progress made in implementation of the initiatives identified in the Plan and to confirm that the assumptions underpinning the initiatives remain valid.

Why have a Water Conservation Management Plan?

Water is a critical resource, essential for life and necessary for human health and well-being as well as for the preservation of the environment. Masterton has a generally reliable and secure supply of water but this is subject to seasonal variability. Unless carefully managed, water demand may exceed supply in particular during the summer months.

Council has limits on the volume of water that can be extracted from the Waingawa River. These limits are based on both legal requirements created by the Resource Consent and physical constraints from the design of the intake and treatment system itself.

Water conservation then has many benefits. Reducing the amount of water consumed conserves the resource within the river and can help with improved ecosystem health. This is particularly true during the summer when rainfall and river flow is at a minimum and demand is highest.
Conserving water helps to conserve energy. Energy is required to treat and pump water via the distribution system to users. Reducing energy use reduces the costs of delivering the water supply.

Reduced water consumption will also contribute to reductions in wastewater flows which will further reduce the impact on the environment.

Finally, reducing the amount of water consumed can contribute to delaying the upgrade of infrastructure required to treat and distribute water where infrastructure is close to capatown. The same pumps and pipes can be used to supply any increase in water demand due to population growth for longer. This will contribute to reducing the cost to supply water over the long term.

Where Does our Water Come From?

Masterton sources it drinking water from the upper reaches of the Waingawa River. This is piped to the treatment plant at Kaituna via a 4 km long siphon before being treated and reticulated to the urban area.

The treatment plant includes storage dams which can hold up to 60,000m$^3$ of water. This equates to 3 to 6 days storage and allows for diversion of the water when the river is in flood, or at times of low flows. The less water that is taken for storage and treatment, the more water is retained in the river.

Because of the close link between the Waingawa River and the water treatment plant, water conservation measures have a direct impact on the volume of water retained in the River.

How Much Water Do We Use?

Masterton has a daily, per capita usage of 434 litres. This equates to 7,800m$^3$ per day. This does not include industrial / commercial users and is considerably higher than other cities in New Zealand. Usage increases over the summer months.

Industrial / commercial use is approximately 300m$^3$ per day, or around 6% of total usage.

However, usage increases over the summer month.

Daily average output of the treatment plant is 13,000m$^3$ per day. Summer flows are higher (average 14,400m$^3$) while Winter flows are lower (Average 11,800m$^3$)

What Have We Done So Far to Promote Efficient Water Use?

Council has been actively working to reduce water loss and increase efficiency in Masterton for several years, by reducing leakages, metering our larger users and promoting water efficiency to the wider community.

Network Leakage

Council currently undertakes reactive leaks repairs as and when required. A leak detection study was completed in 2008 and a network condition assessment commenced in 2009. This work is ongoing and is detailed in the 35 year asset management plan. Systematic replacement of aging infrastructure will result in increased efficiency of the system with less losses and fewer maintenance issues overall.

This work will continue to contribute significantly to the efficiency of the network.

Metering Commercial Users

The largest commercial / industrial users on the network are metered in order to help manage their usage. This allows the users to better understand their individual water use and, although water is not
currently being charged for, it does allow the Council to determine appropriate charging for the water provided should the need arise.

**Promoting Water Use Efficiency**
Council runs a public awareness campaign during the summer to educate the public on water restrictions and usage. In addition to ‘sprinkler bans’, the Council will promote positive water efficiency messages to highlight the benefits, and emphasise the linkage between water use and river health.

A public education campaign is planned to run prior to the commencement of the summer to coincide with seasonally low river flows.

**What Powers Do We Have To Manage and Restrict Water Use?**
Council has adopted a bylaw to assist with the management and regulation of the Town’s water supply.

The Water Supply Bylaw 2012 includes provisions for demand management;

**5.7.3 Demand management**
The customer shall comply with any restriction or other conservation measures which may be approved by the WSA to manage high seasonal or other demands. Such restrictions shall be advised by public notice.

Even when such restrictions apply the WSA shall take all practicable steps to ensure that an adequate supply for domestic purposes is provided to each point of supply.

Typically, this results in water restrictions being introduced for the water supply area during the summer;

Stage 1 – Alternative days sprinkler bans
Stage 2 – Total sprinkler bans, but with hand-held hoses permitted
Stage 3 – Total ban on all watering and non-essential use.

The level of water restriction is directly related to the flow rate of the Waingawa River. As the flow drops below 1,900 l/s, increasingly restrictive water conservation measures are implemented by Council;

<table>
<thead>
<tr>
<th>Status</th>
<th>Conservation Measures</th>
<th>River Flow Rate (l/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Normal use</td>
<td>&gt;1,900</td>
</tr>
<tr>
<td>Amber</td>
<td>Stage 1; Alternate days</td>
<td>1,900 – 1,700</td>
</tr>
<tr>
<td>Red</td>
<td>Stage 2; Sprinkler bans</td>
<td>1,700 – 1,100</td>
</tr>
<tr>
<td>Low Flow</td>
<td>Stage 3; Watering Prohibition</td>
<td>&lt;1,100</td>
</tr>
</tbody>
</table>

The river tends to peak rapidly following a rainfall event. Water restrictions are not implemented unless there is a likelihood that low flows will continue for a period of time. Water restrictions will be looked at when the river flow is clearly trending towards a flow of less than 1,900 l/s and no significant rainfall is forecast within the following 5 days.

A single rainfall event is therefore not sufficient to justify removing the restrictions.
Communication with Greater Wellington Regional Council

Prior to the implementation of water restrictions, or to a change to a more restrictive measure, Council will consult with the Environmental Manager, GWRC. This is to ensure that a consistent message is being relayed to the Masterton Community by both Councils and that the proposed measure is appropriate. A flexible and common sense approach will be taken in terms of the public messaging to ensure that the need for water conservation is clearly communicated, with a view to avoiding confusion.

What Can We Do To Further Reduce Our Water Usage?

Initiative 1. Improve the efficiency of the Network

Improving the efficiency of the distribution system is key to maintaining and improving on water use efficiency.

In order to better understand the system and to continue to improve efficiency and measure any improvement, Council needs to continue its flow and water use monitoring. Council has invested in monitoring systems to better understand how the water supply operates, and identify areas where improvements can be made.

<table>
<thead>
<tr>
<th>Outcome sought</th>
<th>Actions</th>
<th>Progress to date (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve understanding of the water supply network</td>
<td>Trial of small number of water meters to gauge ‘typical use’.</td>
<td>Pilot trial in association with BRANZ being implemented.</td>
</tr>
<tr>
<td></td>
<td>Ongoing programme of flow monitoring to better understand zones of the system.</td>
<td>Lower cost and practical measures to assess flow rates throughout the network.</td>
</tr>
<tr>
<td>Reduce leakage in the water supply system</td>
<td>Continue current investment in routine inspections, network maintenance and water main replacement programme.</td>
<td>Majority of water mains replaced. Secondary lines to be projected for replacement through Asset Management model.</td>
</tr>
<tr>
<td></td>
<td>Carry out conditional assessment of critical pipes and use asset management modelling to better target renewals.</td>
<td>Asset management model currently being developed with a go-live date of XXXX.</td>
</tr>
</tbody>
</table>

Initiative 2. Enforce regulation to control consumption

Council will continue to enforce the Water Supply Bylaw as required. In particular Council will target water losses on private property and illegal water use in the town, including the use of water for gardening during times of water restrictions. Note that Council is not currently aware of any illegal water connections but will endeavour to locate and stop unauthorised use if it is identified.

Initiative 3. Public Awareness
There is a great deal that the community can do on an individual level to reduce their water use in the house and garden. Council will provide information and guidance to the community on how consumers can reduce their water use.

It is not clear that the community understand the direct link between water use and the impact on the Waingawa River. Council will therefore use a variety of media to not only promote water conservation, but also that linkage.

Council will promote a low flow “consumption target” of 11,000m$^3$/d via its webpage and other media outlets when the river flow drops below 1,900 l/s. This target is equivalent to the average low flow during the winter months. Note that the average summer flow is 14,400m$^3$/day, so this is equivalent to a 30% saving in consumption.

**Commercial Users**

As commercial users make up 6% of all the water used in the town, Council will also promote water efficiency to industry and commercial users.

<table>
<thead>
<tr>
<th>Outcome Sought</th>
<th>Actions</th>
<th>Progress to Date (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial users educated / advised on water efficiency initiatives they can implement.</td>
<td>Contact with major users.</td>
<td>TBC</td>
</tr>
<tr>
<td></td>
<td>Information / plan on reduction in supply to major users at time of low river flows.</td>
<td>TBC</td>
</tr>
<tr>
<td>Communication to wider public on the need to conserve water</td>
<td>Communication plan for implementing water use restrictions</td>
<td>TBC</td>
</tr>
<tr>
<td></td>
<td>Coms plan for public education programme focusing on linkage between water use and the river.</td>
<td>TBC</td>
</tr>
<tr>
<td></td>
<td>Coms plan for the need to generally conserve water, not just at stress times, through efficient water use.</td>
<td>TBC</td>
</tr>
</tbody>
</table>

**Initiative 4. Leadership in water management**

Council intends to promote water conservation by leading by example. There are a number of initiatives that Council will commence in the next three years.

<table>
<thead>
<tr>
<th>Outcome sought</th>
<th>Actions</th>
<th>Progress to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation of sports parks and public reserves to be via non-potable water sources.</td>
<td>Use of bore water to irrigate sports fields.</td>
<td>Red Star, Sports Oval and Memorial Park currently use non-potable bore water for irrigation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Council will investigate;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sewer-mining for water.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Water harvesting from roof of recreation</td>
</tr>
</tbody>
</table>

| Parks and roadside plantings irrigated via non-potable water. | Council will investigate; |
| | • Sewer-mining for water. |
| | • Water harvesting from roof of recreation |
Increased water efficiency in Council buildings and facilities.
- Water efficient appliances / systems installed in its own administration buildings
- Investigate push button taps/urinal sensors in new builds and refurbishments.
- Leak investigations and minimisation at recreation centre pools.
- Ongoing investigation and maintenance.

Council will provide relevant, practical and up to date advice on best practise for water conservation. Council will keep the community informed on the water use within the town and provide information on conservation initiatives and their effect on overall water use.

**Initiative 5. Installation of Domestic Water Meters**

Council has allocated funds in the 2019/20 Long Term Plan for the installation of water meters for domestic users. Water meters serve to increase public awareness of water use, provide feedback on water efficiency measures and allow for improved leak detection and prevention. The final decision on whether or not to proceed with the installation will need to be made closer to the budget year and will depend on the effectiveness of the other water conservation measures.

**How Will We Measure Our Success?**

Council intends to show that the success of the Water Conservation Management Plan by demonstrating that Masterton’s per capita water use is below average for similar communities and is stable or declining over a rolling 3 year period. Council is currently participating in a small scale pilot trial to determine ‘normal’ household usage, and this information will assist in modelling water use for a typical household in Masterton.

Council will determine the success of the Low-Flow management measures by tracking water consumption during times when the low-flow messages are being advertised. Changes to the message and the media format will be made depending on the public’s response.

Council will review the Water Conservation Management Plan every three years.