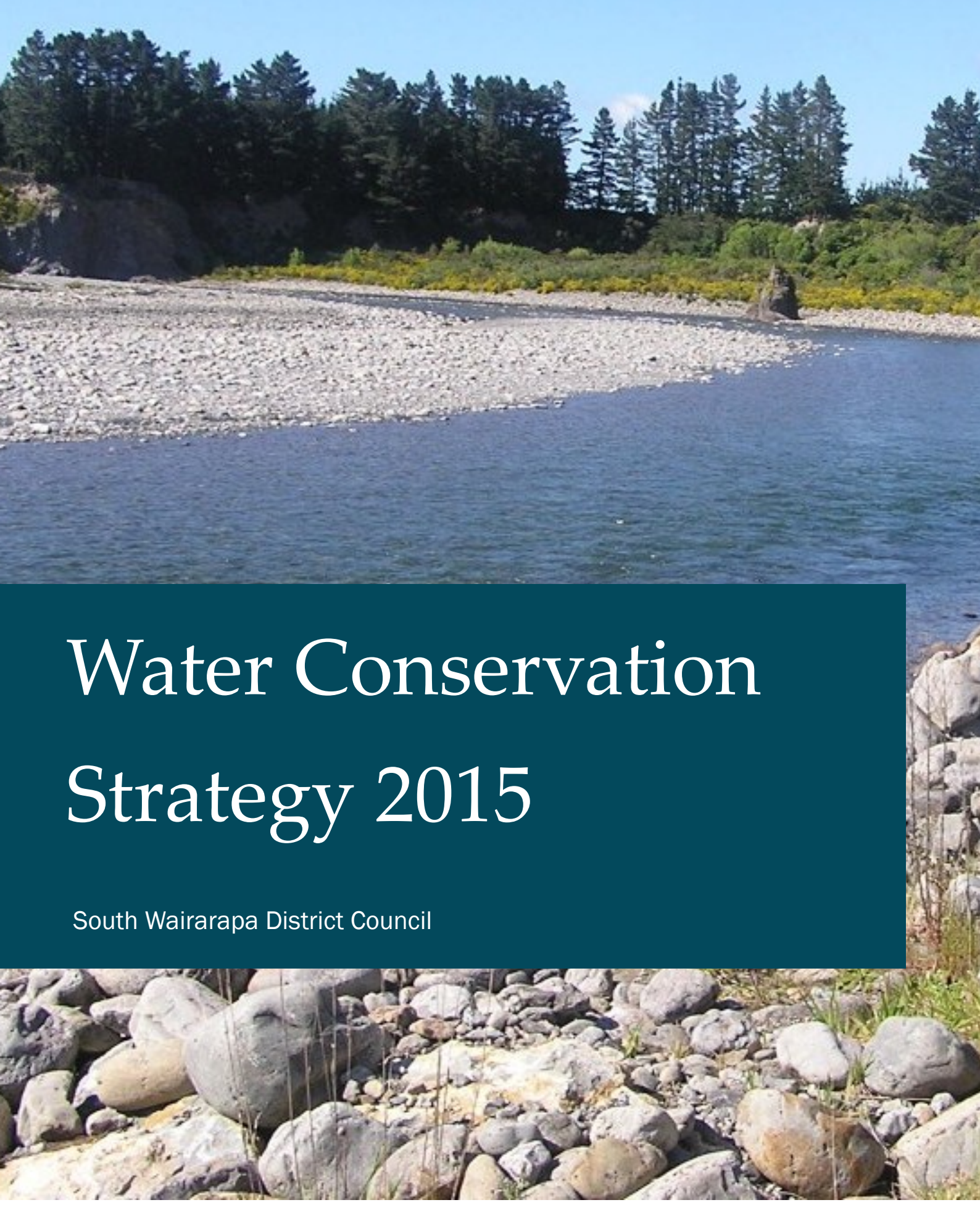


Water Conservation Strategy 2015

South Wairarapa District Council

Contents

Introduction

Clean, safe water is essential for the health, wellbeing and prosperity of our district.

The South Wairarapa Water Conservation Strategy 2015 is about promoting sustainable use of water supplied by the reticulated water supply systems in the three urban communities of Featherston, Martinborough and Greytown.

This Strategy establishes the principles which apply to managing water supply and demand, infrastructure, regulatory controls and community engagement around water use in South Wairarapa.

Water is a fundamental need. We must work together to ensure there is enough for everyone.

The outcome of the strategy should be:

- *A reliable supply of water for people's economic, environmental, recreational, health, and social wellbeing.*
- *A reduction in the adverse effects of abstraction of water on the environment, particularly in summer when river flows can be low.*

Like all users of fresh water, the Council is required under the Resource Management Act to promote the sustainable use of water.

Central and regional government and South Wairarapa District Council's own local policy frameworks reinforce that requirement.

If you would like to discuss the Strategy, email the planning department on enquiries@swdc.govt.nz or ring 06 306 9611.

Our water system

South Wairarapa's water supply is known as a 'run-of-the river' system. Effectively, the water that passes through our water supply catchments today provides the water we consume tomorrow.

Water is derived from rivers and aquifers close to the reticulated towns of Featherston, Greytown and Martinborough. Very little of our water demand is met by water stored in a longer term bulk supply.

This means that the supply can be significantly affected by weather conditions, low river flow conditions or spikes in consumption.

Statutory framework

The Water Conservation Strategy responds to national, regional and local (territorial) policies and statutory requirements. Maori cultural values about water use are also relevant.

Council's reticulated water supplies are not the only users of Wairarapa freshwater. The majority of allocatable water is used for other purposes, particularly to support farming practices. Nevertheless, the Council is required by legislation and national and regional resource management policies to use water in a sustainable manner and to avoid, remedy or mitigate adverse effects of that use. The Council's own district plan policies also require sustainable use of water resources.

Conservation

There are social, cultural, economic and environmental benefits from responsible water use. Conservation helps the Council:

- *Mitigate environmental effects such as impacts on natural flows of rivers and streams, and water levels in aquifers.*
- *Protect freshwater flora and fauna, and natural features such as wetlands and lakes.*
- *Protect cultural values of freshwater bodies, including Maori cultural values such as the mauri of water and mana of water bodies.*

The Greater Wellington Regional Council indicates that the amount of water taken for farm pasture irrigation in the Wairarapa has more than doubled in the last ten years. Demand for water supply from rivers, lakes and groundwater is expected to increase. The regional council has noted that groundwater levels in some Wairarapa aquifers are declining year by year.

Lowered groundwater levels can affect the flow of springs, rivers and streams, and water levels in wetlands can eventually dry up, permanently affecting dependent ecosystems.

Council is also concerned about the effects of climate change, which may lead to less rain in summer and additional pressures on our supply.

Conservation is a very important tool when water supplies become unusually low, such as in dry summers or after natural events that disrupt water supplies. In these circumstances some water conservation measures will be promoted and required at short notice by the Council. These measures may be made compulsory.

Wellington Regional Council has granted resource consents for our water takes.

Consent conditions require us to take steps to use water more efficiently and reduce peak demand during periods of drought and low river flows.

It is important for the Council to continue to promote responsible water use so we can:

- Avoid the need for additional water sources and infrastructure
- Reduce energy and costs for water treatment and distribution
- Reduce community costs and ensure reliable long term supplies

Approaches

Experience both in New Zealand and overseas indicates that a combination of approaches is necessary to manage and reduce demand for water. Typical actions to reduce water use by the Council and community can revolve around minimization of use, efficiency gains and alternative sources.

Council's own actions in the past five years have led to a slight reduction in reticulated water use. The introduction of water metering and charging residents for water beyond standard use appear to have contributed to stabilising water demand. Education and the promotion of sustainable water use by the Council are also likely to have assisted.

Minimisation of use

This is where we do fewer things that use water, such as watering the garden less frequently, not washing the car, using buckets rather than hoses for car washing, only running the dishwasher when it's full, or using the shower less often or for shorter periods. Gardening techniques of using only hand held garden watering devices and applying mulch to gardens are also effective.

Minimisation also involves people changing their behaviours. Behavioural change can be realised by education, providing information, instilling community pride, and economic instruments. The latter could include water metering and pricing mechanisms. Some changes take a long time. Others, such as those resulting from water charging, can be made more immediately. If behavioural changes can be made, conservation measures are generally low cost and can be implemented straight away.

Efficiency gains

These can be made when Council and users use management tools and hardware to obtain the same level of benefits from using water, but with the use of less water.

Examples of water efficiency measures include detecting and fixing leaks in the Council owned infrastructure and on private land, and installing water conservation measures such as low-flow shower heads, front loading washing machines, and low or dual flush toilets.

Alternative sources

Alternative sources like the collection and use of rainwater tanks and grey-water systems can also be promoted.

Additional water efficiency measures and alternative sources are more sustainable over time, since people generally do not need to change their behaviour for them to be effective. However, they tend to be more expensive and take longer to implement.

Strategy

Maintain 2014 water use levels and reduce demand flows when environmental impacts of water takes are high.

Aim

With falling water use from 2009 - 2014 and a relatively stable population, Council has set:

- *A primary aim of maintaining future reticulated water use at current levels.*
- *A secondary aim of reducing water demand during low river flows when the environmental impact of water takes are high.*

Council seeks to accommodate growth in the next ten years within the current water allocation levels. This is similar to the approach adopted by Wellington City Council in 2011.

The success of the approach will be evaluated before Council finalises its next Long Term Plan for 2018 - 2028.

In the District, peak demands occur in summer with February generally being the month of highest use. River flows tend to be lower and the environmental impact of water takes is the highest at that time. The size of the water infrastructure needed to ensure a secure supply is determined by the peak demand during dry periods. Council's minimisation of water use and efficiency improvements therefore focuses on that period.

The District's overall water demand has been tracking downwards over the past five years, primarily as a result of the introduction of universal water metering in 2009. Council's active leak detection work and increased public awareness of water conservation issues have also contributed.

Without any new major interventions, the downward trend may plateau in the future and demand may rise incrementally with increases to the population and overall economic growth and wealth.

Rationale

The Council's existing approach to reticulated water use is considered to have been sound. The introduction of water metering and a user pays pricing model for high domestic use has helped reduce water use.

Robust asset management practices including leak detection, repair programmes and maintenance and renewal practices are in place. Basic educational tools and information provision systems are in place. Council bylaws require responsible use and allow for seasonal restrictions.

This Strategy's aims are feasible, practical and achievable and build on initiatives already in place, as well as allowing for better co-ordination of these. They will not require significant additional financial resources beyond what has been included in the Council's 2015-2025 Long Term Plan.

This is because significant new initiatives to further reduce water use are not contemplated in the next three years. Such initiatives can be expensive, particularly if retrofitting of existing buildings and infrastructure is required. They may also be unnecessarily restrictive on the community and the effectiveness marginal.

Outcomes

Specific actions listed in the following pages are intended to achieve the following outcomes:

1. Foster a community culture of conservation and efficiency promotion across the Council, businesses and residents based on increased knowledge about water use and conservation issues.

2. Put in place regulatory measures to help reduce demand for water, particularly when river flows are low and environmental impact of water takes is high.

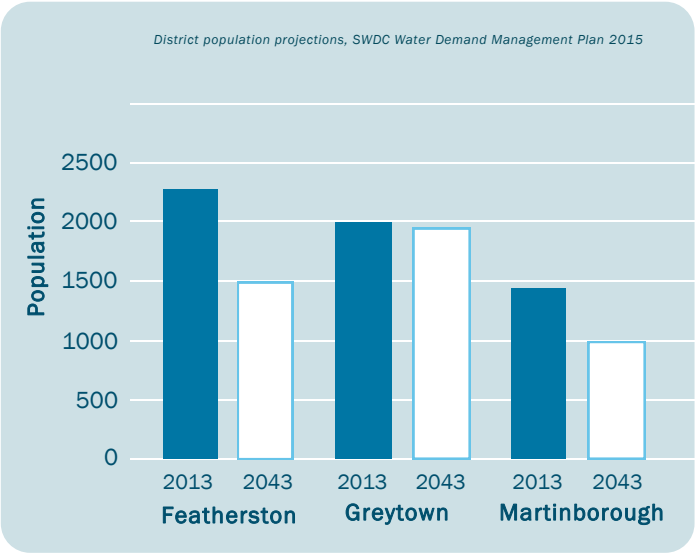
3. Have a robust asset management plan in place so that the Council's water supply system is efficient.

4. Create clarity about when reticulated water will be supplied.

Assessment and reporting

The progress on implementing the actions and their impact on water use will be reported back to Council in late 2017. That report will confirm the implementation of the activities, assess their relative performance in achieving the stated outcomes and identify any further development that might be required.

Reporting will also identify how the activity will be further advanced across the District and provide for updated performance targets or outcomes. The report will consider whether the possible further actions outlined in this Plan for implementation in 2018 will likely be required.



Actions

2015—2018

1: Foster a community water conservation culture

Establishing a community culture that delivers sustainable water conservation practices requires a consistent approach from the Council. Clear and enduring messaging, and engagement of relevant community agents is required. The Council will:
Promote water saving and efficiency practices and make information about the financial and environmental costs of water use available and accessible to all citizens
Promote the use of low environmental design practices (rainwater tanks, dual reticulation of potable/non potable household systems).
Make education material available to schools, community groups, and retailers.
Lead sustainable water use practices in Council buildings, parks and reserves.
Work co-operatively with the District's water users to reduce water use, and communicate
Consider the introduction of a permissive regulatory approach for reduction practices (installation of rainwater tanks in side yards, dual reticulation of potable/non potable household systems), including considering fees on resource consent applications that do not meet district plan rules, or a Plan change to enable these activities to occur "as of right".

2. Put regulatory measures in place to help reduce demand

Regulatory measures will help reduce demand for water, particularly when river flows are low, and environmental impact of water takes is high. The Council will:
Use the Masterton and South Wairarapa District Councils' Consolidated Bylaw 2012 (Part Five Water Supply) to require responsible water use practices by the community.
Use and enforce the bylaw provisions restricting water use for non-essential purposes during periods of high demand and low river flows. This includes providing additional advice, erecting sign boards and additional enforcement action when necessary.
Develop and implement a programme of seasonal information distribution which will precede possible bylaw restrictions on water use at periods of low river flows and high water demand.

3. Have a robust asset management plan in place

A robust asset management plan ensures Council's water supply system is efficient. The Council will:
Increase monitoring and investigation of unaccounted water losses and take actions to reduce them.
Continue to use the successful water metering and pricing system as a demand control instrument.
Ensure that the water supply is well maintained and carry out renewals before parts of the system lead to inefficiencies, and detect and repair leaks in a timely manner.
Invite the community to report suspected leaks and provide timely responses to such reports.

4. Clarify where reticulated water will be supplied

Council has a policy that restricts new connections in the rural area, subject to a limited number of exclusions. The Council will:
Continue the urban limits policy, which means that generally no new connections will be provided outside current urban areas.
Review reticulated supplies for vineyard irrigation in Martinborough and work with these vineyards to enable a shift to alternative water sources.

Detailed information on water conservation actions can be found in the Water Demand Management Plan 2015.

Actions

2018 onward

If in 2018 it appears that the target of stabilising use can be met, then no further additional actions would be required. Council will take into account the effectiveness of its water conservation actions in 2015 - 2018 and will consider the following approaches after 2018.

1: Foster a community water conservation culture

Further approaches to establish community water conservation cultures may include:
Employing or contracting of environmental education personnel, possibly in conjunction with other Wairarapa Councils and Wellington Regional Council.
Providing grants to assist with the installation of water conservation devices such as low flow showers, water saving toilets, front-loading washing machines, rainwater storage tanks, and grey water (dual reticulation) supply systems.

2. Put regulatory measures in place to help reduce demand

Further regulatory measures to help reduce demand for water may include:
Introducing seasonal pricing regimes for water consumption, where higher prices are payable when demand is high.
Introducing subsidies or regulatory requirements to install water conservation devices such as low flow showers, water saving toilets, front-loading washing machines, rainwater storage tanks, grey water (dual reticulation) supply systems.

3. Have a robust asset management plan in place

Further asset management plan approaches may include:
Increasing capital expenditure to ensure higher levels of leak detection and system maintenance.
Considering larger reservoirs to allow for more abstraction at times of higher river flows for use at times of low flows.
Inviting the community to report suspected leaks and provide timely responses to such reports.

4. Create clarity about where reticulated water will be supplied

Additional approaches to water supply and restrictions may include:
Further reducing exceptions of supply from the reticulated services and reinforcing the policy that no new reticulation connections will be provided outside of the current urban areas.
The Policy could be made clearer to generally exclude new connections outside the urban area unless: • Council mains are already present in the area; • Provision of alternative water supply is not practical or economical; and • There are tangible economic or environmental benefits to the provision