

Water Forever

South West

Community Engagement Report



Foreword



The Water Corporation has reached a prominent milestone in its planning for safe, secure and sustainable water supplies in the South West region for the next 50 years.

With input from communities throughout the region over the past six months, we are pleased to present our Community Engagement Report.

This report details the comments, ideas and suggestions that have been provided by stakeholders and the community about their expectations to secure future water supply for the region.

I am delighted at the volume, range and quality of responses that you, our community members and stakeholders, have provided. They will help to prepare

a *Water Forever: South West* plan and ensure it is guided by local knowledge and needs.

I warmly thank all those who have been involved so far, and look forward to a continuing high level of interest as we move towards producing a final *Water Forever: South West* report in a few months' time.

Catherine Ferrari

General Manager, Customer and Community Group

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We acknowledge the valuable contribution made by the South West community and stakeholders.

Particular thanks go to the Department of Water, Busselton Water, Aqwest and local government authorities for their ongoing contributions and engagement with the project.

We also thank the catchment councils, businesses, farmers' markets, and community resource and visitor centres for providing venues and support for our community information displays and workshops.

The community attitudes survey for this project was conducted independently by research company, Ipsos. Both surveys conducted as part of this project were analysed and reported by Ipsos.

Ipsos
Ground Floor, 338 Barker Road, Subiaco WA 6008
Tel: (08) 9463 0739, www.ipsos.com

The community workshops held in Busselton and Nannup were facilitated by Joel Levin from Aha! Consulting.

Aha! Consulting
Unit 1/265 Walcott St, North Perth WA 6060
Tel: (08) 9443 9474, www.ahaconsulting.net.au

Introduction

We live in an increasingly dry climate, and the Water Corporation is working to ensure that there is enough drinking water across the South West of Western Australia.

We plan to do this by becoming climate resilient.

This requires a balance of reducing water use, increasing the amount of water we recycle, and developing additional water sources.

Water Forever: South West is a planning study to ensure we can continue to provide a sustainable and secure water supply for the towns we service in the South West. We need a long-term plan to support regional town development, particularly in rapidly growing coastal areas.

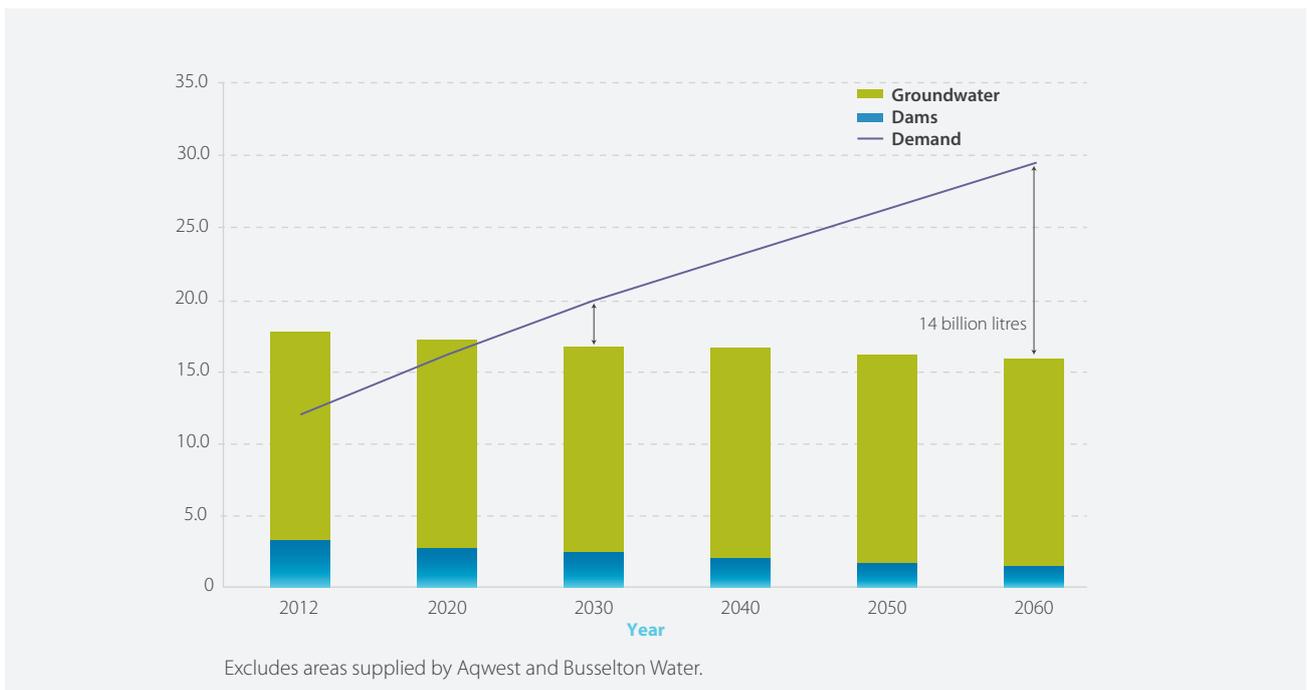
The plan will identify water source options to safeguard water supplies over the next 50 years — no matter what the future brings. While winter rainfall has traditionally been our primary water source for the South West, in recent years we have seen record-low rainfall and inflows to dams. We will still use our dams but we need to think about a combination of solutions that are less reliant on rainfall.

Since the project was officially launched by the former Water Minister, Terry Redman, on 16 August 2013 in Margaret River, a key part of the project has been to consult with the community and stakeholders about how to meet this challenge.



Former Water Minister, Terry Redman, at the project launch.

Figure 1: Projected water supply and demand, 2012–2060



Engagement approach and objectives

By engaging with the community on *Water Forever: South West*, we set out to:

- provide information about our current activities and potential options for the future.
- obtain feedback on these potential options.
- provide opportunities for a wide range of community members, including stakeholders, technical experts and industry, to contribute to the South West's water future.
- generate new ideas for water service delivery.

The community engagement process allowed community members to provide their feedback through a range of channels from August 2013 to February 2014.

It kicked off with a mail-out to our customers in the South West informing them about the project and inviting registrations to receive updates.

We then undertook a series of stakeholder briefings and held community information displays, workshops and forums across the region. We provide summaries, general themes and comments from these activities in this report.

There were two surveys conducted as part of the project. The first was open to the public on our website and through face-to-face interactions with the community. The second survey was a statistically representative phone survey of randomly selected Water Corporation customers in the South West.

In addition to planned activities, we listened to stakeholder feedback and adapted our engagement activities to include other ways for the community to be involved. We accepted invitations to present at public forums in Busselton, Margaret River and Nannup, and added Augusta, Bridgetown and Donnybrook to our community information display venues.

Throughout all these activities, there were divergent views on many issues, however some common themes emerged.



Key themes

South West Yarragadee

During the engagement process, members of the South West community expressed their concern that groundwater from the South West Yarragadee Aquifer would be used to supply the Perth metropolitan area.

We have no plans to pump water from the South West Yarragadee to Perth and it is not a potential option being considered as part of the *Water Forever: South West* project.

This is consistent with the State Government's position that groundwater in the South West is used to supply towns in that region, and the Department of Water's South West Groundwater Areas Allocation Plan (2009) that reserves groundwater in the South West region for future town water supply.

Perth's water supplies have been secured through increased water efficiency practices and water recycling, and the development of groundwater replenishment and seawater desalination. The completion of stage 2 of the Southern Seawater Desalination Plant has increased its capacity to 100 billion litres per year; and we are on schedule to begin construction of stage one of a full-scale groundwater replenishment scheme in July 2014.

Environment and climate change

The South West is an internationally recognised biodiversity 'hot spot' with unique ecosystems. Environmental concerns and the impact of climate change on ecosystems were raised by many stakeholders.

There is a strong appreciation of the natural beauty in the region and concern over the broad impacts of increased development.

Much of the interest in water efficiency measures was driven by a desire to reduce environmental impacts.

Regulation of water resources

The control, access and management of groundwater and surface water resources were other common themes. There were many questions about the role of the Water Corporation as opposed to the Department of Water.

The Department of Water is the state's water resource manager, which is responsible for:

- developing allocation plans
- setting allocation limits
- licensing, monitoring and enforcing abstraction limits in line with their allocation plan
- monitoring regional environmental responses, and
- preparing water quality improvement plans, including for salinity and drainage.

Water Corporation customers use only seven per cent of licensed groundwater in the South West region (and six per cent of surface water). The rest goes to commercial users (such as irrigators, industry, mining and agriculture), domestic users (self-supply properties) and other water utilities. It is the Department of Water's responsibility to manage these allocations and licences.

Recognising the importance of town water supplies as an essential service, a proportion of the groundwater available for licence is reserved for future allocation to water utilities.

Water conservation and efficiency

Throughout the region, there was strong support and interest in water efficiency measures including rainwater tanks and recycling. It was recognised that we all need to use water more efficiently, and community members and stakeholders want to see behaviour change through education, incentives (including water pricing) and regulation (for example, building codes).

There was an overarching sentiment that everyone needed to do their part, not only residential users. In particular, community members highlighted the need for larger users such as mining, industry, agriculture and local governments to do their part to use water wisely.

Engagement activities

Community registration

When From 16 August 2013

Where *Water Forever: South West* project area

Who South West community

How We sent a brochure and letter to 21,138 of our customers to provide an outline of the project and how the community could be involved.

Goal To invite community members and stakeholders to register for updates about the project.

Outcome 251 registrations



Stakeholder briefings

When August 2013 to March 2014

Where South West region and Perth

Who Stakeholder groups for the South West region, including State Government departments, water utilities, local government authorities, media, and Aboriginal, community and environmental groups.

How We contacted 43 stakeholders by letter and phone to offer briefings on the project.

Goal To present information about the project and discuss potential future water supply options for the region.

Outcome We provided 62 stakeholder briefings (refer to Appendix I for a full list).

Throughout the stakeholder briefings, the most prominent theme that emerged was the need for the community to maximise its usage of existing water sources. This includes 'stepping up' water efficiency efforts and increasing the amount of water recycling.

The future of groundwater resources was also high on the agenda. With a drying climate, stakeholders expressed concerns about the amount of groundwater that would be available in the future and the impact groundwater abstraction might have on the environment. The Blackwood River and Lake Jasper were two specific areas of concern.

In line with the views of the broader community, the feedback from stakeholders showed high support for water efficiency measures, particularly increases in:

- community education and a focus on builders, landscapers and new developments
- water efficiency monitoring and tougher penalties for those watering outside rostered days, and
- the use of rainwater tanks.

For the region's future water supply, a range of options were supported and proposed including continued investment in dams for higher rainfall areas. Other stakeholders supported more climate independent sources such as desalination, although they recognised there are cost and energy usage

implications with this option. Groundwater replenishment and water recycling were supported by some stakeholders, while there were mixed views on integrated schemes to provide water security between towns.

Because there is a growing concern about saltwater intrusion into groundwater some stakeholders are in favour of using recycled water to provide a saltwater barrier. There were also advocates for stormwater harvesting to increase water recycling.

Water pricing was mentioned by some stakeholders, with suggestions to adopt pricing which reflects the scarcity of water resources and provides an incentive for more water efficient behaviour.

Some stakeholder groups do not support continued water carting in Northcliffe and Quinninup.

The strongest theme emerging from our discussions with stakeholders was for more water recycling. Stakeholders would like to see more water recycling for public open space, but noted that cost is currently a major barrier.

They also want more recycled water used for industry (for example, dust suppression) and in new urban developments (for example, third/purple pipe and greywater systems), commenting that greater government support is needed for the planning stages of these developments.

"Recycled water for drinking has been used successfully overseas for years

— Australia needs to catch up." (Stakeholder feedback)

"We need to think about water holistically – clearing native vegetation decreases rainfall."
(Stakeholder feedback)

Community information displays

When 4 September to 1 November 2013

Where Collie | Eaton | Dalyellup | Donnybrook | Dunsborough
Margaret River | Augusta | Pemberton | Manjimup | Bridgetown | Nannup | Greenbushes

Who South West community

How We staffed information displays at various locations and times to discuss the project with the community and collect feedback either through survey forms or general comments.

Goal To create family-friendly displays at high traffic locations (e.g. shopping centres and farmers' markets) to talk with community members one-on-one about their future water supplies.

To reach a wide cross-section of the community, particularly those who would not normally attend a formal community engagement event.

Outcome 21 community displays

At the community displays, our focus was primarily on introducing the project and providing information about potential water supply options to help community members give their feedback and/or complete a survey form.

There was a lot of interest in the fact sheets developed for water supply schemes. There also were questions about water supply options and general support for a 50-year plan.

The main feedback at these displays was for more water recycling and water efficiency measures, particularly the use of domestic greywater systems and rainwater tanks. There was also a general concern about the use and quality of groundwater sources.

At some locations, there was support for the ongoing use of dams.



Survey form

When August to November 2013

Where South West region and publicly available online

Who General community aged 18 years and over

How The questionnaire was developed in-house and made available on our website and at community displays and forums.

An independent research company, Ipsos, collated and reported on the data.

Goal To gauge community perception towards various water supply, recycling and efficiency measures.

Outcome 106 survey responses submitted

There was sound representation of respondents from across the South West region, although Busselton, Manjimup and Augusta-Margaret River made up for more than one-third of respondents.

The survey responses were used to identify general themes and to help develop the community attitudes survey. Overall, the results correlate with the community attitudes survey in terms of support for the various water supply, efficiency and recycling options (see page 13).

They indicate that:

- the most popular sources to address future water needs are catchment management activities, along with new pipelines to inter-connect town water supply schemes, and dams to provide additional water security.
- the level of support for water recycling and water efficiency measures is high, with strong support for water recycling for industry, agricultural use and public open spaces.
- rainwater tanks, domestic greywater systems, retrofitting plumbing fixtures and smart metering have high levels of support as water efficiency measures.
- leak detection and greywater systems are two water efficiency practices that a high proportion of respondents would consider using.
- education and financial incentives are effective ways to encourage customers to be more water efficient.

“The future needs in the South West will, like most places across the globe, escalate. We must start now to plan for the future.”

(Survey respondent)

“More financial incentives and training, and making industry more accountable especially in building new houses.”

(Survey respondent)

“I feel that the Water Corporation has started to educate the population – this does take time, so keep at it.”

(Survey respondent)

Busselton forum

When 19 September 2013

Where Busselton Community Resource Centre

Who Friends of the Yarragadee members and invited guests
Representatives from the Department of Water and Busselton Water attended to answer questions

How Presentations by local geologist and *Water Forever: South West* project team, followed by a 'question and answer' session.

Goal To give an overview of the project and answer specific questions from the group.

Outcome About 45 community members attended

In response to a request from the Friends of the Yarragadee, we gave a presentation to the group, followed by a 'question and answer' session.

At the forum, several participants commented that there was too much information being presented and more time was needed for the community to discuss the options. In response, we presented at another public forum in Margaret River (see page 10) and held two facilitated community workshops in Busselton and Nannup (see page 12).

The feedback about water security and supply options included: more rainwater tanks and planting trees; concerns about sprinkler usage by market growers; and concerns about the effect of groundwater replenishment on the aquifer.

There were also comments about poor water quality and saltwater intrusion into groundwater supplies in Busselton and Bunbury caused by over-abstraction, which were responded to by the Busselton Water CEO at the forum.

Members of the Friends of the Yarragadee expressed their fear that water would be taken from the South West Yarragadee Aquifer and pumped to Perth for use in the metropolitan Integrated Water Supply System.

As explained under 'Key Themes', the group was assured that we do not plan to pump water from the South West Yarragadee to Perth and it is not a potential option being considered as part of this project.

"Rainwater tanks to be seriously considered in the plan".

(Busselton forum participant)

"All these unlicensed and unregulated bores must be having a huge effect on the aquifers."

(Busselton forum participant)

Margaret River public forum

When 17 October 2013

Where: Margaret River Permaculture Centre

Who: General public invited

Representatives from Department of Water attended to answer questions on surface and groundwater allocations

How Presentations by local geologist and *Water Forever: South West* project team, followed by a 'question and answer' session.

Feedback from participants was collected on post-it notes.

Goal To explain water supply options in further detail and answer questions from the community.

Outcome About 30 community members attended

The Margaret River Regional Environment Centre and Friends of the Yarragadee invited us to give a presentation on the project at a public information forum.

At the forum, there was a strong focus on water use efficiency and water recycling, with the community providing many creative ideas. Rainwater tanks and retrofitting plumbing fixtures were mentioned several times in participant feedback. There were also comments about water pricing to encourage water efficiency, and concerns about whether industry and mining were being held accountable for their high water usage.

Greywater systems and capturing stormwater were suggested as ways to increase water recycling, along with education to promote awareness of water usage and efficiency measures. There were some environmental concerns, particularly in relation to gas bores near aquifers.

“Capturing stormwater before it flows to sea.”

(Margaret River forum participant)

“Need to plan for recycling to potable quality sooner rather than later.”

(Margaret River forum participant)

“Better infrastructure to allow for water to be used more wisely. It already exists – just need to see more of it.”

(Margaret River forum participant)

“Language is important in shaping belief. Avoid ‘water costs nothing’ – there is huge cost to future generations.”

(Margaret River forum participant)

Australian Water Association conference presentation

When 25 October 2013

Where Busselton

Who Technical experts and professionals involved with water

How The project team was invited by the WA branch of the Australian Water Association to present at their National Water Week Conference.

Goal To raise awareness of the *Water Forever: South West* project and invite feedback from water industry experts.

Outcome 58 participants

Each year, the WA branch of the Australian Water Association holds a conference during National Water Week. It is one of their calendar highlights, bringing together a range of water industry professionals to discuss a variety of topics. In 2013, the conference was held in Busselton and was based on the National Water Week theme of 'Liveable Communities' with a South West regional focus.

Our stakeholder engagement manager for the *Water Forever: South West* project gave a presentation to raise awareness of, and encourage feedback and discussion about, the project.

Fifty-eight people attended the conference which was promoted through the Australian Water Association and supported by local water utility Busselton Water.

Other conference presentations included: Managing groundwater in a drying South West; Managing large dams and downstream flows in the drying climate; and Water quality improvement projects in the South West.



Community workshops

When 23 and 30 November 2013

Where Busselton and Nannup

Who General community

How In consultation with a community planning committee, two workshops were held to allow more time for community members to discuss the project and potential source options.

The workshops were publicised through local media, online and the project stakeholder database. They were facilitated by an independent consultant.

Goal To provide an opportunity for community members to absorb information about the project and discuss in more detail potential source options.

Outcome 12 participants (across both workshops)

The workshops held in Busselton and Nannup were not well attended, therefore the feedback represents individual comments rather than general themes.

At the Busselton workshop, topics of discussion included water pricing, desalination, queries about catchment management (i.e. clarification about what it is), groundwater replenishment costs, the feasibility of third pipe systems and how leak detection works.

In terms of water sources, there was general support for local groundwater and water trading between existing users. Desalination was recognised as an option if powered by renewable energy.

At the Nannup workshop there was a broad spectrum of views, some of which differed substantially. For example, while some participants were against further development of towns, others were in favour of it. Similarly, some community members thought that households should be the focus of water efficiency campaigns, whereas others wanted more emphasis to go on industry and agriculture.

There were discussions on groundwater usage, behavioural programs, water usage for gardens, agriculture usage and the commercial sector.

“Change how we look at gardens, beyond being waterwise; traditional gardens are no longer viable.”

(Nannup workshop participant)

As with Busselton, there also were queries and discussion about catchment management, third pipe systems and groundwater replenishment.

There were also suggestions to restrict the size of lawns and limit new residential developments, however these are broader policy matters beyond the scope of the Water Corporation.

Generally, participants supported educational programs, leak detection, desalination, rainwater tanks, dams, and recycling treated wastewater for industry, agriculture and public open space.

“Number one priority is to get people to use less water.”

(Nannup workshop participant)

“Desal is okay if it is run on renewable power or has the appropriate offsets in place.”

(Nannup workshop participant)

“We need to better value water. A more realistic price will make people think.”

(Busselton workshop participant)

Community attitudes survey

When Conducted 20–29 January 2014

Where *Water Forever: South West* project area

Who Randomly selected Water Corporation customers

How An independent research company, Ipsos, developed the survey questions in consultation with us, then conducted the survey by phone, and analysed and reported the results.

Goal To formally survey our customers about their opinions and support for various water supply, recycling and efficiency measures, and to ensure there was statistically reliable data from the community.

Outcome 400 interviews conducted

Because of the number of people interviewed across the region, the community attitudes survey provides the most statistically valid data and forms the basis of the feedback reported below under 'What you said'.

The community and stakeholder views from other engagement activities complement the results where relevant, and feedback from all engagement activities will be taken into account for the draft plan.

“We live in an area which is well known for its large groundwater reservoir so it should be utilised.”

(Phone survey participant)



Submissions

When August to December 2013

Where South West region

Who Open to stakeholders and general public

How At stakeholder briefings, and through general communications and advertising, stakeholders and community members were invited to submit formal submissions and written feedback.

Goal To obtain formal submissions and written feedback from stakeholders and community members.

Outcome Five submissions were received from: Shire of Manjimup, Shire of Nannup, Bunbury Wellington Economic Alliance, resident of Dunsborough and resident of Bridgetown.

The submissions are summarised at Appendix II and only include the comments which relate to the scope of the *Water Forever: South West* project. We will respond to all formal submissions directly and will provide responses to the comments that fall outside the scope of this project.

Informal feedback

When August 2013 to January 2014

Where South West region

Who General community

How The project team encouraged informal feedback throughout the project. This was collected through emails, letters, telephone calls, and at community displays and workshops.

Goal To provide a range of ways for the community to provide their feedback.

Outcome Nine community members provided informal feedback.

The few emails, letters and phone calls we received relate to rainwater tanks, groundwater levels, water carting to Northcliffe, water recycling using aerobic treatment units, limiting lawn sizes and the effect that sourcing water has on ecosystems.

The feedback relating to specific areas or subject matters has been taken into account for the draft plan.



We're looking for more ways to recycle water. Got any ideas?

Visit watercorporation.com.au/waterforeversw
Or post your comments to
Lauren Lane, Water Corporation,
PO Box 305, Bunbury WA 6231.

 WATER CORPORATION

What you said

Overview

The data reported in this section is from the community attitudes survey (see page 13).

In general and across all engagement activities, the South West community acknowledges that we live in a drying climate and that addressing our water needs and reducing water consumption are important issues.

Water recycling was also strongly supported through all feedback channels.

However, the acknowledgement of a drying climate seems to be in more general terms rather than specifically relating to the South West, with many community members advocating for more dams and catchment management as future water supply preferences — both of which are highly reliant on the climate.

“I think that the South West rain is consistent through winter, so catch more of that.”

(Phone survey participant)

“We need a reliable supply and the Water Corporation should take the lead to plan for climate change.”

(Survey form respondent)

Figure 3: Agreement that Western Australia is in a drying climate

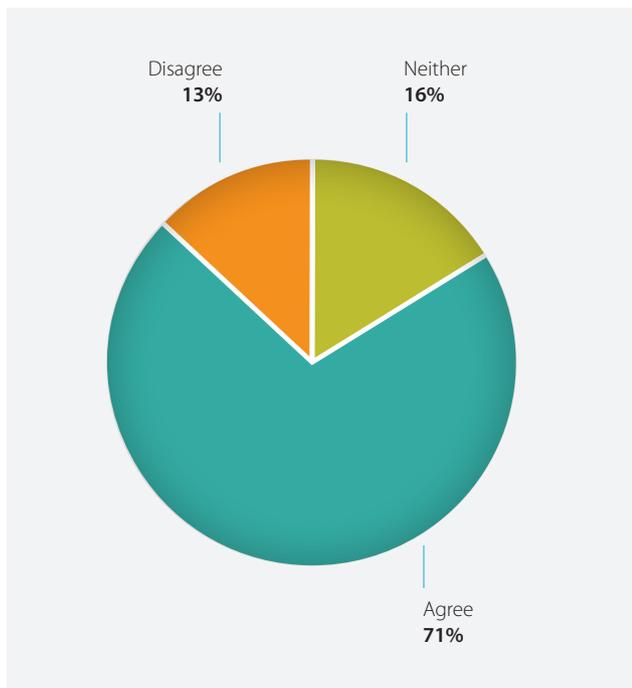
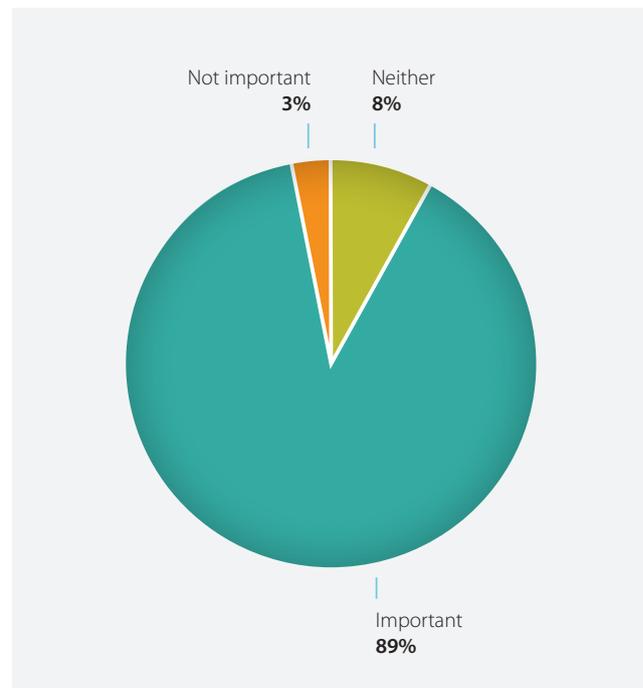


Figure 4: Importance of reducing water consumption



New water sources

In the community attitudes survey, catchment management received the highest support as a future water supply option with 88 per cent support, marginally above dams with 83 per cent. Seawater desalination and groundwater were well-supported with 75 per cent and 62 per cent respectively.

When asked, nearly two-thirds of respondents would like to see the allocation of groundwater to the local drinking water supply.

Verbatim comments from the survey indicate that some community members may not be aware that catchment management refers to a range of forestry practices to return the forest to a more mature and natural state that will use less water.

The figures also show there was not enough information provided about water trading.

“We have more groundwater than we know what to do with, and we don’t have any worthwhile rivers in the South West.”

(Phone survey participant)

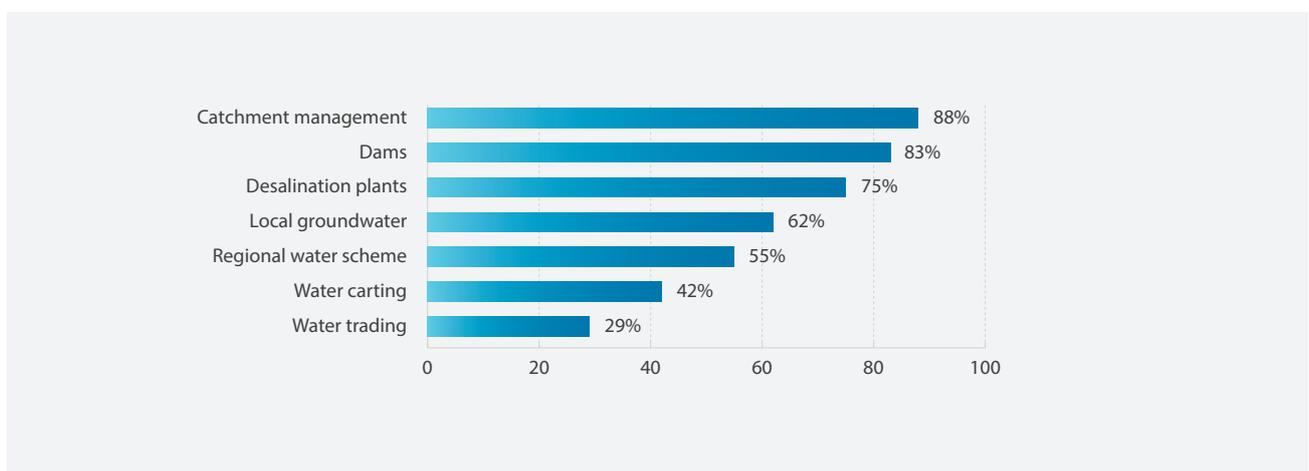
“We do have a high amount of rainfall and a lot of area where we could build dams. I do not think it’s hard to build more dams.”

(Phone survey participant)

“I think [desalination] is the way of the future. We are taking too much water out of the ground, dams can’t keep up with demand. Desalination is the answer.”

(Phone survey participant)

Figure 6: Support for future water supply options



Water use efficiency

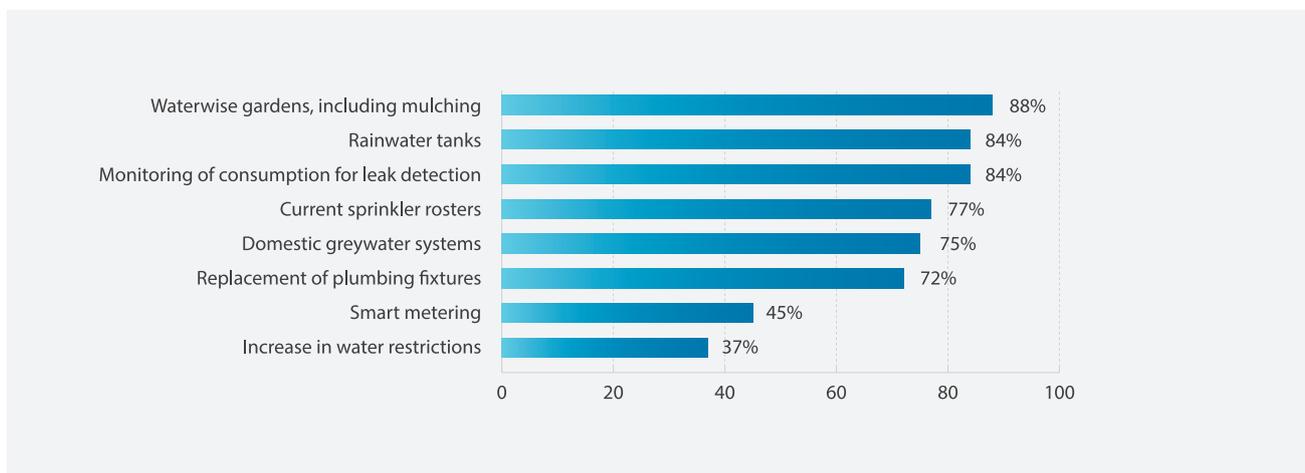
Our customers in the South West are committed to water conservation, recording some of the lowest water use per person in the state. This was reinforced in the community attitudes survey with many customers stating that they already engage in water efficiency behaviours and would consider adopting other behaviours to become more efficient.

With nearly all participants agreeing it is important to reduce water consumption, the support for various water efficiency measures is very high, particularly for waterwise gardens, rainwater tanks and leak detection.

The response to an increase in water restrictions (above the current sprinkler roster of two watering days per week) was divided, with support from only 37 per cent of participants.

The survey revealed a lack of community awareness about smart metering, with 30 per cent of respondents stating 'don't know' when asked if they supported this as a water use efficiency measure. As this is a new technology that has not been trialled with our South West customers, this is not a surprising result.

Figure 5: Support for water efficiency measures

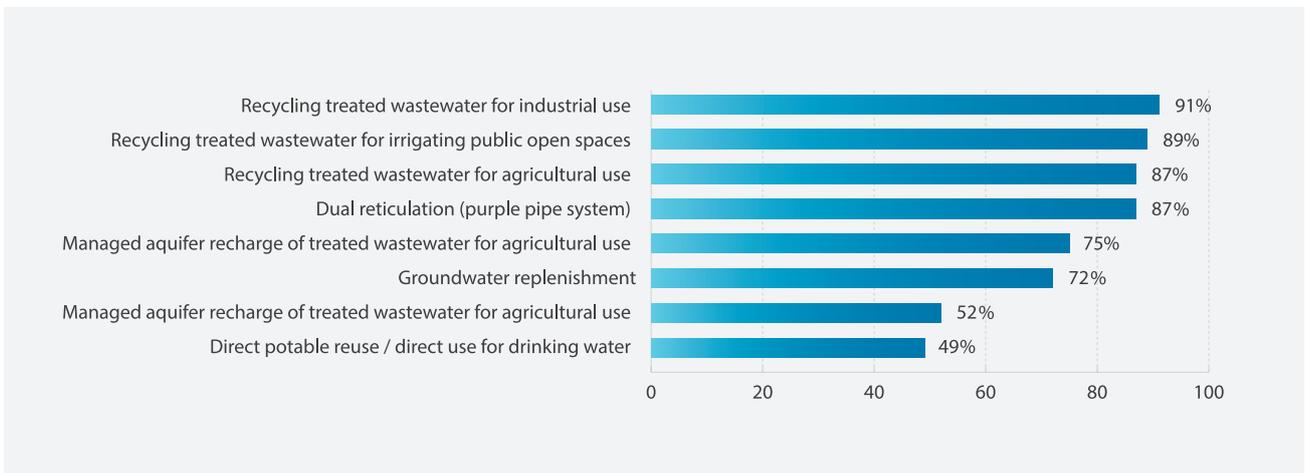


Water recycling

Support for water recycling is generally high, especially for industrial use, public open space, agricultural use and dual reticulation (for household gardens and toilet flushing).

This support was consistent across all regions and was consistent with informal feedback provided at information sessions and displays. We currently recycle wastewater from 11 of our 16 wastewater treatment plants across the South West. Across Western Australia, more than 21 billion litres of treated wastewater is recycled every year.

Figure 7: Support for water recycling options



Appendices

Appendix I — List of stakeholder briefings

We provided one or more briefings on the *Water Forever: South West* project to:

Aboriginal community

- South West Boojarah
- Gnaala Karla Boodja

Aqwest

Augusta Community Development Group

Bunbury Wellington Economic Alliance

Busselton Water

Conservation Council of Western Australia

Department of Environment Regulation

Department of Parks and Wildlife

Department of Planning

Department of Water

Eaton Probus Club

Environmental groups

- Busselton Dunsborough Environment Centre
- Busselton Naturalists Club
- Cape to Cape Catchment Group
- Friends of the Yarragadee
- Margaret River Environment Centre
- South West Catchments Council

Environmental Protection Authority

Local Government Authorities

- City of Bunbury
- City of Busselton
- Shire of Augusta Margaret River
- Shire of Augusta Margaret River councillors
- Shire of Bridgetown-Greenbushes
- Shire of Capel
- Shire of Capel councillors
- Shire of Dardanup
- Shire of Manjimup
- Shire of Manjimup councillors
- Shire of Nannup

Media

- Augusta-Margaret River Times
- Donnybrook-Bridgetown Mail
- Manjimup-Bridgetown Times

South West Development Commission

Water Corporation, South West regional staff

Appendix II — Summary of formal submissions

Bunbury Wellington Economic Alliance

The Bunbury Wellington Economic Alliance supports the investigation and consideration of all the potential options presented for *Water Forever: South West* and expects that improved water use efficiency, identifying additional water sources, and water recycling will all be features of a long-term strategy to secure water supplies in the South West.

They note the success of the Water Corporation in recent years of moving to the climate independent water source option of desalination, as opposed to reliance on dams.

Resident of Bridgetown

This Bridgetown resident's submission promotes the need to think about water resources holistically. His detailed submission includes:

- alternatives to the current thinking on deep sewerage including maximising the use of existing leach drains and harvesting phosphorous from wastewater for fertiliser
- opportunities for increased domestic and commercial water harvesting and storage in particular rain water
- consideration about the effect of land management (in particular tree planting) on rainfall, and
- the need for increased resources for research and development into agriculture to help farmers adapt to climate change and drier conditions.

Resident of Dunsborough

This submission from a Dunsborough resident acknowledges the work already undertaken on greywater reuse in Dunsborough and proposes:

- Recycled water to be included as a water option for Dunsborough with previous reports by the City of Busselton on recycled water reuse in Dunsborough being made available to the public.
- Recycled water use made a priority on public open space in Dunsborough.
- Dual reticulation to be used in a future primary school and public sporting facilities, including for use in toilet systems.
- A feasibility study be undertaken comparing micro-desalination along the Leeuwin Naturaliste Park with recycled water use from the Dunsborough Wastewater Treatment Plant.

Shire of Nannup

The Shire of Nannup relies heavily on agricultural, timber and environmental/tourism industries. With a considerable proportion of the shire consisting of state forest vegetation, agricultural use and plantations, the demand on water from the Leederville Aquifer is considered high.

The Shire of Nannup expressed concern that any increased allocations (for groundwater licences) may have an even greater effect on its shire, and requested that they be included in future decisions affecting its water future.

In particular, it suggested that a baseline reading for the Blackwood River must be more clearly understood before any further increase in allocations is proposed.

It also noted that the considerable change in rainfall in recent years needs to be understood and factored into any future proposals, and that the efficiency of infrastructure across the region must be ensured.

The shire supported the *Water Forever: South West* project's emphasis on water recycling, reducing water use and finding additional water sources.

Shire of Manjimup

The Shire of Manjimup's submission included requests for the following to be considered:

- Improving water holding performance of the Phillips Creek Dam.
- Improving the water pipe infrastructure within Manjimup to provide water at an adequate pressure.

The shire queried:

- the justification and intention for the alternative groundwater source for Pemberton located near the Donnelly River, and
- the proposed micro-seawater desalination plants near Windy Harbour, given the town's water supply is met from bores and there is no reticulated power.

It noted that water carting to Northcliffe and Quinninup is not supported by some members of the community, and it does not support keeping proclaimed drinking water restrictions over the Quinninup Dam.

The shire also requested that the Water Corporation conduct a comprehensive investigation of groundwater south of Northcliffe.

The shire's other comments regarding the Manjimup Wastewater Treatment Plant and a proposed innovative hybrid reticulated/septic treatment of wastewater for Northcliffe are outside the scope of this project, but will be responded to directly.

At the stakeholder briefing given to the shire's council, they indicated their desire for additional dams.

Appendix III — Communication tools

Webpage

We dedicated a page on our website to the *Water Forever: South West* project. Located under 'Solutions to regional water supply', the page included (at various stages of the project):

- overview of the project
- facility to register for updates
- facility to complete survey form
- promotion of community information venues and times
- information sheets on water supply schemes in the region
- project updates
- email contact, and
- background documents.

The webpage address, watercorporation.com.au/waterforeversw was included in all communication materials.

Information materials

We developed the following information materials to support our engagement activities:

- 'Register Your Interest' brochure
- 'Potential Water Options' brochure
- Information sheets – Potential options
- Information/fact sheets – Water supply schemes
- Display stands
- Registration form
- Survey form

Media

As part of the project, we advertised in several regional newspapers to promote the following:

- *Water Forever: South West* project launch held in Margaret River on 16 August 2013.
- Community displays held in Collie, Eaton, Dalyellup, Dunsborough, Margaret River, Pemberton, Manjimup, Bridgetown, Nannup and Greenbushes.
- Public Forum held in Margaret River on 17 October 2013.
- Community workshops held in Busselton on 23 November and Nannup on 30 November 2013.
- 'Teaser' questions to encourage ideas and comments from the community.

During the community engagement phase, the project received media coverage following the launch and in relation to the community displays and calls for feedback.

Community updates

We provided regular email updates to stakeholders and community members who had subscribed, and published a project update on our webpage in January 2014.

Selection of media articles on *Water Forever: South West*

Chance to influence water supply future

RESIDENTS across the South West are being asked for their input into a long-term public water supply plan for the region.

Water Forever: South West plans the future of water and wastewater services across the region in the face of a drying climate.

Mr Redman said the community consultation would include a direct mail-out to residents of all towns serviced by the Water Corporation to register interest in taking part, information booths in local towns and online surveys to collect community ideas and feedback. A draft report will be released next year for further con-

Water agency set to outline 50-year plan

Those interested in the sustainable water debate and the future of the South West Yarragadee are invited to a forum on Thursday.

Friends of the Yarragadee spokeswoman Melina Maro said it would be residents' chance to hear the Water Corporation outline scenarios about its 50-year water plan, with strong local interest following a similar forum in Busselton last month.

"Channels of open communication, transparency and accountability between water management entities and local communities as stakeholders are being forged in an unprecedented way," Ms Maro said.

Corporation to address water needs

THE Water Corporation will have a booth outside Reubens Newsagency in Forrest Street today and Saturday from 10am-2pm where residents can have their say on water needs in Collie.

Water Forever: South West is the Water Corporation's plan for the future of water and wastewater services across the region.

Water Minister Terry Redman said the Water Corporation would talk with customers over coming months about plans for water sources, reducing water use and water recycling options.

"I urge people in the water catchment area to register their interest in the plan."

Input wanted for water plan

SOUTH West residents are being asked for their input into a long-term public water supply plan for their region.

Water Forever: South West is a plan for the future of water and wastewater services across the region in the face

of a drying climate. The Water Corporation would talk with customers over coming months about plans for water sources, reducing water use and water recycling options.

Information booths will be set up in Dalryellup, Eaton and Collie from September to November 2013.

To register interest, go to watercorporation.com.au

Water worries for South West

SOUTH West water planning consultations have led to the re-activation of the Friends of the Yarragadee network.

The Water Corporation has started community consultations for their 50-year Water Forever plan in some towns in the South West region.

Friends of the Yarragadee have re-formed to encourage communities to be proactively present and are holding a public forum.

The Water Corporation has stated decisions around future recycling, reducing and new water sources are being driven by what the communities want.

"We aim to make the Water Forever consultations an inspiring example of what good community consultation can be," Friends of the Yarragadee spokesperson Melina Maro said. "We wish to understand how Water Corp's decision-making model will look so that it truly reflects the voices and priorities of the people."

South West communities banded together in 2006 to fight the Water Corporation's proposal to pump 45 gigalitres per year from the Yarragadee Aquifer for Perth's water supply.

The Friends of the Yarragadee formed as a collaboration between community members, indigenous

and environmental groups and farmers and resulted in a change of plan, with the government building a desalination plant instead.

The Water Forever consultation sessions are designed to gather the input of community members and community stakeholder groups.

The planned consultation sessions involve online and on-street surveys, presentations to 'key stakeholders' and feedback sessions once the plan is drafted.

"We think the consultation sessions could be better designed," Margaret River Regional Environment Centre's co-ordinator David Ratnick said.

"There is much expert knowledge in the community that could be gathered through early face-to-face group consultations."

To join the Friends of the Yarragadee, please contact Melina Maro on 9757 0212.

Water Corporation's community consultation for Nannup will be outside the post office between 10am and 2pm, October 24 and 26.

"I urge all residents to please contact Kathryn Hession of the Water Corporation on 0419 916 665 to register their interest in attending a 'stakeholder briefing' in Nannup," Nannup organic farmer, Bob Winfield said.

"Here on Thomas Road, the

ground of frogs has been drowned out (or do they just not sing and play the banjo anymore?) by the Yarragadee bore pump going continuously through August and into September," she said.

"We know Water Minister Terry Redman has promised Manjup people their two town dams will be kept at 50 per cent capacity at all times using 'ground water sources from Nannup'."

In answer to my enquiries as to why the pump is running in the middle of the wettest winter in 100 years, the Water Corporation claimed on August 19 that Manjup dams were only at 37 per cent capacity.

"This project was based on Water Corporation's flawed notion that the Yarragadee is a confined aquifer."

Pete Lane, geologist, points out that it is not a confined aquifer, it is linked to the Blackwood River via the Leederville aquifer that environment and bores rely on.

"Officials have failed to respect Mr Lane on this issue."

"Nannup, this is your chance to demand low energy solutions that will not further contribute to climate change."

last week, water Minister Terry Redman said the Water

Water conservation a must

By ZANNIA YAKAS

THE future of water supplies in Collie and the South West, including the potential to recycle wastewater, will be put under the microscope in a series of information sessions for local residents.

The sessions have been called by the Water Corporation in response to concern about an increasingly dry climate in the South West.

Minister for Water Terry Redman recently announced a scheme which would see Perth's wastewater recycled and pumped back into the Perth underground aquifer.

When the scheme is ramped up to full capacity it could deliver enough

water each year to fill Patersons Stadium seven times over.

Water Corporation's Scott Moorhead said everyone in the South West would be involved in developing their own water plan, Water Forever: South West. "We don't want it to be a surprise," he said.

"We want the community to come up to us (and say) what the issues are."

It includes residents from Collie, Margaret River, Manjup, Pemberton, Greenbushes, Nannup, Dunsborough, Dalryellup and Eaton.

A draft report will be released early next year for further consultation, with the final report to follow later in the year. To register interest in the program, go to watercorporation.com.au

Glossary

Aqwest

The trading name of the Bunbury Water Corporation which is the water utility responsible for supplying water to Bunbury residents.

Busselton Water

The water utility responsible for supplying water to Busselton residents.

Catchment management

Catchment management includes a range of forestry practices to return the forest to a more natural state that will use less water and therefore improve streamflow and runoff. The treatments can include selectively removing trees, controlling re-growth, replacing exotic trees with native species, and prescribed burning.

Dams

Local rivers or streams impounded for long-term water storage.

Department of Water

A department of the Government of Western Australia responsible for managing the availability and quality of water sustainably (see water.wa.gov.au).

Desalination

Seawater is treated to remove salt and other minerals making it suitable for drinking.

Department of Parks and Wildlife (DPAW)

The state Department of Parks and Wildlife protects and conserves Western Australia's natural environment on behalf of the people.

Direct potable reuse

Treated wastewater is further treated to drinking water standards and supplied directly to a drinking water supply system.

Dual reticulation

Non-drinking water is provided to new developments through an additional pipe system used for non-drinking water uses such as toilet flushing or landscape and public open space irrigation. Also known as a purple or third pipe system.

Greywater

Household wastewater that comes from the bath, shower, washing machine, dishwasher and sinks.

Greywater system

A system installed to take household wastewater, excluding from toilets, and reuse it for non-drinking water uses, typically garden irrigation.

Groundwater

Water sourced from underground aquifers, made up from (mostly) rain which trickles down through the rocks and soils and into aquifers.

Groundwater replenishment

The process where treated wastewater is further treated to drinking water standards and recharged into groundwater supplies. The water can then be stored and taken out some time later for further treatment and supply to a drinking water system

Leak detection

Monitoring water usage to identify leaks. It can be done at a household level by monitoring the water meter overnight. On a larger scale, water utilities can use data logging to detect leaks in customer water systems, and techniques such as flow meter testing to find leaks in pipelines.

Managed aquifer recharge

Water — including wastewater, stormwater or rainwater — is purposefully re-directed into an aquifer.

Managed aquifer recharge for salt water intrusion

Highly treated wastewater is recharged into aquifers along the coast to create a 'water barrier' to prevent seawater from seeping into the less saline groundwater.

Managed aquifer recharge for industry or agriculture

Highly treated wastewater is recharged into aquifers allowing it to be taken out later by industry and/or agriculture.

Potable water

A term used for water that meets drinking water standards.

Public open space

A generic term used to describe parks, golf courses, playing fields and other recreation areas, particularly in relation to water recycling.

Purple pipe system

See 'dual reticulation'.

Rainwater tanks

Tanks used domestically to collect rainwater, used either as the primary or supplementary source for household water supply.

Retrofits

Existing plumbing products, such as shower heads, single-flush toilets and irrigation controllers, which do not meet Water Efficiency Labelling and Standards (WELS) are upgraded with products that are WELS rated.

Salt water intrusion

The movement of denser, salty water into fresher water which is less dense. It typically occurs along coastlines and can occur in surface and groundwater systems.

Seawater desalination

Seawater is treated to remove salt and other minerals making it suitable for drinking.

Smart metering

Advanced metering units are installed to enable more frequent and remote monitoring of water use and early detection of leaks at properties.

Third pipe system

See 'dual reticulation'.

Water carting

Drinking water is transported to small towns by truck when local sources are unavailable or inadequate.

Water restrictions

Sprinkler bans to limit the use of automated irrigation in spring, summer and autumn.

Water trading

The buying and selling of tradeable water rights between licensed water users, allowing it to be redistributed. In Western Australia, water trading is regulated by the Department of Water.

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