

SUNBURY'S WATER FUTURE

COMMUNITY SURVEY REPORT

Prepared for Western Water and Melbourne Water

December 2018

LIMITATIONS OF USE

The sole purpose of this report prepared by MosaicLab (www.mosaiclab.com.au) is to provide a report on findings from the community survey conducted by Western Water and Melbourne Water in relation to the Sunbury's Water Future project.

This report has been prepared in accordance with the scope of services set out by Western Water and Melbourne Water. In preparing this report, MosaicLab has relied upon the information provided by the participants who responded to the survey. Western Water and Melbourne Water can choose to share and distribute this report as they see fit.

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1. INTRODUCTION

This report summarises the results of a survey conducted by Melbourne Water and Western Water as part of the first phase of community engagement for Sunbury's Water Future project. The survey was available electronically for a duration of three weeks (4 October 2018 – 28 October 2018).

The survey sought to collate community feedback on the future of water management and help Melbourne Water and Western Water to understand what matters to the community when it comes to Sunbury's water future.

2. EXECUTIVE SUMMARY

Over the next 20 years, Sunbury is set to double in size. Western Water and Melbourne Water are working together to consider future water solutions for Sunbury. As part of preparing for this population growth, Western Water and Melbourne Water are working with the community and stakeholders to consider the broader impacts of climate change, the environment and community liveability and hold discussions around how water is managed into the future.

Sunbury's Water Future project aims to make the most of all available water resources including alternative water such as recycled water and stormwater and minimise impacts on the environment.

The survey, which is one of several activities planned for the first phase of community engagement, was conducted in October 2018. The survey aimed to collect community feedback on the future of water management and was issued to customers in Sunbury as well as nearby towns which may be affected by future water management solutions for Sunbury. The results will help Melbourne Water and Western Water improve their understanding of what matters to the community when it comes to Sunbury's Water Future.

283 respondents participated in the survey. Most of the respondents (75%) were from Sunbury (3429) and there was a strong representation from both long-term residents (more than 20 years) at 34% and new residents (0-5 years) at 39%. During analysis of the results, answers were filtered and compared based on place of residence and length of residency. Overall, no significant difference in results was identified based on these filters.

Broadly speaking, key findings and themes arising from the responses include:

- Continuity, reliability and availability of local water supply is important to and top of mind for the community and was highlighted as a priority across several sections of the survey.
- The community is open to multiple water supply options. Those that preferred a specific source (e.g. local or external source) were most concerned about water quality, continuous supply and cost.
- When it comes to the benefits that could be delivered from making the most of all available water sources, the community is happy to share the benefits of local solutions, as long as Sunbury and surrounds are benefiting also.
- There is support for wastewater management options that involve recycled water, particularly where this is provided for local re-use. There is also support for education campaigns that encourage people to use grey water, save water and capture their own water.
- Protection of the environment is seen as a priority, and there is support for waterway management options that ensure waterways have enough water to flow properly.
- Most people would prefer stormwater to be captured and re-used rather than continuing to let it flow into local streams.
- Both investment in and community involvement in future planning is important to the community, however some people also said it was important that experts were also brought in to provide planning support and expertise.

3. SURVEY METHODOLOGY

The survey was delivered electronically and built using Survey Monkey. The survey was hosted on the Melbourne Water Have Your Say website. 497 unique visitors viewed the page while the survey was open.

A link to the survey was sent via email to 10,441 customers. This included 6,396 Sunbury residents and 4,045 residents of other towns near Sunbury (Bulla, Diggers Rest, Gisborne, New Gisborne, Riddells Creek, Macedon, Mount Macedon) which may be affected by future water management solutions for Sunbury. 47% of recipients opened the email, and 7% of recipients clicked the survey link.

A reminder email was sent to those that didn't respond to the first email. This was delivered to 9,898 email addresses. 43% of recipients opened the email, and 4% of recipients clicked the survey link.

A competition was run to encourage participation – all respondents were invited to enter the draw to win \$100 off their water bill. 230 participants opted to enter this draw.

Respondents were provided with seven informative fact sheets and a set of project FAQs. These resources were made available on the Melbourne Water Your Say website and the fact sheets were downloaded 252 times in total. Links to relevant fact sheets were also provided throughout the survey itself. These fact sheets are provided in Appendix B. They address:

1. Natural and urban water cycle
2. Challenges for the Sunbury region
3. Water management in the Sunbury region
4. Western Water and Melbourne Water
5. Having your say in Sunbury's Water Future
6. Integrated water management
7. Looking after our rivers and creeks.

The survey results were slightly limited in terms of overall sample size. The population of Sunbury and surrounding towns (postcodes 3427, 3437, 3438, 3440, 3441, 3431, 3429) is approximately 59,530. 283 respondents participated in the survey, meaning the sample size is accurate to a 95% confidence level within a margin error of +/- 6%¹. To achieve a 95% confidence level and +/- 5% margin of error, a sample size of 382 respondents would be required².

Responses to optional or conditional questions (questions offered only to respondents who selected a certain answer in a previous question) were further limited in number. These results (provided in Sections 5.2. and 5.7.3) should be considered with the lower response rate in mind.

1. Confidence level refers to the level of certainty you can have that the results are a reliable - i.e. there is a probability that at least 95% of the result of the survey is also true for the wider population. The margin of error is the maximum expected difference between the the survey results (the sample) and the true population (survey results that would be true for the whole population).

2. SurveyMonkey, 2018, MARGIN OF ERROR CALCULATOR, surveymonkey.com/mp/margin-of-error-calculator/

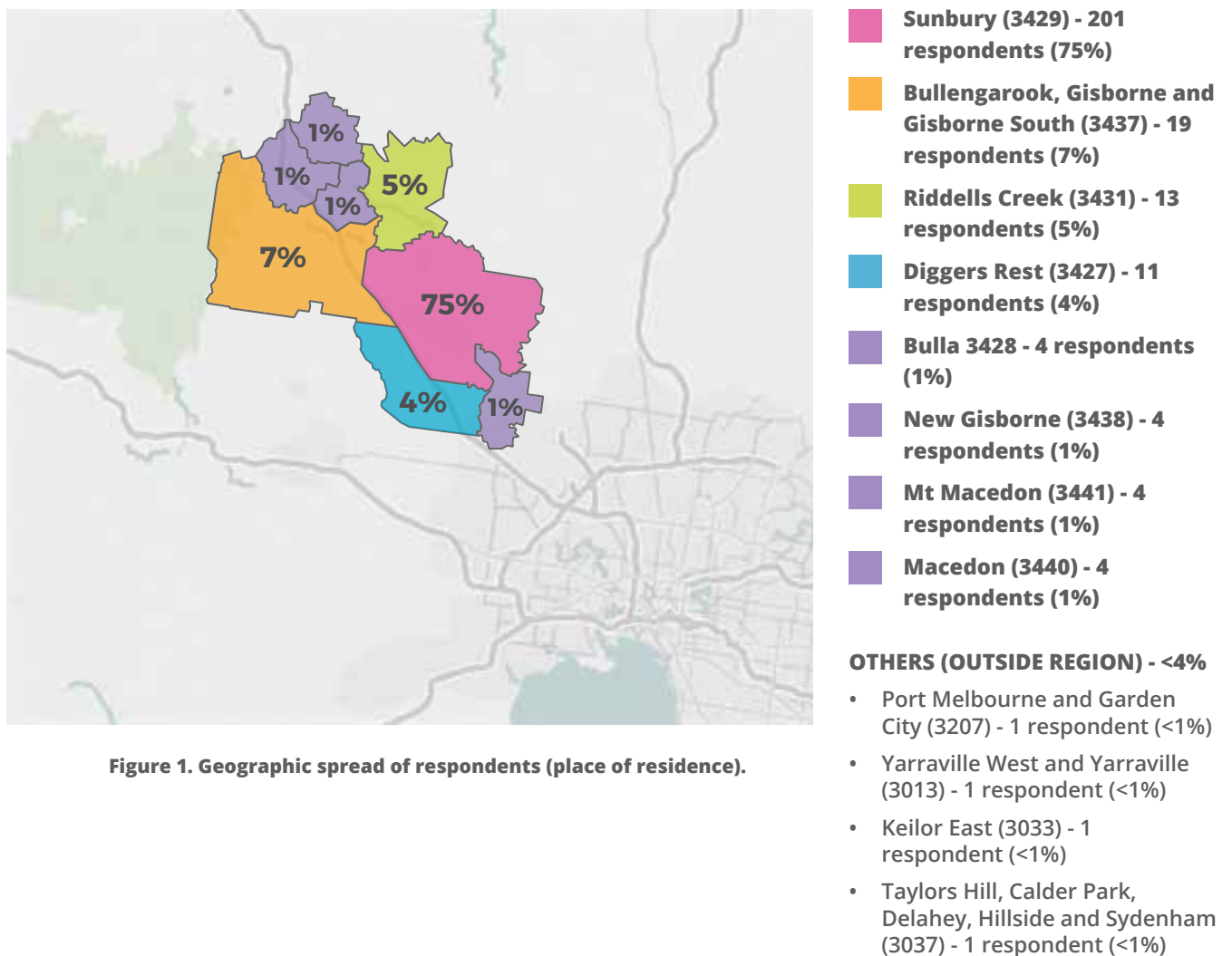
4. ABOUT THE RESPONDENTS

4.1. OVERVIEW

268 people provided their postcode (15 people skipped this question). The largest cohort of respondents (75%) were from the Sunbury area (postcode 3429). Three respondents provided a postcode that were unknown (no location could be attributed to that postcode) and may have contained an error.

The survey was distributed to a list of customers within a certain number of postcodes (see Section 3). Some of the respondents indicated that they lived in a postcode outside of this list, which may possibly be attributed to them having moved outside the region since their details were collected, owning multiple properties or owning a business within the region and living outside the region.

Figure 1 below depicts the geographical spread of residents.



Respondents also indicated how long they had lived in the local region. 268 people completed this question (15 people skipped this question). 104 respondents had lived in the local region between 0-5 years and 90 respondents had lived in the local region more than 20 years. Combined, these new and long-term residents made up 73% of total respondents. 15 respondents indicated that they had never lived in the local area. Figure 2 below shows the full results.

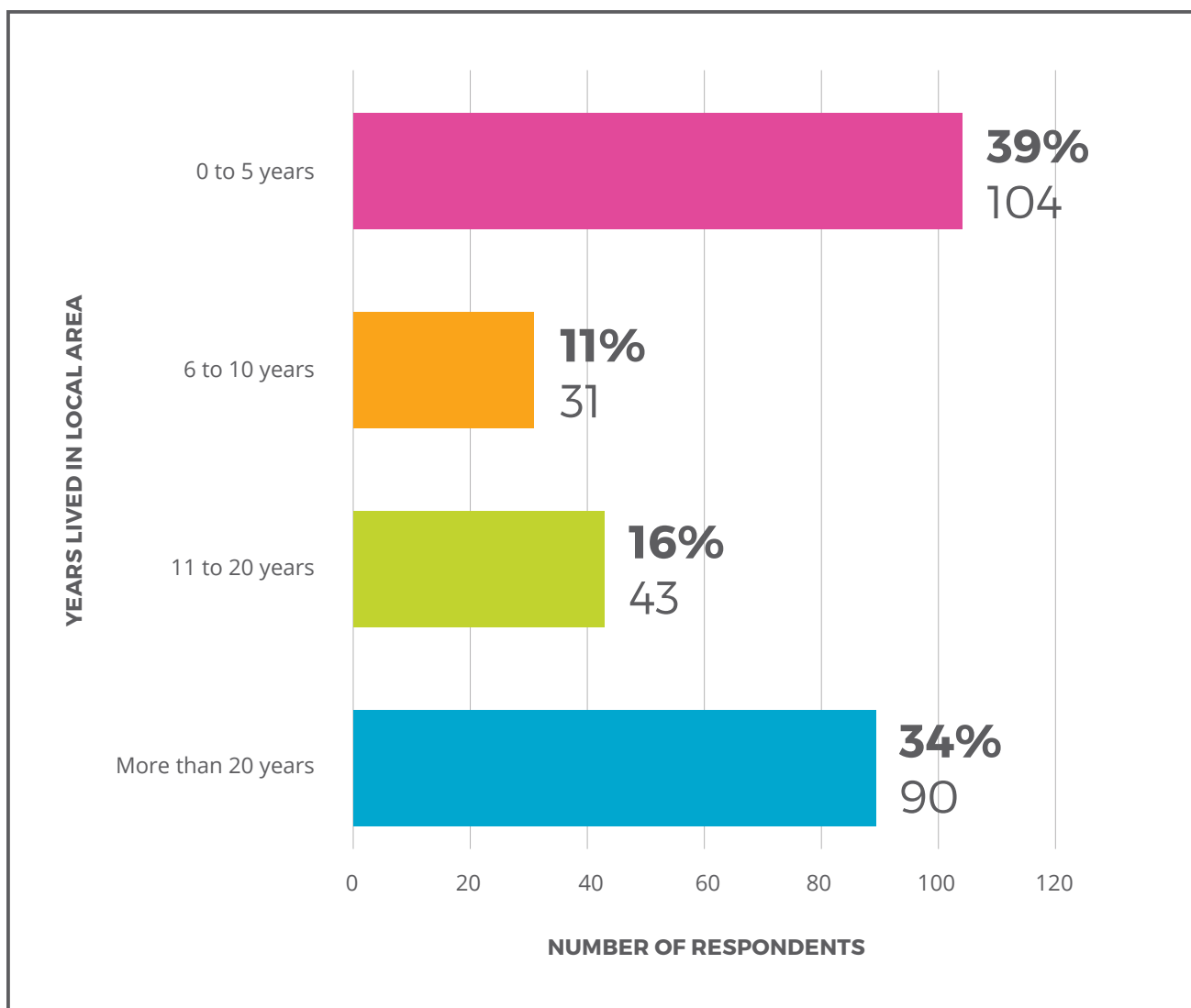


Figure 2. Length of residency in the local area. 268 total responses.

4.2. COMPARISON OF RESPONSES: PLACE AND LENGTH OF RESIDENCE

Overall, there was no significant difference identified when responses were filtered and compared based on people's place of residence or length of time living in the local area.

There was only a very slight difference in responses noted in relation to some questions. Where this has been identified, it has been noted in the relevant section of survey findings below (throughout Section 5).

5. SURVEY FINDINGS

5.1. BENEFITS OF ALL AVAILABLE WATER SOURCES

Respondents were asked to indicate, on a scale of 0-10 (where 0=not important and 10=very important), how much importance they placed on making the most of all water sources available. There was strong support for all five options provided. These options were:

Water supply	Ensuring there's enough water available for the needs of the Sunbury region as the population grows
Green spaces	Having water available for parks, gardens and sporting fields and keeping them green during droughts
Healthy waterways	Ensuring we have enough water in the waterways for plant and animal life; reducing the impacts of stormwater runoff
Agricultural and industrial productivity	Providing treated alternative water (e.g. recycled water, stormwater) for use by farms and industry
Affordability	Keeping the cost of water services at levels as low as possible

283 respondents completed this question. The option given the most importance was 'water supply'. 241 (85%) respondents gave this a rating of 10 in importance, and this option had an average rating of 9.7. This was closely followed by 'healthy waterways'.

The option that received the most (comparatively) mixed response was 'green spaces' – 32 respondents (11%) rated this as 4 or less on the importance scale. However, overall, this option was still considered important by the majority of respondents – 251 people (88%) felt this was a 5 or higher on the importance scale, 83 people (29%) rated this option a 10, and it had an overall average rating of 7.4. A full breakdown of responses for each option is provided in the graphs below (Figure 3).

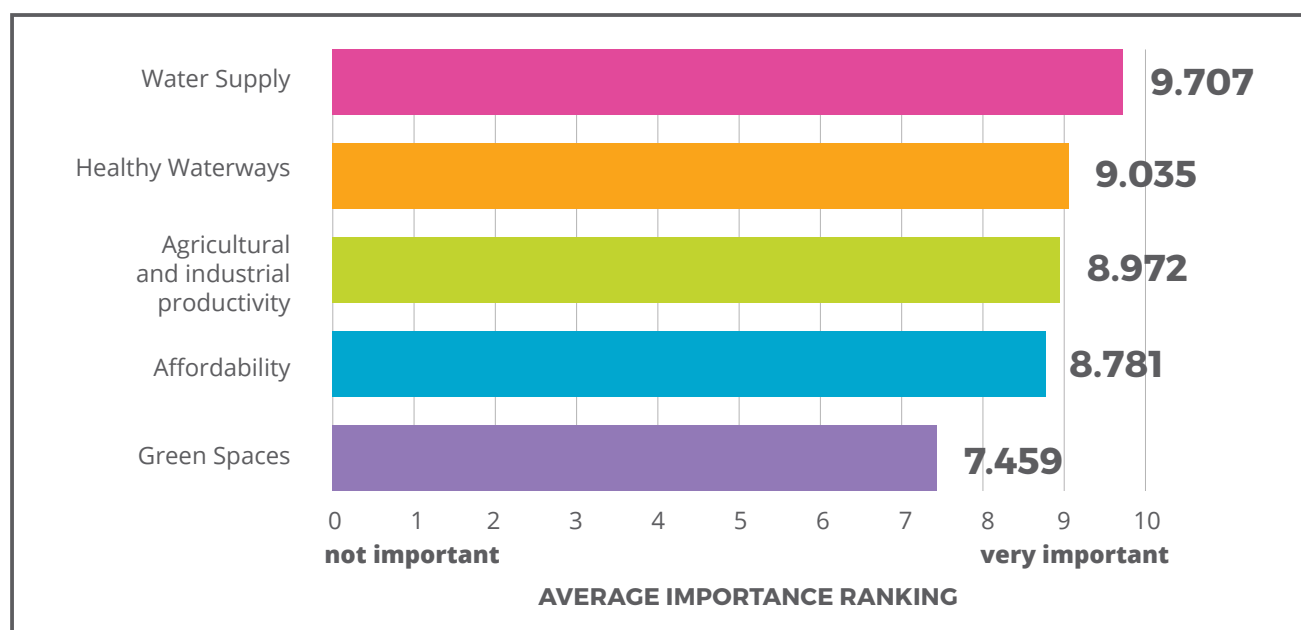


Figure 3. Average (mean) importance score – individual rating of each option – benefits of available water sources.

Respondents were then asked to rank the same five options in order of importance. Instead of rating each option individually, respondents had to consider all options and order them in one list (where 1=most important and 5=least important).

Please note that while the previous rating scale went up in importance (i.e. each option was rated on a scale where 10 was the most important), this second rating scale went down in level of importance (i.e. options were placed in order of importance where 1 was the most important).

The findings were fairly consistent with the results of the previous question, where respondents ranked each individual option on an importance scale. 'Water Supply - ensuring there's enough water available for the needs of the Sunbury region as the population grows' – was given the highest level of importance overall.

'Agricultural and industrial productivity' and 'Affordability' swapped positions during the ranking exercise (previously the latter was, on average, rated slightly higher than the former) - however the difference between results for these two options was very small in both this ranking question and the previous rating question. The graph below (Figure 4) provides a breakdown of the results.

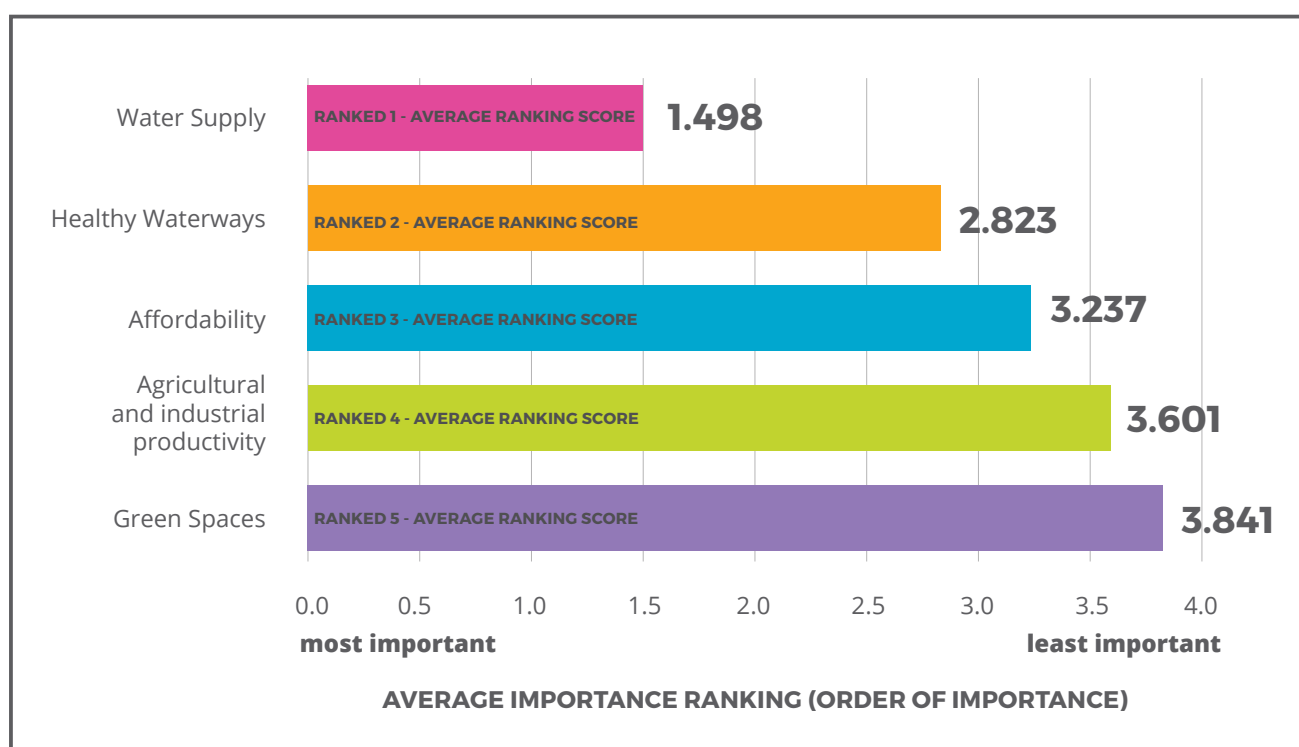


Figure 4. Average (mean) importance score – order of preference – benefits of available water sources.

5.2. DRINKING WATER

Respondents were asked to put costs aside and consider where they would prefer water to come from in the future to meet increased water needs due to population growth.

The results suggested that overall, most respondents (65%) don't mind where their water supply is drawn from in future. 22% of respondents selected 'local sources' as their preference, while only 9% indicated 'external sources' would be their preference. See Figure 5 below.

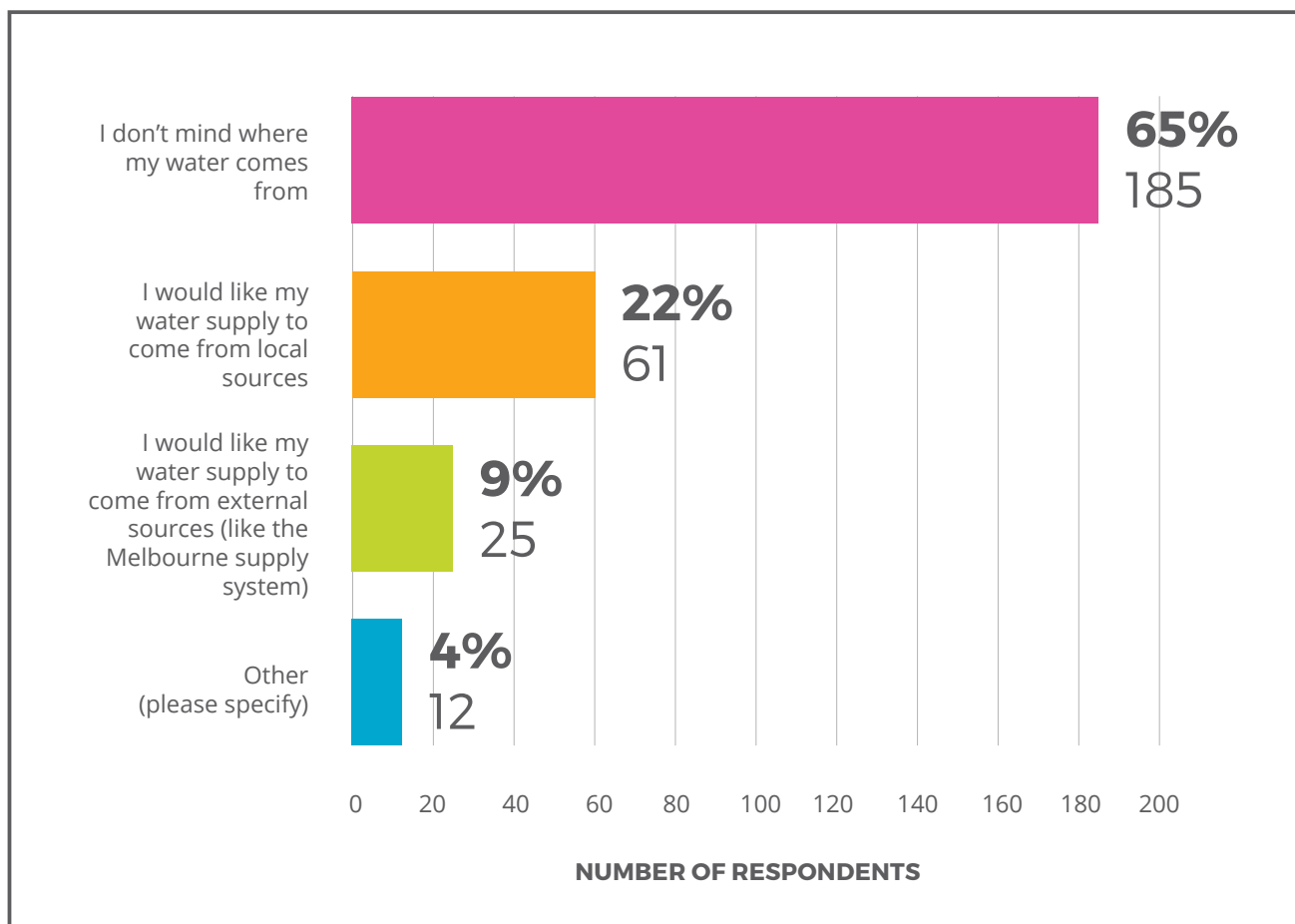


Figure 5. Preferences – where water comes from.

Respondents who selected 'local sources' or 'external sources' were asked to explain their answer.

55 respondents provided an explanation as to why use of 'local sources' was important to them. The most popular reason given was that they believed it would affect quality and cost. Their answers have been themed into categories which are provided below.

THEME	NUMBER AND % OF COMMENTS (TOTAL RESPONSES = 55)	EXAMPLES OF COMMENTS PROVIDED
Able to better manage water quality	14 (25%)	<i>"Cleaner and cheaper water."</i> <i>"We can have control over the water quality from local sources."</i>
To keep costs lower	14 (25%)	<i>"It doesn't have to travel as far. It would keep costs down."</i> <i>"Hope the cost of water will be cheaper."</i>
Increases sustainability or environmental benefits	9 (16%)	<i>"Less cost and fossil fuels used for transport."</i> <i>"Sustainability of the local area."</i>
To encourage local employment	8 (15%)	<i>"More local jobs."</i> <i>"Keep jobs hopefully local."</i>
Accountability	8 (15%)	<i>"I know what is happening and can view and discuss if there are any changes or problems."</i>
Other	2 (4%)	<i>"Sunbury should be independent of Melbourne water supply."</i>

23 respondents provided an explanation as to why use of 'external sources' was important to them. The most popular reason given was that they believed it would be better for continuity of supply and water quality. Their answers have been themed into categories which are provided below.

THEME	NUMBER AND % OF COMMENTS (TOTAL RESPONSES = 23)	EXAMPLES OF COMMENTS PROVIDED
To maintain continuous water supply	8 (35%)	<i>"Guarantee of continuous good quality water."</i> <i>"To ensure there is plenty of it as droughts are becoming more common".</i>
To ensure high water quality	7 (30%)	<i>"Water quality. The taste is better."</i> <i>"The Melbourne supply system is by far the best tasting than other Victorian systems."</i>
Because local water sources are insufficient	5 (22%)	<i>"Our local resources are not adequate to meet our needs."</i>
To reduce dependence on other rural communities	2 (9%)	<i>"Because towns in the Macedon Ranges region rely on their own water supplies (rainwater tanks) and it wouldn't be fair to reduce their water supply potential."</i>
Other	1 (4%)	<i>"I don't want Sunbury using Rosslyne."</i>

To assist them to complete these questions, respondents were provided with Fact Sheet 3 (Appendix B).

5.3. WASTEWATER

Respondents were provided with a definition of the term 'wastewater' and a description of the future challenge facing Melbourne Water and Western Water. Five alternatives to future wastewater management were provided for consideration. Respondents were asked to rank each option on a scale of 0-10 (0=least preferred and 10=most preferred). These alternatives were:

NO.	ALTERNATIVE
1	Transfer extra untreated wastewater to Melbourne's main treatment plant.
2	Treat all wastewater locally at the current recycled water quality (Class B) and transfer extra recycled water to sell to farmers for suitable agricultural uses
3	Treat all wastewater locally at the current recycled water quality (Class B) and use extra recycled water on local land purchased by Western Water to grow livestock feed.
4	Treat all wastewater locally to a higher recycled water quality (e.g. Class A) so more recycled water can be re-used locally.
5	Treat all wastewater locally to a higher recycled water quality (e.g. Class A) so more recycled water could be stored and released to local creeks at the right time to improve waterway flows.

Alternative 4 received the most support, closely followed by Alternative 2. Figure 6 provides a breakdown of the results.

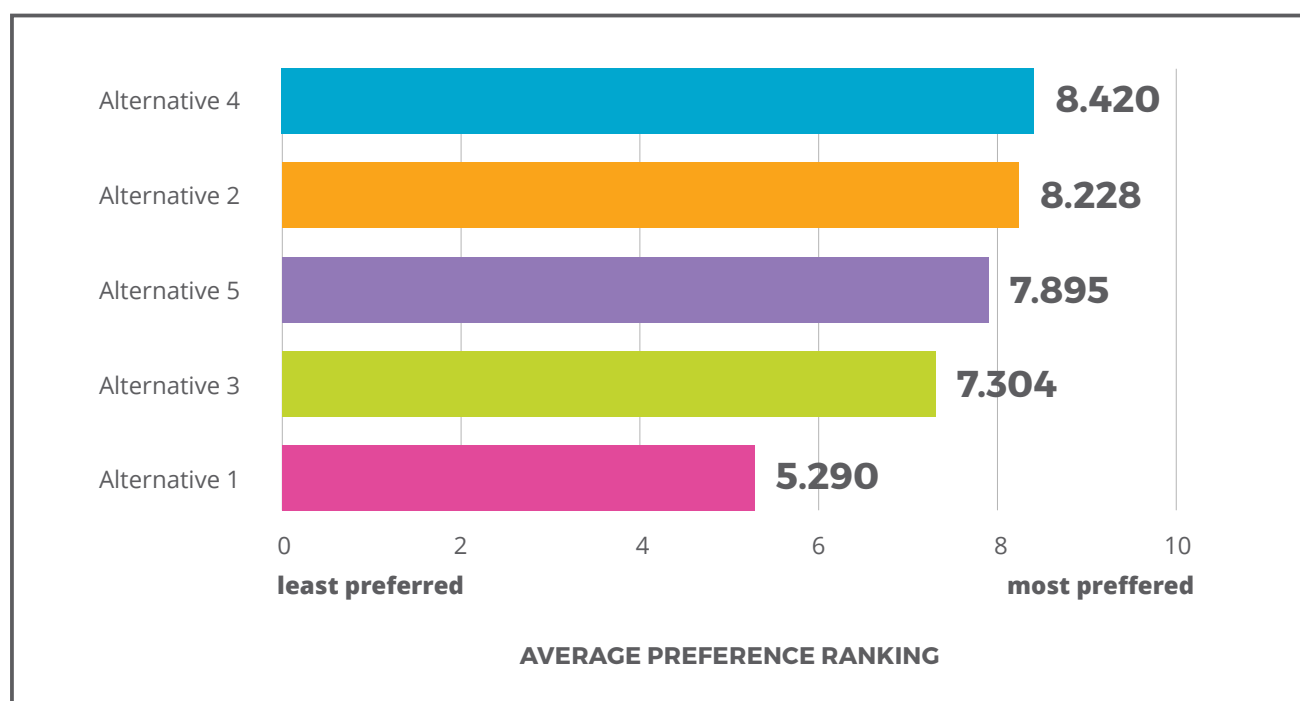


Figure 6. Average (mean) preference score – future wastewater management alternatives.

There was a slight difference between answers depending on people's length of residence in the region. Long term residents (more than 20 years) were slightly more likely to prefer not sending wastewater to Melbourne's main treatment plant (i.e. prefer to treat wastewater locally). People who had lived in the region 20 years or less rated Option 5 as an average (mean) importance score of 5.5 while people who had lived in the region more than 20 years rated this option an average (mean importance score) of 4.8.

To assist them to complete this question, respondents were provided with Fact Sheets 1 and 3 (Appendix B).

5.4. WATERWAYS

Respondents were asked to consider waterways and the impact of human activities on the natural state of waterways including threats such as climate change, drought, taking too much water and changes to land adjoining waterways.

Respondents then rated each of the following future management options terms of importance on a scale of 0-10 (where 0=not important and 10=very important).

NO.	OPTION
1	Make sure there is little to no impact on waterways from stormwater flows.
2	Cap the amount of recycled water released to the creek at the current amount so as not to impact the waterway any further.
3	Improve the quality of recycled water and store it, so that more could be released at the right times to improve the flow in the waterways.
4	Make sure the local waterways always have enough water to flow properly.

There was general support for all propositions and Options 4 and 3 had the highest importance rating overall. Figure 7 below provides a full breakdown of results.

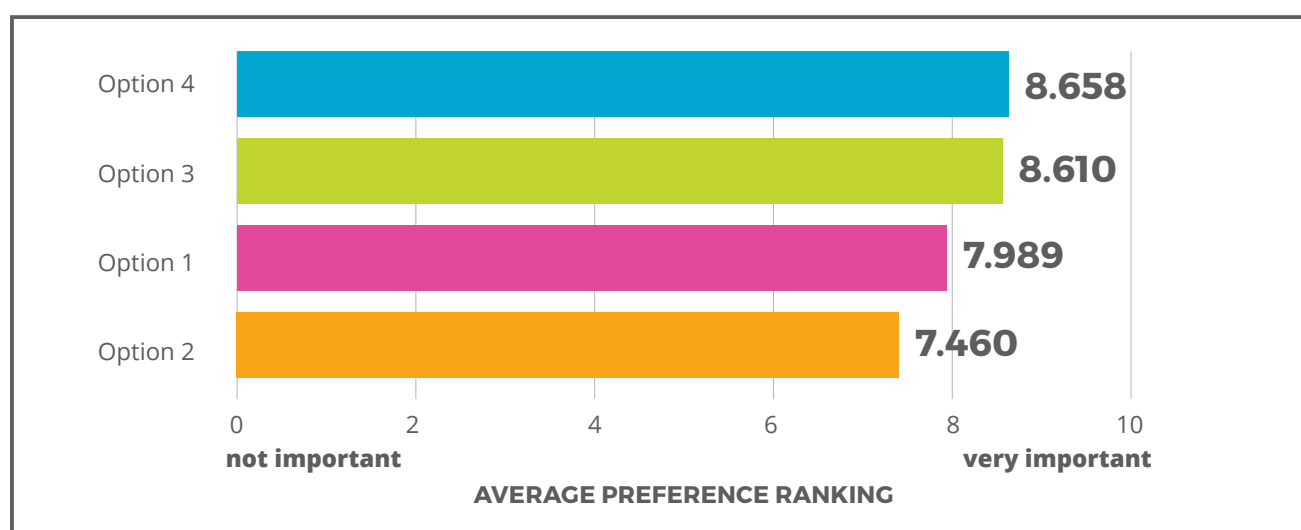


Figure 7. Average (mean) importance score – future waterway management options

There was a slight difference in answers when comparing respondents' length of residency. Long term residents (more than 20 years) were slightly less likely to believe Option 2 was important when compared with new residents who had lived in the region 5 years or less. The former gave this option an average rating of 7.2 compared to the latter which rated this option an average of 7.9.

Respondents were then invited to provide other suggestions on how local waterways should be managed in the future. 45 respondents provided a comment. There was a wide range of different ideas provided. Their answers have been themed into categories which are provided below.

THEME	NUMBER AND % OF COMMENTS (TOTAL RESPONSES = 45)	EXAMPLES OF COMMENTS PROVIDED
Prioritise environmental protection	10 (22%)	<i>"It is so important to protect local waterways as so much ecology depends upon them, which human beings rely on secondarily. To me this is an absolute priority."</i> <i>"Only so that they can be environmentally sustained for native animal and plant life."</i>
Treat and use wastewater or recycled water	5 (11%)	<i>"All waste water should be recycled and consideration to plumb recycled water to residential customers."</i> <i>"Treat and store treated water and reticulate recycled the water through separate mains initially into new estates and progressively throughout the region."</i>
Improve water quality monitoring and regular clean ups	4 (9%)	<i>"More cleaning of waterways to remove rubbish and pollutants."</i>
Encourage increased flows into local waterways	3 (7%)	<i>"Remove noxious weeds and introduced vegetation which alters flow of waterways and uses too much water, e.g. willow trees etc"</i>
Improve water infrastructure	3 (7%)	<i>"Develop more facilities for managing local waterways."</i>
Plan for a water system that accommodates our growing population	3 (7%)	<i>"Clean water is the staff of life to all living things, so plan well ahead, if you don't we all loose."</i>

Six themes emerged that had two or less comments attributed to each of them. These themes were:

- Encourage use of water tanks
- Improved communication
- Prioritise water for agriculture and industry
- Encourage public access
- Encourage water conservation
- Reduce costs to water users

8 comments were not attributed to a theme as they were not related to the topic or could not be analysed.

To assist them to complete these questions, respondents were provided with Fact Sheets 2 and 7 (Appendix B)

5.5. STORMWATER

Respondents were asked to consider a range of local stormwater management options for the future, as new housing estates being developed in Sunbury will result in more stormwater being available for potential use. These options were:

NO.	MANAGEMENT OPTION
1	All stormwater, including the extra flows from population growth, should keep flowing into local streams, just as it does now
2	Some stormwater should be collected from rooftops and stored in household rainwater tanks for garden use and/or toilet flushing etc. (but what's not captured including from roads and other buildings will flow into local streams)
3	Most of the stormwater should be captured and treated to a higher quality so it can be reused for a range of suitable purposes and to protect the waterways and their plants and animals

Respondents rated each option on a scale of 0-10 (where 0=least preferred and 10=most preferred). The lowest level of support overall was for Option 1 – stormwater continuing to flow into local streams. 141 (50%) respondents rated this as a 5 or less, and 38 (13% respondents) rated this as a 0-1. Figure 8 below provides the full comparative results.

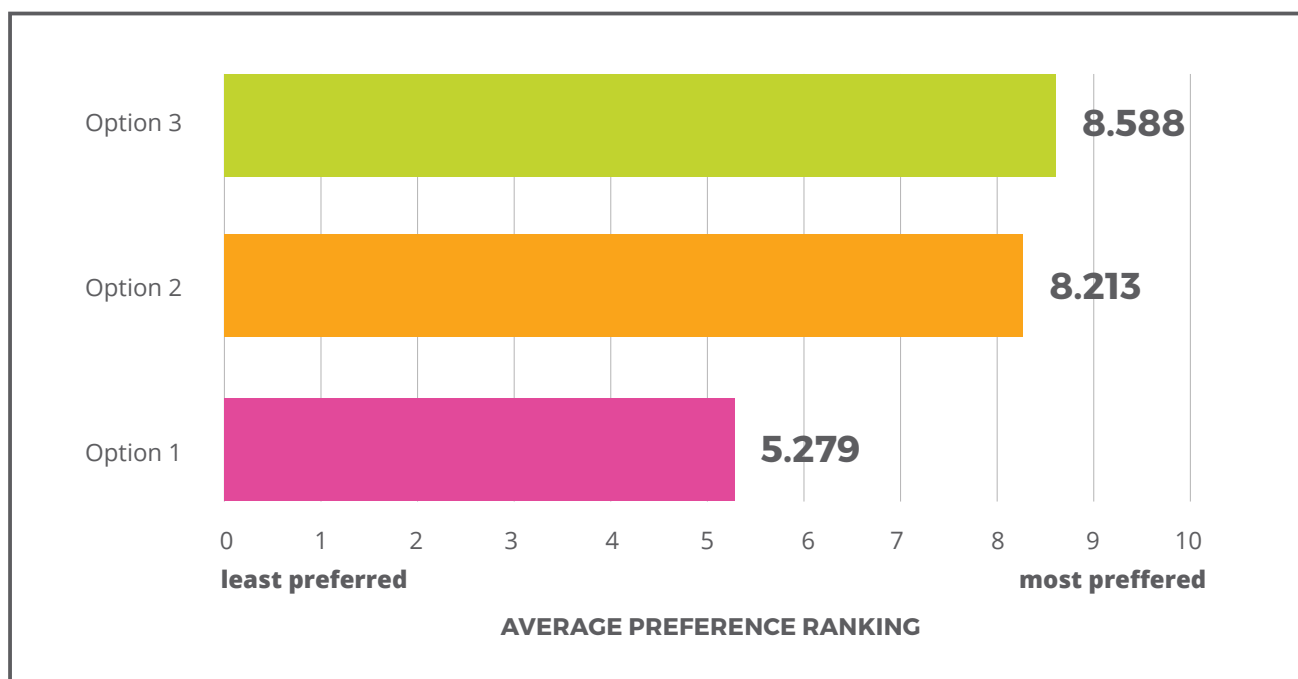


Figure 8. Average (mean) preference- score – future stormwater management options

To assist them to complete these questions, respondents were provided with Fact Sheets 2 and 7 (Appendix B).

5.6. LOCAL VERSUS BROADER IMPACT

Respondents were asked to consider where the benefits from available water sources might be directed or have impact. They were asked to indicate if they had a preference as to where the benefits (financial, environmental and recreational) from local solutions are allocated by choosing one of the following options:

NO.	OPTION
1	I want local water management solutions to benefit the Sunbary region only
2	I'm happy if local water management solutions benefit both the Sunbary region and broader region
3	I don't mind if local water management solutions only benefit the broader region rather than the Sunbary region
4	I don't mind who receives the benefits of local water management solutions

271 people responded to this question. The results indicated that respondents are happy to share the benefits of local solutions with the broader region – as long as Sunbary also benefited. The results are provided in Figure 9 below.

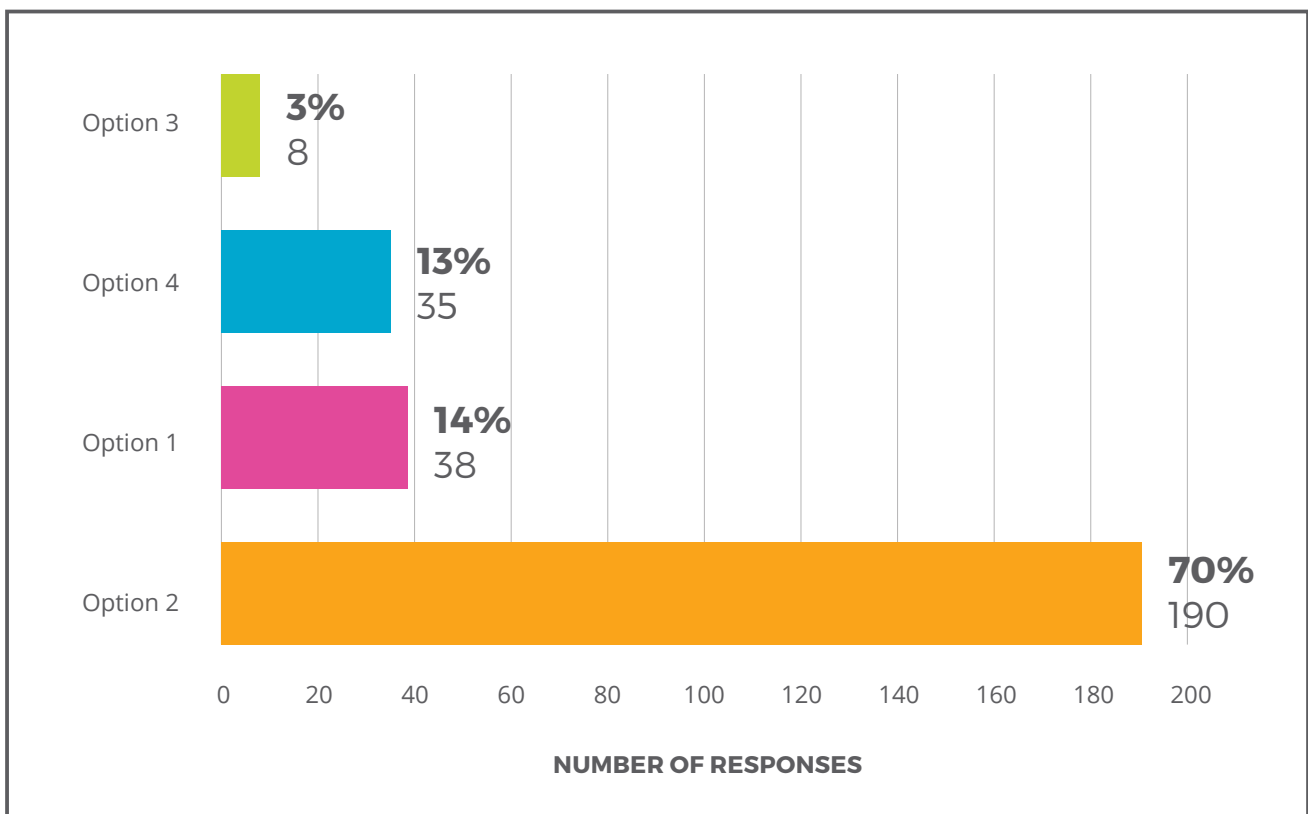


Figure 9. Preferences – benefits of local solutions.

5.7. FUTURE PLANNING FOCUS

5.7.1. INVESTMENT

Participants rated the importance on a scale of 0-10 (0=not important and 10=very important) of Western Water investing in planning future water management solutions. The results indicated that most respondents believe investment in planning is highly important. 283 respondents completed this question. The results are provided in Figure 10 below.

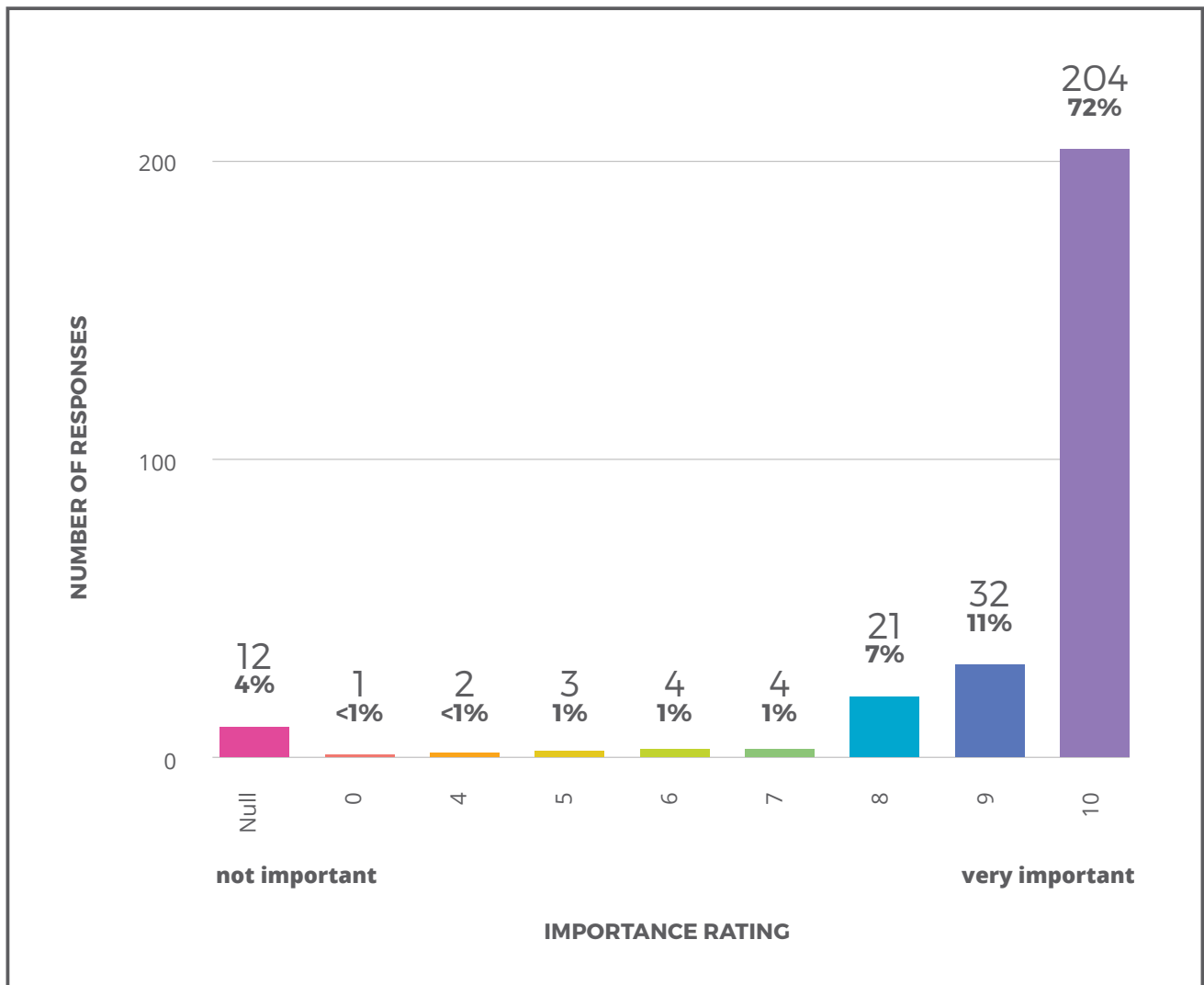


Figure 10. Importance of investment in planning future water management solutions

5.7.2. COMMUNITY INVOLVEMENT

Participants rated the importance on a scale of 0-10 (0=not important and 10=very important) of Western Water involving the community in planning future water management solutions. 271 people completed this question. Overall, most people believed this was important – 227 (83%) respondents rated it as 8 or more on the importance scale. Figure 11 below outlines the results.

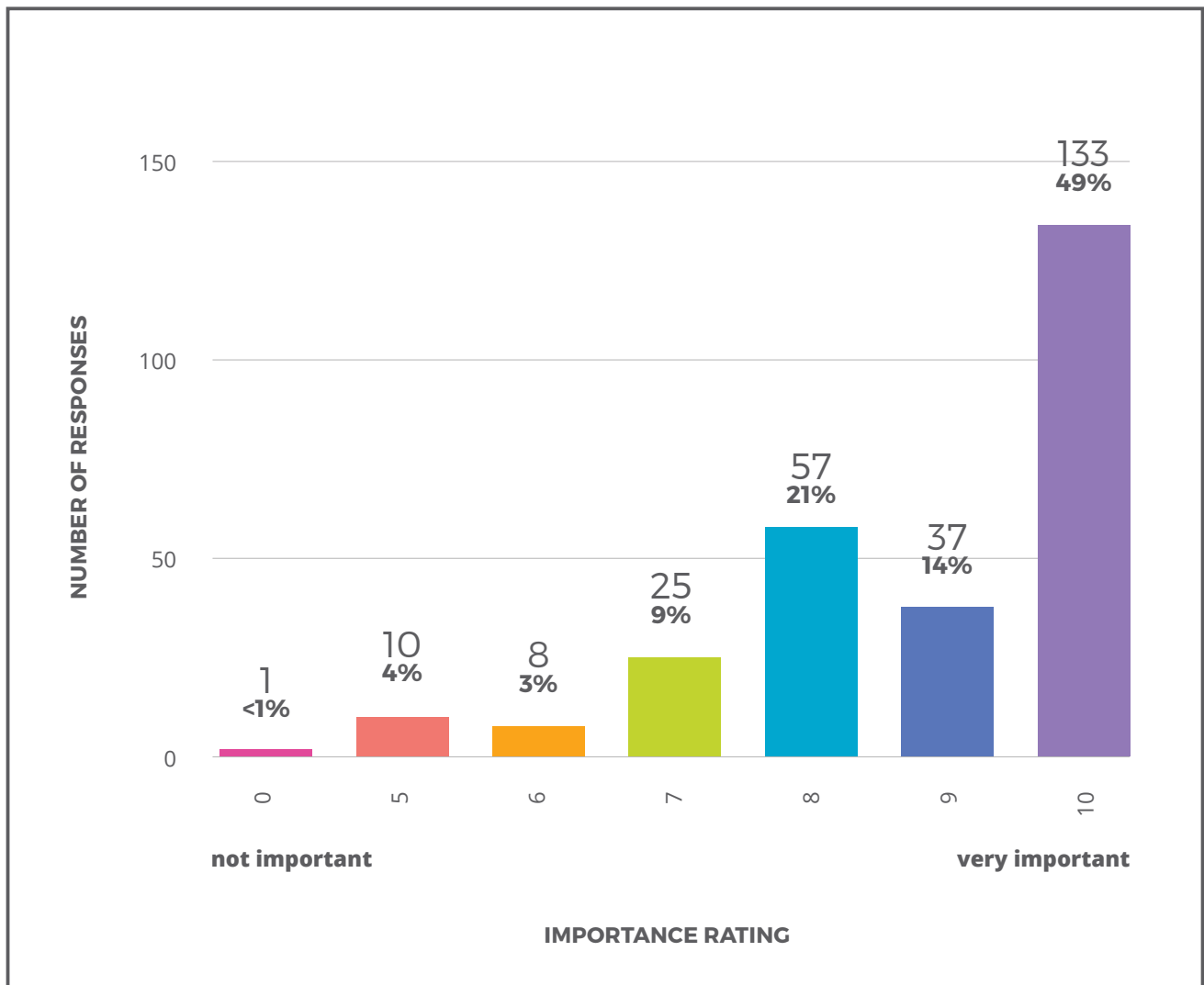


Figure 11. Importance of community involvement planning future water management solutions

5.7.3. OTHER SUGGESTIONS AND COMMENTS

Respondents were invited to provide other suggestions or comments relating to how water in the Sunbury region is managed in the future. 54 people provided a comment. There was a wide range of different ideas provided. Their answers have been themed into categories. The top 6 themes have been provided below.

THEME	NUMBER AND % OF COMMENTS (TOTAL RESPONSES = 54)	EXAMPLES OF COMMENTS PROVIDED
Encourage installation of water tanks	9 (17%)	<i>"Ensure that severe water restrictions are a thing of the past and encourage customers to install tanks."</i> <i>"Strongly encourage the installation of water tanks so households are more responsible with water."</i>
Prioritise planning for the future	8 (15%)	<i>"Any strategy should well researched and form part of a national or at least regional plan with minimal cost to the community and environment now and in the future."</i> <i>"Western Water needs to lead water planning for the region and ensure maximising of all available water resources..."</i>
Support increased grey/ recycled water use	8 (15%)	<i>"All new properties should be made to have on site storage of storm water and also storage & reuse of grey water for flushing toilets."</i> <i>"All to have recycled water taps and pipes to all houses providing recycled water for the garden and toilets."</i>
Use appropriate expertise to advise on management of the water system	5 (9%)	<i>"It is essential to involve a wide range of local and more broadly accessed 'experts' to contribute to this, so that the best solutions can be found."</i>
Encourage drought resilience	3 (6%)	<i>"I think there should be more taught about it in schools. People seem to have forgotten all the things I remember being taught during the last drought."</i>
Prioritise environmental protection	3 (6%)	<i>"It should be managed with the protection of our environment as a key factor."</i>

Six further themes each had two comments assigned to them. These themes were:

1. Consult with the local community
2. Educate people about water conservation
3. Find greater efficiencies and cost reduction
4. Prioritise continuity of supply
5. Reduce marketing expenditure
6. Specific requests (other)

6 comments were not attributed to a theme as they were not related to the topic or weren't able to be analysed.

6. NEXT STEPS

The first phase of engagement for the Sunbury's Water Future project will continue in early 2019, when the conversation will continue through face to face events and discussions, which will be held to gather additional views. The results of this report will be combined with the results of these activities in 2019, and collated into a phase one engagement report that will be shared publicly.

For more information on this project or to sign up for news updates, go to **yoursay.melbournewater.com.au/Sunburys-Water-Future**

APPENDIX A: SURVEY

Privacy and Confidentiality

Western Water and Melbourne Water ("we") are bound by the Privacy and Data Protection Act 2014. To understand how we handle personal information, you can view:

Western Water's [Personal Privacy Charter](#)
Melbourne Water's [Privacy Policy](#)

You can complete the Sunbury's Water Future survey anonymously. Your responses are confidential and we collect them for project research. We may share anonymous responses with our project partners and contractors for the same purpose.

To enter the draw, please provide your name and contact details. By providing your name and contact details, you agree to participate in future research and communications about this project. Your contact details may be shared with our contractors but will only be used for future research and communications purposes. Your responses will not be matched to your name and contact details.

You have the right to seek access to your personal information. For more information contact feedback@westernwater.com.au

Benefits of available water sources

Over the next 20 years, Sunbury is set to double in size. As Sunbury and nearby towns prepare for the growing population, we need to think about the broader impacts of climate change, the environment and community liveability, and how we manage water in the future.

In this survey, Western Water and Melbourne Water are seeking your views on what matters for Sunbury's Water Future.

Fact Sheets and FAQs can be found in our [YourSay page](#).

If you would like to go into the draw for a chance to win \$100 off your water bill, tick the box at the end of the survey and provide your contact details. The winner of the draw will be notified by email during the week commencing Monday 29 October.

For the best experience, we recommend completing this survey on a desktop computer or tablet.

In making the most of all the water sources available, how much importance do you place on each of the following?

Rate each on a scale of 0-10 where 0=not important and 10=very important

Water supply: Ensuring there's enough water available for the needs of the Sunbury region as the population grows

Green spaces: Having water available for parks, gardens and sporting fields and keeping them green during droughts

Healthy waterways: Ensuring we have enough water in the waterways for plant and animal life; reducing the impacts of stormwater runoff

Agricultural and industrial productivity: Providing treated alternative water (e.g. recycled water, stormwater) for use by farms and industry

Affordability: Keeping the cost of water services at levels as low as possible

Now, please rank each of the following in order of importance, where 1=most important and 5=least important.

To enter your choices, you can drag and drop your selection (recommended), click into fields and type a number or choose from the drop down menus.

Water supply: Ensuring there's enough water available for the needs of the Sunbury region as the population grows

Green spaces: Having water available for parks, gardens and sporting fields and keeping them green during droughts

Healthy waterways: Ensuring we have enough water in the waterways for plant and animal life; reducing the impacts of stormwater runoff

Agricultural and industrial productivity: Providing treated alternative water (e.g. recycled water, stormwater) for use by farms and industry

Affordability: Keeping the cost of water services at levels as low as possible

Drinking water

The water supplied to properties in the Sunbury region currently comes from the local supply (Rosslynne Reservoir) and from the Melbourne water supply system.

As the population grows, we'll need additional water from other local sources or from Melbourne.

Fact Sheet (PDF): [Water management in the Sunbury region](#)

Putting costs aside, for future water needs in the Sunbury region, where would you prefer your water comes from?

Choose one of the following options

- ☐ I would like my water supply to come from local sources
- ☐ I would like my water supply to come from external sources (like the Melbourne supply system)
- ☐ I don't mind where my water supply comes from
- ☐ Other (please specify)

Drinking water

Please explain why it's important to you that water supply comes from external sources (like the Melbourne supply system)

Please explain why it's important to you that water supply comes from local sources

Wastewater

Wastewater is the term for the household water that flows into the sewerage system. It includes the wastewater from kitchens, bathrooms, laundries and toilets. It must be treated to a suitable quality, so it can be reused - treated wastewater is called recycled water. As the population grows, we will have extra wastewater to manage.

Currently, around half of the recycled water produced in Sunbury is reused (for irrigation) and the remainder is released to Jacksons Creek. Western Water's Environment Protection Authority Licence has a set limit on the amount of recycled water we can discharge to the creek each day to protect the waterway.

There are alternatives to future wastewater management including where it's treated, to what quality it's treated and where it's reused. Some of these will cost more than others, but putting costs aside, how would you like local wastewater to be managed in future?

Fact Sheets (PDF): [Water management in the Sunbury region](#) | [Natural and Urban Water Cycles](#)

How would you like local wastewater to be managed in future?

Rate each of the following on a scale of 0-10 where **0=least preferred** and **10=most preferred**

Transfer extra untreated wastewater to Melbourne's main treatment plant.

Treat all wastewater locally at the current recycled water quality (Class B) and transfer extra recycled water to sell to farmers for suitable agricultural uses

Treat all wastewater locally at the current recycled water quality (Class B) and use extra recycled water on local land purchased by Western Water to grow livestock feed.

Treat all wastewater locally to a higher recycled water quality (e.g. Class A) so more recycled water can be re-used locally.

Treat all wastewater locally to a higher recycled water quality (e.g. Class A) so more recycled water could be stored and released to local creeks at the right time to improve waterway flows.

Waterways

The plants and animals that rely on rivers and creeks live together in a delicate balance. This can be upset by human activities that change a waterway's natural state, sometimes with damaging results.

Some of the threats to our waterways include climate change and drought, taking too much water,

and changes to land use adjoining the waterways.

Fact Sheets (PDF): [Challenges for the Sunbury region](#) | [Looking after our rivers and creeks](#)

Thinking about the future management of waterways, how much importance do you place on each of the following?

Rate each of the following on a scale of 0-10 where **0=not important** and **10=very important**

Make sure there is little to no impact on waterways from stormwater flows

Cap the amount of recycled water released to the creek at the current amount so as not to impact the waterway any further

Improve the quality of recycled water and store it, so that more could be released at the right times to improve the flow in the waterways

Make sure the local waterways always have enough water to flow properly

Do you have any other suggestions on how local waterways should be managed in future?

Stormwater

As more houses are built, stormwater from roofs and roads flows into local streams where higher flows and poorer water quality impact aquatic plants and animals.

Managing stormwater can help protect the environment and produce a new alternative water source for certain uses.

Now is the time to think about what we can do with stormwater from the new housing estates being developed around Sunbury.

Fact Sheets (PDF): [Challenges for the Sunbury region](#) | [Looking after our rivers and creeks](#) | [Natural and urban water cycle](#)

How would you like local stormwater to be managed in future?

Rate each of the following on a scale of 0-10 where **0=least preferred** and **10=most preferred**

All stormwater, including the extra flows from population growth, should keep flowing into local streams, just as it does now

Some stormwater should be collected from rooftops and stored in household rainwater tanks for garden use and/or toilet flushing etc. (but what's not captured including from roads and other buildings will flow into local streams)

Most of the stormwater should be captured and treated to a higher quality so it can be reused for a range of suitable purposes and to protect the waterways and their plants and animals

Local vs broader impact

Some benefits from available water sources may directly impact the Sunbury region (e.g. water for local sports fields).

☐ Some benefits may impact a broader area (e.g. water for agriculture outside the Sunbury region).

☐ Others may impact both local and broader areas.

Do you have a preference where the benefits (financial, environmental, recreation) from local solutions are allocated?

Choose one of the following options

☐ I want local water management to benefit the Sunbury region only

☐ I'm happy if local water management solutions benefit both the Sunbury region and broader region

☒ I don't mind if local water management solutions only benefit the broader region rather than the Sunbury region

☐ I don't mind who receives the benefits of local water management solutions

Future planning focus

How important is it that Western Water invests in planning water management solutions for the future?

Rate the importance on a scale of 0-10 where 0=not important and 10=very important

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☒ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

How important is it that Western Water involves the community in planning water management solutions for the future?

Rate the importance on a scale of 0-10 where 0=not important and 10=very important

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☒ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

Do you have any other suggestions or comments about how water in the Sunbury region should be managed in the future?

About you

What is your postcode?

How long have you lived in the local region?

Would you like to be kept up to date about planning for Sunbury's Water Future?

☐ Yes, I'd like to be kept up to date

Would you like to be entered in the draw to win \$100 off your water bill?

☐ Yes, please enter me in the draw

If you indicated above that you would like to be kept up to date or go into the draw, please provide the following contact details.

Your survey responses will remain anonymous and we will not match you to your responses.

What is your first name?

What is your last name?

What is your email address?

What is your mobile phone number?

APPENDIX B: FACT SHEETS



Natural and urban water cycle

The way our water cycles work

1

What are the water cycles?

As water moves between the land, ocean, rivers and atmosphere, it changes from solid to liquid to gas – this is our planet's way of recycling water. It's called the '**natural water cycle**'.

The natural water cycle still happens in cities and towns, but urban growth has changed how water flows through the environment. This is called the '**urban water cycle**' and includes water supply, wastewater, recycled water and stormwater.

What's the difference between stormwater, wastewater and recycled water?

Rainfall that runs off roofs, roads and other hard surfaces into gutters, drains, creeks and rivers, and eventually into the sea is called 'stormwater'.

Water that's been used in the home, in a business or an industrial process is called 'wastewater'. It's captured in the sewerage system which has different pipes to stormwater.

When wastewater goes through a treatment process, it becomes 'recycled water' that can be reused for other purposes. The Sunbury Recycled Water Plant is one of seven recycled water plants operated by Western Water.

Recycled water can have different levels of treatment depending on what it is to be reused for. Recycled water is also released to waterways.

[Read more: Western Water's approach to recycled water](#)



To find out more about Sunbury's Water Future go to:
yoursay.melbournewater.com.au/Sunburys-Water-Future



What is the urban water cycle?

Dams and pipes have been built to take water from our waterways for drinking water supplies. There's also wastewater to manage from homes and businesses that will eventually return to waterways (if it's not reused).

More development results in more stormwater runoff that needs to be managed.

The urban water cycle is managed by organisations like Melbourne Water, Western Water and local councils.

Following is a bit more about each aspect of the urban water cycle.

Water - catchments to tap

When it rains, water runs off catchment areas, flows into rivers and then into reservoirs. It's then treated and supplied through water mains that make up our water supply system — eventually making its way to you.

Wastewater - toilets to treatment plants

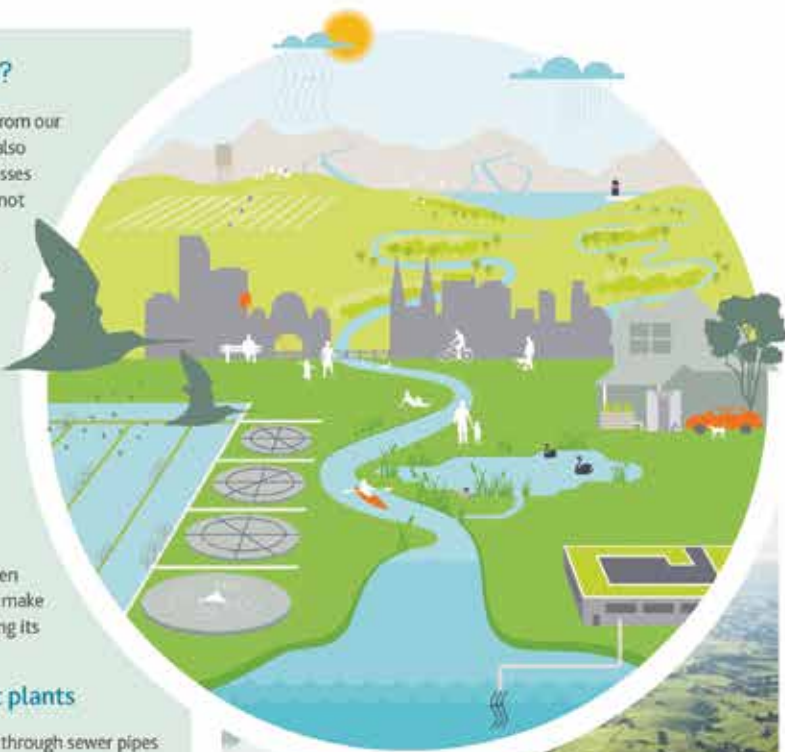
Used water from homes and businesses travels through sewer pipes to wastewater treatment plants — all part of our sewerage system.

These plants turn wastewater into recycled water so it can be re-used. For example, on sports grounds, parks and reserves and in agriculture. Some of it also goes back into local rivers and creeks.

Stormwater - drains to our bays

Stormwater drains collect rainwater runoff from roads, roofs and gutters. It's sent into nearby rivers and creeks where it re-enters the water cycle. It then eventually ends up in the Port Phillip Bay.

In new growth areas, wetlands and basins are constructed to help filter stormwater. The series of shallow, densely-planted, man-made ponds help filter water through physical and biological processes. It's a natural way to treat and remove some of the sediment and pollutants from stormwater before it enters our rivers and creeks.





Challenges for the Sunbury region

Population growth and climate change impacts

2

The effects of a changing climate, growing population and increasing urban development will impact the available water sources in the Sunbury region as well as our local waterways.

Why is the population growing?

Sunbury has been identified as an area of growth by the Victorian State Government. The population is forecast to more than double over the next 20 years.

The Victorian Planning Authority has set out a plan for Sunbury. It outlines a clear vision for housing, transport, employment, open space, shopping and community services to support this growth.

Population growth increases water demand and will produce greater volumes of wastewater and stormwater to be managed.

[Read more: Growth Corridor Plans](#)



To find out more about Sunbury's Water Future go to:
yoursay.melbournewater.com.au/Sunburys-Water-Future



What are the impacts of climate change?

Greenhouse gases like carbon dioxide in the Earth's atmosphere play a key role in making our planet warm enough to support animal and plant life. But, these gases have been increasing since the mid-1800s, causing our climate to change.

This is a major issue for our water supplies as it will cause:

- higher average and minimum temperatures
- more storms, bushfires and heatwaves
- less rainfall
- more frequent and intense heavy downpours
- rising sea level

As well as the impacts of climate change, Melbourne's weather has always been variable. We've had long periods of low rainfall causing droughts and periods of high rainfall causing floods.

The harsh Millennium Drought (1997 to 2009) followed the wet decades of the 1950s and 1970s. It had an extreme impact locally as our water storages almost dried up.

Western Water acted quickly to construct pipelines that connected local towns to Melbourne's water supply system. This helped to meet immediate water needs but we need to identify additional water sources to make up for gaps in water availability caused by climate change and population growth.

CLIMATE CHANGE ISSUES



HIGHER
temperatures



MORE
storms,
bushfires &
heatwaves



LESS
rainfall



MORE
frequent and intense
heavy downpours



RISING
sea level

Climate change and our local waterways

Climate change remains a threat to water supplies and the environment across Melbourne. More drought and heatwave events are predicted, with less overall rainfall and an increase in extreme events like storms and floods.

When our waterways are exposed to increased stormwater, this leads to poorer water quality and erosion, among other impacts.

Over the longer term, climate change will affect the habitat of plants and animals that live along waterways and around wetlands.





Water management in the Sunbury region

3

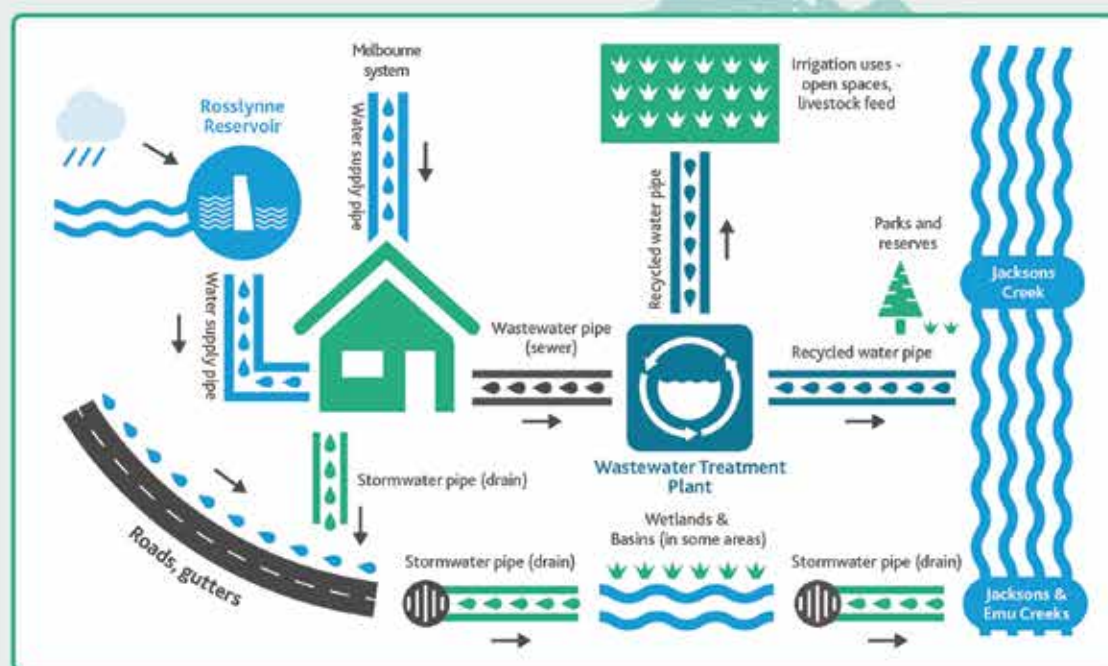
Local water sources and uses

As the population grows, there's increasing pressure on our drinking water supplies. There's also increased potential to capture and produce alternative water for reuse.

Where does the Sunbury region's drinking water come from?

Drinking water for the Sunbury region comes from the local Rosslynne Reservoir and the Melbourne Water supply system.

The supply from Rosslynne Reservoir is limited and has reduced over time due to lower water flow into the reservoir.



To find out more about Sunbury's Water Future go to:
yoursay.melbournewater.com.au/Sunburys-Water-Future



What's the difference between stormwater, wastewater and recycled water?

Rainfall that runs off roofs, roads and other hard surfaces into gutters, drains, creeks and rivers, and eventually into the sea is called 'stormwater'. In new growth areas, wetlands and basins are constructed to help filter stormwater.

Water that's been used in the home, in a business or an industrial process is called 'wastewater'. It's captured in different pipes to stormwater.

When wastewater goes through a treatment process, it becomes 'recycled water' that can be reused for other purposes. The Sunbury Recycled Water Plant is one of seven recycled water plants operated by Western Water.

Recycled water can have different levels of treatment depending on what it is to be reused for. Recycled water is also released to waterways.

[Read more: Western Water's approach to recycled water](#)



What are some alternative sources of water?

Alternative sources of water include stormwater and recycled water which can be treated to suit specific uses. Using alternative water sources may provide greater overall benefits for water conservation and the environment.

Locally, some of the recycled water from our treatment plants is being used to irrigate local sports grounds, parks and reserves and in agriculture.

Another solution is to capture and reuse stormwater. A stormwater harvesting pilot in Melton South is collecting urban runoff for treatment, storage and potential reuse by local farmers.

Alternative water has been used for a range of purposes including grass and crop irrigation, livestock watering, gardening, and some residential uses like flushing toilets, washing clothes and vehicles.





Western Water and Melbourne Water

4

Working together for Sunbury's Water Future

Over the next 20 years, the Sunbury population is set to double in size. We need to think about the broader impacts of climate change, the environment and liveability on the growing population, and how water is managed.

Western Water and Melbourne Water are working together and seeking community input into innovative water management solutions. The aim is to make the most of all available water resources and minimise impacts on the environment.

This project is being jointly led by Western Water and Melbourne Water. Hume City Council and the Department of Environment, Land, Water and Planning have important roles too.



Why are both Western Water and Melbourne Water involved?

We each manage different aspects of the urban water cycle and need to work together to ensure our planning is well coordinated to benefit the community.

For more on the urban water cycle, see Fact Sheet 1: Natural and urban water cycle.

Western Water provides water, sewerage and recycled water services for Sunbury, Melton, Bacchus Marsh, the Macedon Ranges and surrounds.

Melbourne Water has the responsibility to manage local waterways such as Jacksons Creek and Emu Creek, and provide essential drainage and flood management services for the region.

Costs to protect and improve waterways and provide flood and drainage services are funded through your Waterways and Drainage charge.

Each year, the waterway projects funded within each local council area are published in a local update.

[View City of Hume Waterways Local Update 2017-18](#)

[View Shire of Macedon Ranges Waterways Local Update 2017-18](#)

To find out more about Sunbury's Water Future go to:
yoursay.melbournewater.com.au/Sunburys-Water-Future





Having your say in Sunbury's Water Future

5

How your feedback will shape decision making

Over the next 20 years, Sunbury is set to double in size. As we prepare for a growing local population, we need to think about how water will be managed, the broader impacts of climate change, and the environment and liveability.

The effects of climate change are reducing the available water in our creeks, rivers and dams. We'll need additional water sources to make up any gaps in water availability caused by climate change and to cover the increased water demand from new properties in the Sunbury region.

There'll be more recycled water and stormwater to manage. And we'll need to make sure we're working together to protect our environment, green spaces and waterways from any potential harm.

We need to start talking now about the future to understand what's important in managing water for both the community and the environment.

Understanding what matters to you

Western Water and Melbourne Water are working together to look at future water solutions for the Sunbury region. The aim is to make the most of all available water resources and minimise impacts on the environment.

Before plans are put in place or decisions made, it's important that we understand what matters to the local residents of Sunbury and nearby towns. We're seeking your feedback on the future of water management including future supply of water, waterway health, liveability, economic prosperity, alternative water sources and customer affordability.



To find out more about Sunbury's Water Future go to:
yoursay.melbournewater.com.au/Sunburys-Water-Future





Having your say in our water future

We invite you to share your feedback by completing the online survey before Sunday 28 October 2018.

Share your feedback by completing the Sunbury's Water Future Survey

In early 2019, Western Water and Melbourne Water will be continuing the conversation through events and targeted discussions to gather additional views. We'll then collate all feedback into a public report which we look forward to sharing with you.

We have lots of information available in fact sheets so you can confidently share your views with an understanding of water management.

Sunbury's Water Future Water management planning for the Sunbury region

WHY

Growth and climate change are impacting available water sources and local waterways

WHAT

Western Water and Melbourne Water working together to plan Sunbury's water future

Understanding what's important to Sunbury region residents for new water management models

HOW

Completing Sunbury's Water Future online survey

Learning more and sharing feedback at local events

Targeted discussions for community and interest groups

Collating feedback and preparing public report

NOW

EARLY 2019





Integrated Water Management

An innovative approach for Sunbury's Water Future

6

There's growing demand from communities to provide more innovative approaches to water management.

From offering affordable, readily-available basic services, to creating more liveable cities and protecting our environment, the management of our water systems needs to address today's urban challenges.

A new approach to urban water management

Integrated Water Management (IWM) is an innovative planning approach that brings together many stakeholders and all of the urban water cycle elements. These include water supply, wastewater management, stormwater management and water treatment. The planning process also considers environmental, economic and social impacts and benefits.

It integrates the water cycle with other aspects of urban management such as land use, infrastructure, urban design and resources planning.

How is IWM different to traditional approaches?

IWM is an innovative way of thinking about the water cycle and how urban water projects are planned and implemented. Utilities, statutory authorities, local councils, interest and industry groups, residents, businesses and other stakeholders must work together collaboratively and openly.

A big part of IWM involves looking at how the wider opportunities that water from alternative sources can benefit communities. These include recycled wastewater or stormwater treated to suit fit-for-purpose uses. Not only does this provide additional water and protect our drinking water supply, but it can also address damaging impacts on our waterways.



To find out more about Sunbury's Water Future go to:
yoursay.melbournewater.com.au/Sunburys-Water-Future



How can integrated water management help?

An integrated approach to water planning and management can provide multiple benefits to communities beyond water supply, sewage and drainage services. Benefits include higher resilience to floods and droughts, more water available for a variety of uses, protection of healthy waterways, and green and cool streetscapes.



IWM for the Sunbury region

The Victorian State Government has created a framework to help government, the water sector and the community work together to better plan, manage and deliver water in Victoria's towns and cities.

This framework helps us look at ways we can manage the different elements of the urban water cycle. In the Sunbury region, these include rainfall in the catchments, wastewater from households, stormwater that runs off roofs and roads and water recycled from wastewater.

Looking at all of these sources and how they're used may help to reduce the impacts of climate change and the additional urban areas planned for Sunbury. Western Water and Melbourne Water are working with councils, state government, other stakeholders and the community to ensure the best water management outcomes.





Sunbury's Water Future

Water management planning for the Sunbury region

Looking after our rivers and creeks

The importance of healthy waterways

7

Rivers and creeks across the Melbourne region are home to more than 1,800 species of native plants and 600 species of native animals. They're also relaxing and enjoyable places to visit and, in some areas, supply water to homes, businesses and agriculture.

What are waterways?

Waterways are our rivers, creeks, wetlands and estuaries.

Why do we need to take care of our waterways?

The plants and animals that rely on rivers and creeks live together in a delicate balance. This can be upset by human activities that change a waterway's natural state, sometimes with damaging results. Some of the threats include:

- drought and climate change
- diverting too much water for agriculture, businesses and homes
- land use next to waterways
- new homes and other buildings

The hard surfaces caused by urban development can't absorb water, leading to litter and pollutants washing into our drains and creeks (stormwater pollution). The volume and velocity of stormwater from these hard surfaces can also cause damage by flushing plants and animals out of waterways and damaging the waterway structure.



Who is responsible for waterways?

Melbourne Water is responsible for waterways in the Port Phillip and Westernport region. This includes the Maribyrnong River catchment which our local Jacksons and Emu Creeks flow into. Western Water has a role to make sure they don't negatively affect local waterways with discharges from their treatment plants or sewer spills. Western Water also has a responsibility to release environmental flows to waterways from its reservoirs. Councils and Melbourne Water share responsibility for the stormwater which drains to the waterways.

A healthy waterways strategy has been developed to address the threats posed by climate change, urban development and population growth on our waterways. The 2018-2028 Healthy Waterways Strategy outlines regional decision-making, investment, management issues and activities to support our waterways.

To find out more about Sunbury's Water Future go to:
yoursay.melbournewater.com.au/Sunburys-Water-Future



The Sunbury region and local waterways

Jacksons Creek and Emu Creek flow through the Sunbury region. They both border the future planned growth area.

More about Jacksons Creek

The current state of Jacksons Creek has been rated between very low to moderate in its ability to support a range of native species, including fish, frogs, macroinvertebrates (such as aquatic insects, worms and snails) and platypus. Platypus have been observed in Jacksons Creek near Sunbury.

The natural flows in Jacksons Creek have changed over time as a result of flows being removed and also added at different locations along the stream and at different times of the year. Examples of these include Rosslynne Reservoir upstream, stormwater runoff from Sunbury, recycled water releases and water diverted for agricultural and other uses. These changes are offset to some extent by 'environmental flow' releases from Rosslynne Reservoir. However, over time there has been erosion along Jacksons Creek and changes to its ecology.

To protect the plants and aquatic life in the creek, it needs to flow at the right levels and at the right times to mimic nature where possible. In addition, the volume of stormwater runoff needs to be controlled and high flows at certain times of the year should be avoided.

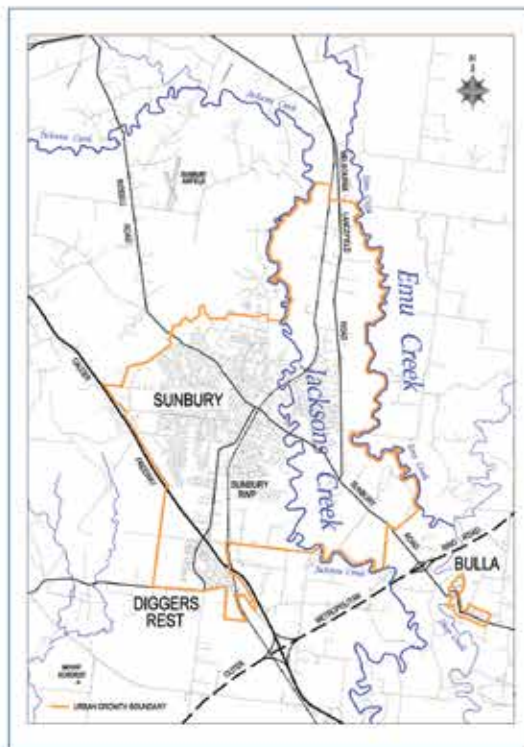


More about Emu Creek

The current state of Emu Creek has been rated between low to moderate in supporting a range of native species including fish, macroinvertebrates and platypus.

Emu Creek is naturally ephemeral (only flows for part of the year) with a chain of ponds providing habitat for a number of native fish and other aquatic life.

Emu Creek is considered to have an important population of, and provide a habitat corridor for, the Growling Grass Frog. To protect the conditions supporting the values in Emu Creek, steps will need to be taken to lessen the risks of additional stormwater flows outlined in the Healthy Waterways Strategy.



How does the water sector look after our waterways?

We can't restore every river and creek to its natural state, but we can help protect and improve them. Each year, Melbourne Water invests \$65 million doing this across the Port Phillip and Western Port catchments, while balancing the needs of the community, costs and safety.

Work includes planting native vegetation, removing weeds and litter and making sure stormwater (flow and quality) from new development is managed to reduce its impacts.



APPENDIX C: EMAIL DISTRIBUTED TO DATABASE



Sunbury's Water Future

Sunbury's population is set to double in the next 20 years - increasing demand for water and impacting the local environment.

Western Water and Melbourne Water are looking at future water solutions for Sunbury and nearby towns.





Help shape the future

Here's how you can help shape decision-making. Visit [Sunbury's Water Future site](#) for:

1. Find out more through our factsheets and FAQs.
2. Complete our survey (It takes 10-15 minutes and you can enter the draw to win \$100 off your water bill).

Why stay informed?

We'll use the survey results to help plan discussions with the local community about Sunbury's Water Future early next year.

There's a lot to talk about and we want to involve as many people as possible. What we hear from the community will help set our direction for decades to come.



About Sunbury's Water Future

Sunbury's Water Future is a joint project between Western Water and Melbourne Water, with support from Hume City Council and the Victorian Government.

[Sunbury's Water Future site](#) has plenty of detail including factsheets on:

- Challenges for the Sunbury region
- Water management in the Sunbury region
- Natural and urban water cycle
- Integrated water management
- Looking after rivers and creeks
- Having your say
- Western Water and Melbourne Water

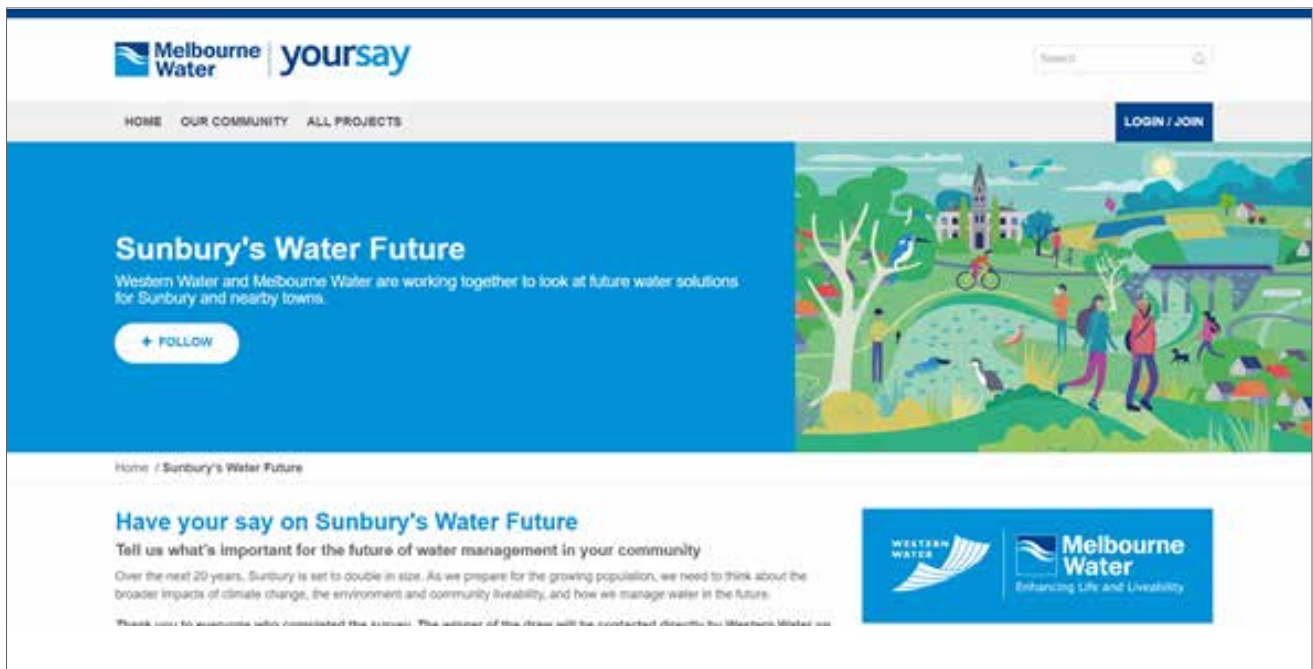


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APPENDIX D: YOUR SAY WEBSITE

The website (screenshot below) can be viewed at:

yoursay.melbournewater.com.au/Sunburys-Water-Future





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PLEASE NOTE: While every effort has been made to transcribe participants comments accurately a small number have not been included in this summary due to the legibility of the content. Please contact Jane Lovejoy at jane@mosaiclab.com.au for any suggested additions.