

Central Coast Water Security Plan

Engagement Summary

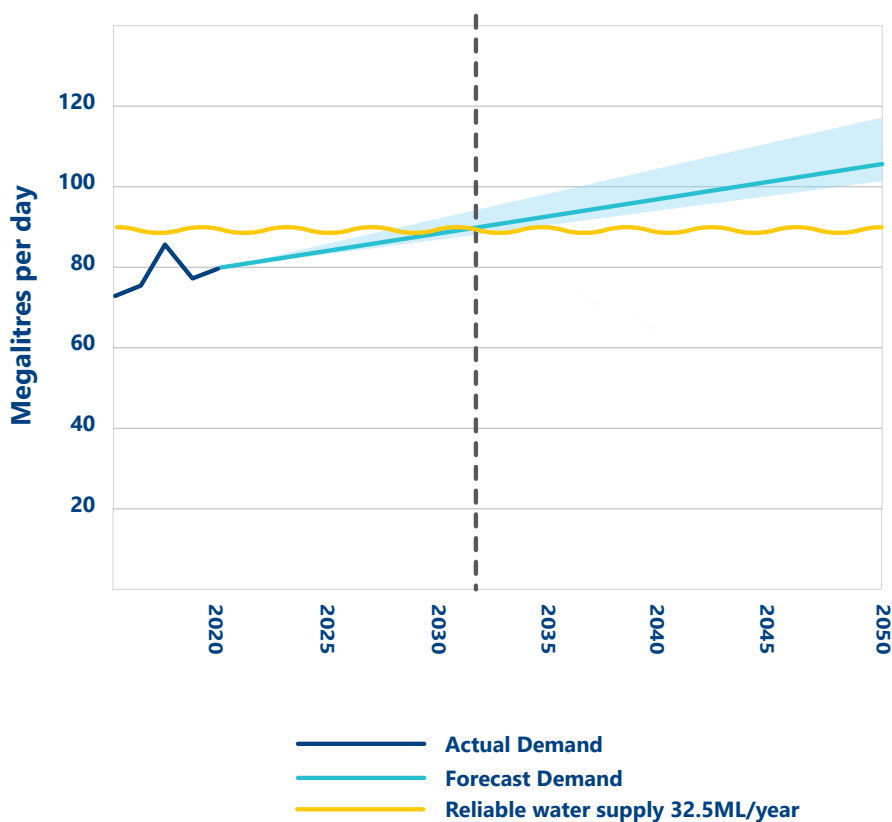
Central Coast Council

Planning our water future

It is important that we continue to plan for the Central Coast's future water needs.

As the Central Coast grows, so does the demand for water. However, our current infrastructure can only supply us with a limited amount of water, so we need to address ways to grow our supply, and manage our demand to ensure we have enough water to meet our future needs:

The water balance: supply versus demand



How you connected



2,238 visits to the Your Voice Our Coast website



The factsheets on the water supply and demand options were downloaded 442 times



Over 11,000 stakeholders were kept up-to-date through e-news



230 stakeholders were kept up-to-date through project update newsletters



127 advertisements were run across two radio stations



308 surveys completed



116 people participated in a series of three live video forums over a five month period



269k people were reached, with 339 clicks through to the project page



230 views of our educational video on water supply and demand options

Working with our community

Between December 2020 and April 2021 Central Coast Council sought community feedback on the Water Security Plan – our plan to secure the Coast’s water supply for future generations.

A representative sample of the Central Coast community was taken on a journey to learn about their water values and educate them on the different water supply and demand options being considered. Five portfolios – or groups of options – were presented to the community and we set out to learn what their preferences were.

Three phases of community consultation consisting of deliberative forums and in-depth phone interviews were conducted in December 2020, and February and April 2021.

During the second and third phases of community consultation, we also ran two online opt-in surveys (available to anyone to fill in), from 8 February to 21 March 2021, and from 19 April to 2 May 2021.



Results: Round 1 (December 2020)

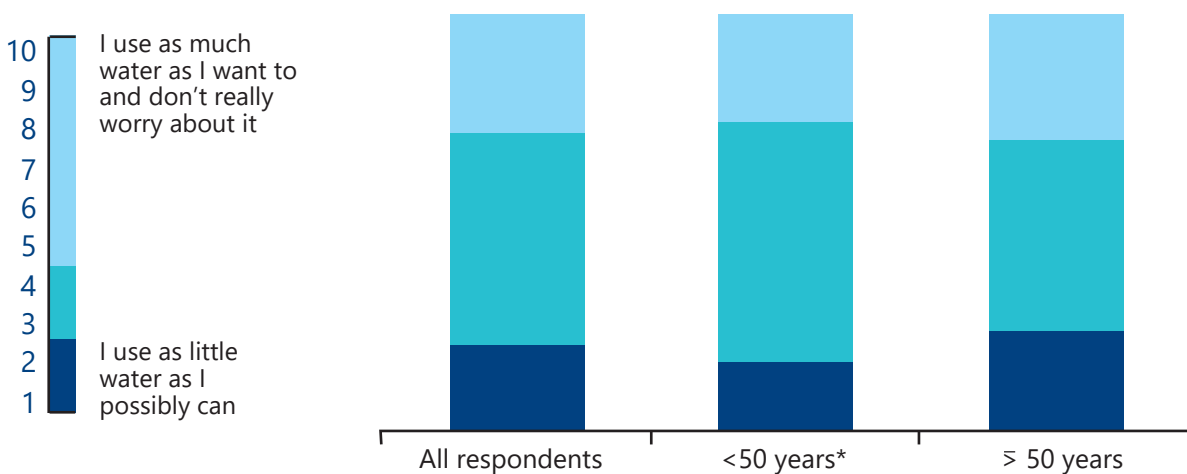
Phase 1 forum and phone interview results

During this first phase of consultation we looked to find out what participants valued around water, and what aspects Council needs to take into consideration when planning water for the future.

There were many water values that emerged that Council will be cognisant of when planning water for the future, such as **reliability, affordability and environmental impact.**

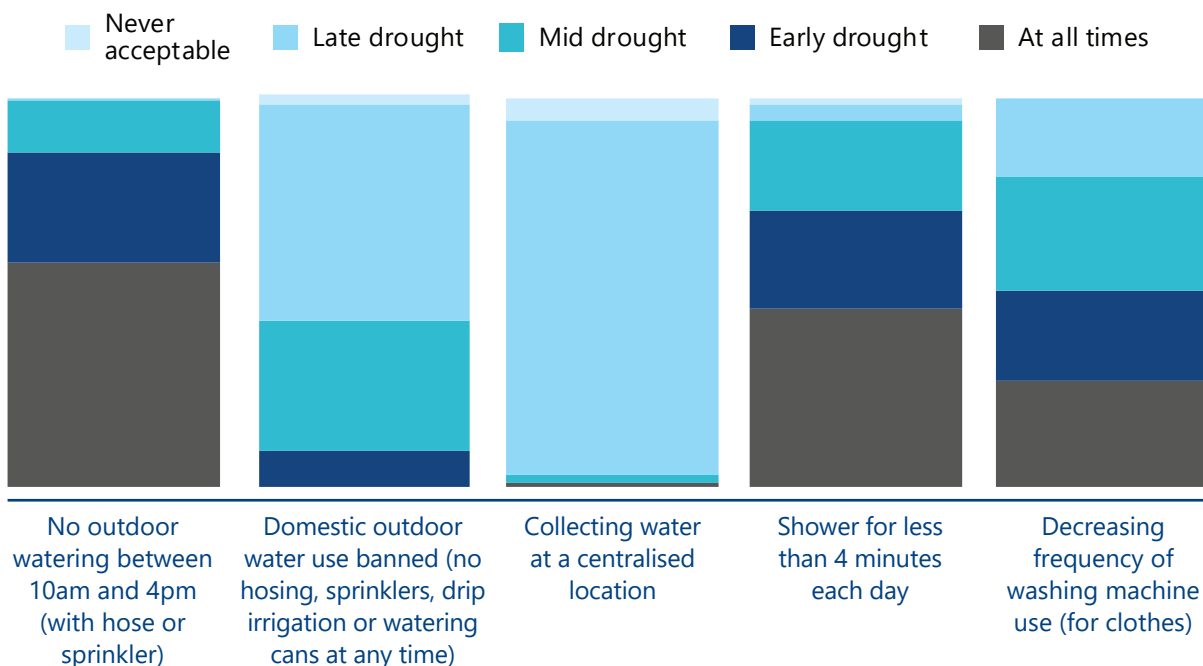
Participants appeared to have a positive attitude toward water conservation, trying to use as little water as needed and acknowledging that their attitudes to water usage have changed as a result of the recent drought, water restrictions and bushfires.

Attitude to water usage



Water restrictions were seen as important and an accepted component of any future drought management plan, and the majority of the restrictions and regulations explored in the engagement are accepted by participants, with **strong support for some restrictions being in place at all times**, for example, no outdoor watering between 10am-4pm.

Acceptability of water restrictions



Results: Round 2 (February 2020)

Phase 2 forum and phone interview results

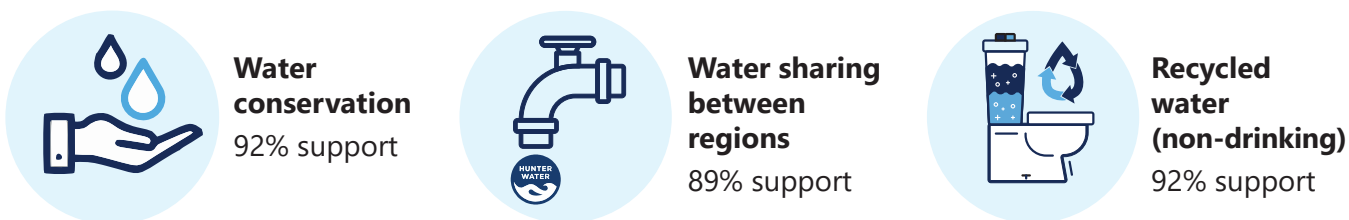
Using the water values identified in forum one, we asked participants to rank the values from most important to least important.

The top three ranked values included:

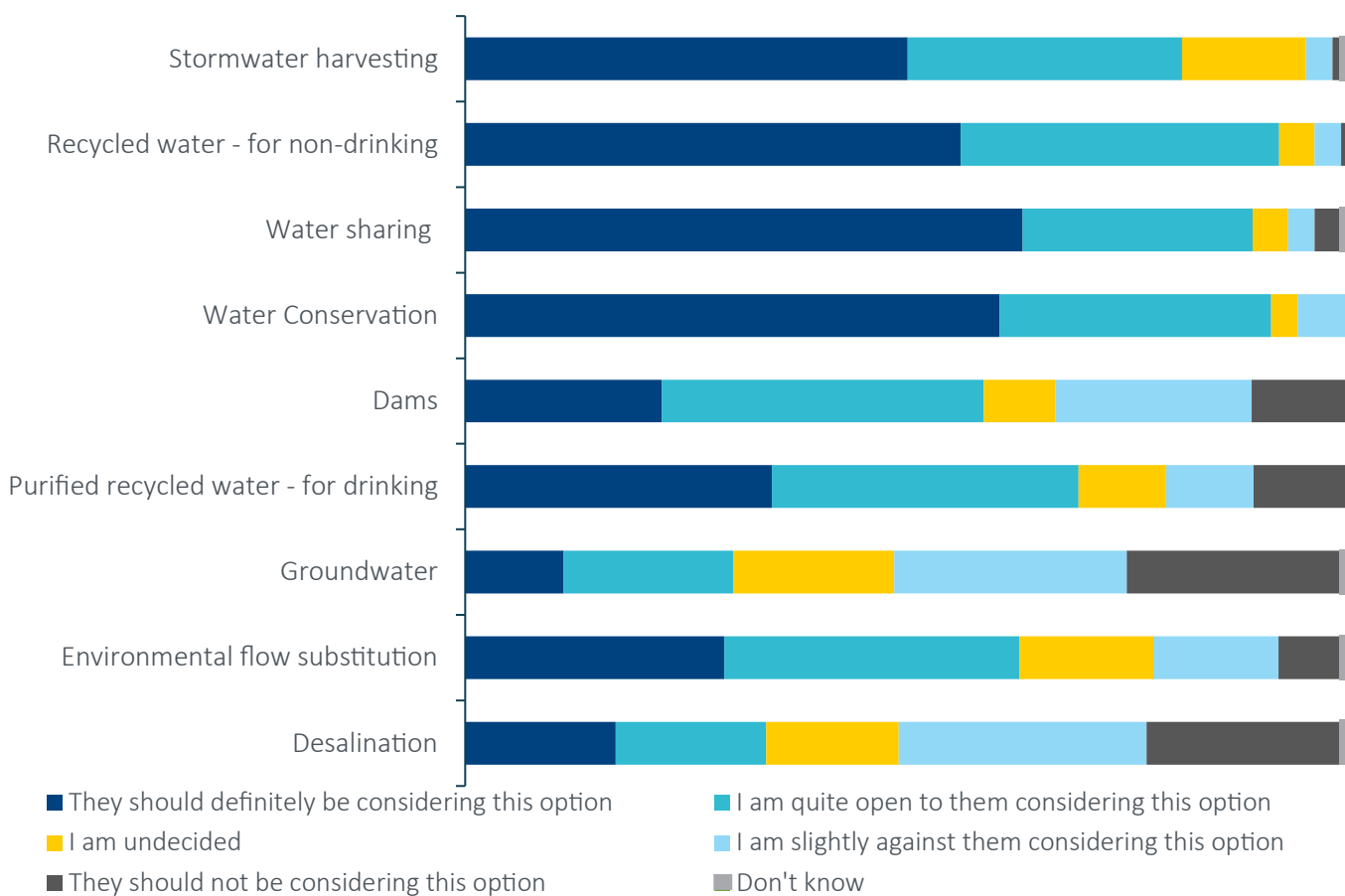
1. **Reliability**
2. **Environmental impact**
3. **Cost to operate**

We also showed participants nine water supply and demand options. After viewing an educational animation and participating in group discussions on the financial, environmental and social impacts of each, we then asked everyone to let us know which options they were open to Council considering.

The top three most supported options were:

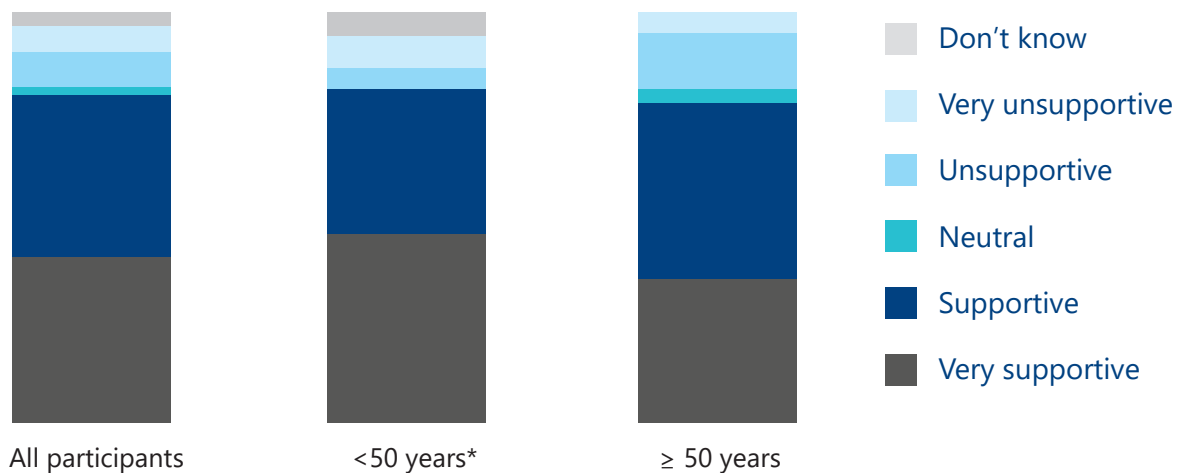


Below shows the participants final openness to Central Coast Council considering each of the water supply and demand options:



The concept of **project offsets** was also introduced. This involves compensating for impacts on the environment at one site through activities at another site – for example, offsetting greenhouse gas emissions and biodiversity impacts such as habitat loss.

The large majority of participants were supportive of this idea (80% were either 'very supportive' or 'supportive'), with 16% opposing the idea (in total).



Water options opt-in survey results

This survey asked participants to review the factsheets or watch the seven-minute video on the water supply and demand supply side options before completing the opt-in survey.

The top three most supported options were:



Stormwater harvesting
90% support



Water sharing between regions
75% support



Recycled water (non-drinking)
76% support

A note about sampling bias: This online survey was 'opt-in', which means participants proactively sought to complete the surveys as opposed to a sample or respondents being selected to more accurately reflect and represent the population makeup of the Central Coast community.

For this survey, 73% of respondents were over the age of 50.














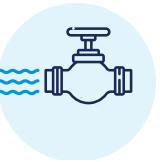










The top option from deliberative forum 2 was water conservation (92%). However, in this forum, final opinions for stormwater harvesting were more favourable amongst those aged 50 years and over (84% compared to 77% amongst those aged under 50 years). Likewise, for recycled water (non-drinking) participants aged 50 years and over were more positive towards recycled water for non-drinking than their younger counterparts.

This is a strong indicator as to why there is a difference in results between the data we accumulated from deliberative forum 2 (which was representative of the Central Coast population), and this opt-in survey, which received input mostly from those over the age of 50.

Results: Round 3 (April 2020)

Phase 3 forum and phone interview results

Participants were provided with information on five different portfolios of water supply and demand options and were then invited to discuss these portfolios. It was noted that no single option could effectively meet the Central Coast’s future water needs.

Portfolio	Incremental option delivery					
Climate independent (staged desalination capacity)						
	Water conservation	Recycled water (non-drinking)	EFS/PRW*	Desalination		
Climate independent (upfront capacity)						
	Water conservation	Recycled water (non-drinking)	EFS/PRW*	Desalination		
Surface water (traditional sources)						
	Water conservation	Recycled water (non-drinking)	Groundwater	Rainwater tank scheme	Dam enlargement	Water transfers
Enhanced water sharing with Hunter Water Corporation						
	Water conservation	Sharing water	Dam enlargement	Recycled water (non-drinking)		
Traditional transitioning to climate independent						
	Water conservation	Groundwater	Recycled water (non-drinking)	Dam enlargement	EFS/PRW*	Desalination

*Environmental flow substitution and/or purified recycled water

There was widespread support for Council adopting a portfolio approach in planning water for the future in the Central Coast region – the idea of having a number of options rather than placing all our ‘eggs in one basket’ was felt to reduce risk and cost and seen to be common sense.

Important to note: Participants during phase 2 indicated low levels of support for desalination, with environmental impacts from greenhouse gas emissions being a key concern.

There was also concern that a desalination plant would result in permanent structures being installed on the beach.

A large amount of participants also were supportive for consideration of environmental and social offsets – involving compensating for impacts on the environment or biodiversity at one site through activities at another site.

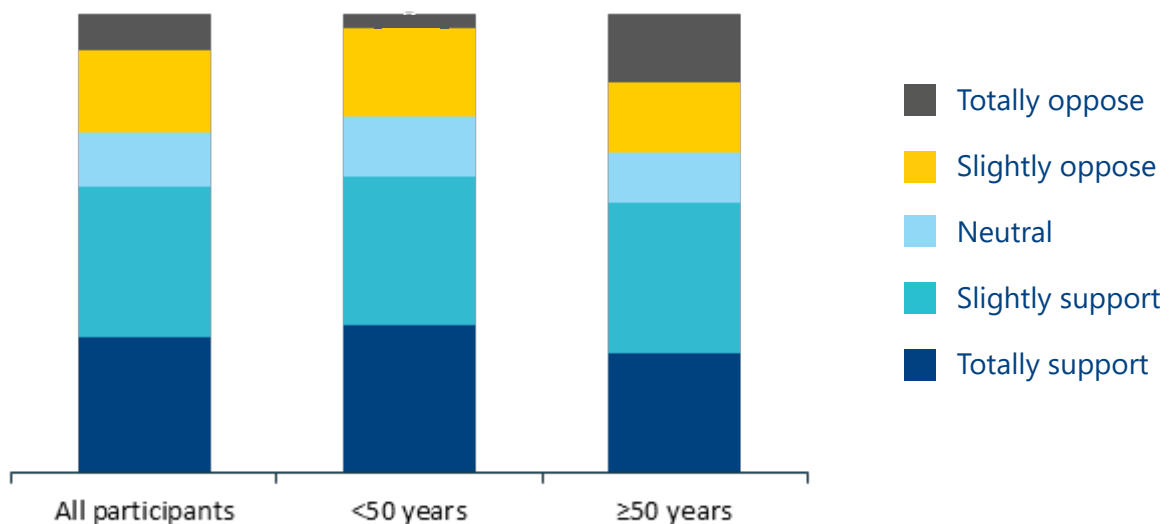
In light of this, when developing these portfolios, Council allowed for the costs of carbon offsetting of emissions associated with desalination. We also allowed for trenchless construction techniques in the vicinity of the coastline - to avoid any permanent structures on the beach.

Following the discussions on each of the portfolios, we asked participants what their level of support for each portfolio was. **The portfolios ranked from most supported to least supported were:**

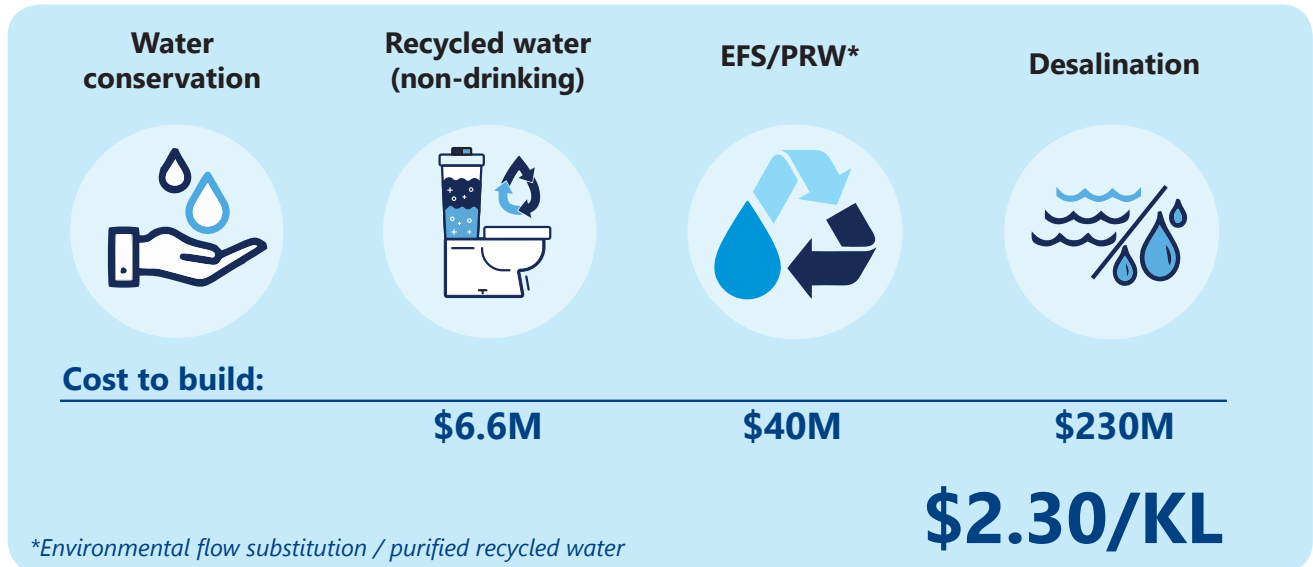
1. Portfolio 2 (66%)*
2. Portfolio 1 (56%)*
3. Portfolio 5 (44%)*
4. Portfolio 3 (26%)*
5. Portfolio 4 (21%)*

*Percentage is number of participants who selected "totally support" or "support"

Support was greatest for Portfolio 2.



Elements in this portfolio such as recycled water and EFS/PRW were seen as particularly appealing and the strong reliability of this option, even during periods of drought, and relatively lower cost to build and operate contributes to its appeal. Participants also learnt that a portfolio containing desalination with carbon offsetting was still affordable relative to the portfolios with investments in dams.



Important to note: This third forum was the first time that participants had seen any estimates of cost to build and cost to operate and revealing this appears to have had an impact on attitudes and level of support for some of the water options from the previous round of consultation. In particular support for the rainwater tank scheme appears to have declined somewhat in this phase due to the relatively high cost for Council.

Water portfolio opt-in survey results

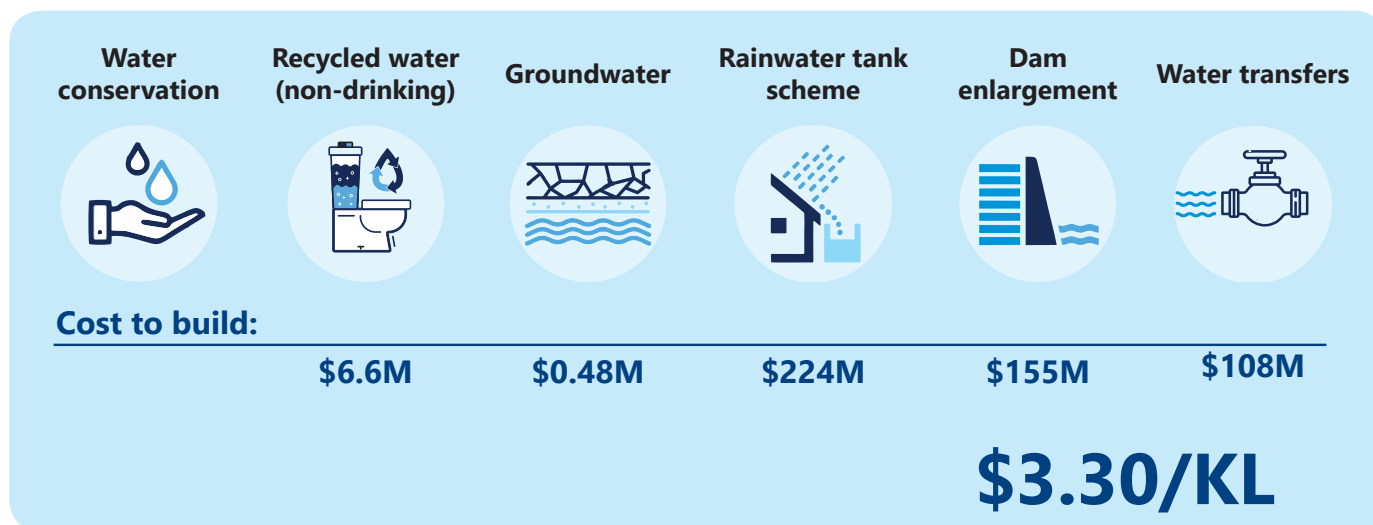
This survey asked participants to review the information packages prepared for each of the five portfolios before completing the opt-in survey.

The portfolios ranked from most supported to least supported were:

1. Portfolio 3 (61%)*
2. Portfolio 4 (56%)*
3. Portfolio 1 (42%)*
4. Portfolio 2 (40%)*
5. Portfolio 5 (33%)*

*Percentage is number of participants who selected "totally support" or "support"

Support was greatest for Portfolio 3.



Using the water values identified in phase one, we asked participants to rank the values from most important to least important.

The top three ranked values were:

- 1. Reliability**
- 2. Environmental impact**
- 3. Cost to build and operate**

These top three values are the same as the values participants ranked in the phase two forum. However it is important to note that the respondents from the water portfolios opt-in survey indicated greater support for the portfolios considered to have lower reliability and higher environmental impacts.

A note about sampling bias: This online survey was 'opt-in', which means participants proactively sought to complete the surveys as opposed to a sample or respondents being selected to more accurately reflect and represent the population makeup of the Central Coast community.

For this survey, 80% of respondents were over the age of 50.

In deliberative forum 3, when asked for their support levels on the portfolios, support for portfolio 3 was considerably higher amongst participants aged over 50 years (51%) compared with the younger participants (9%). For portfolio 4, older participants once again were slightly more supportive than younger participants (27% versus 16%).

This is a strong indicator as to why there is a difference in results between the data we accumulated from deliberative forum 3 (which was representative of the Central Coast population), and this opt-in survey, which received input mostly from those over the age of 50.

Overall key learnings

Based on the data we have received that is representative of the Central Coast population, we have learnt that when it comes to planning our water future residents value reliability, affordability and minimising environmental impact.

Both water conservation and recycled water for non-drinking emerged as (equally) the most preferred water supply options amongst the representative population. These preferences are then reflected again in the most supported portfolio – Portfolio 2 – which includes both these options.

Desalination plants were a source of contention and debate amongst the participants in the deliberative forums. While some remained sceptical about them, by the third and final forum, many participants became more accepting of them compared to when the engagement process began – once the costs and ability to offset carbon emissions were understood.

The large support for the climate independent portfolios reflected the values that the community members identified in phases 2 and 3. Those portfolios provided the most reliable supplies, were shown to be affordable – relative to the other portfolios – and avoided the threatened flora and fauna impacts associated with raising Mangrove Creek Dam. Carbon emissions produced through the desalination process were also being offset which further changed perceptions.

The community also recognised the drought management benefits of the climate independent supplies and noted that if Council invested in large rainfall dependant supplies, desalination may still need to be triggered in addition – as a response to a future severe and prolonged drought.

From these forums, it was also clear that participants felt that if Council were to build a desalination plant, they should build one that has a larger capacity (30 megalitres per day), rather than the smaller 20ML per day option. This would contribute to improved levels of water supply during a severe and prolonged drought and takes into consideration the changing climate and ongoing population growth as part of planning for the longer term.

What's next?

All the feedback we received, including values on water, preferences on water options and support levels for the portfolios will be used to inform the development of the draft Water Security Plan – alongside other ongoing investigations, modelling and analysis.

The draft plan will be placed on exhibition in late 2021 for final community feedback.

Find out more and stay up to date at yourvoiceourcoast.com