



# **Bruny Island Water Supply Strategy: Community update**

**30 March 2019**



# Today's presentation

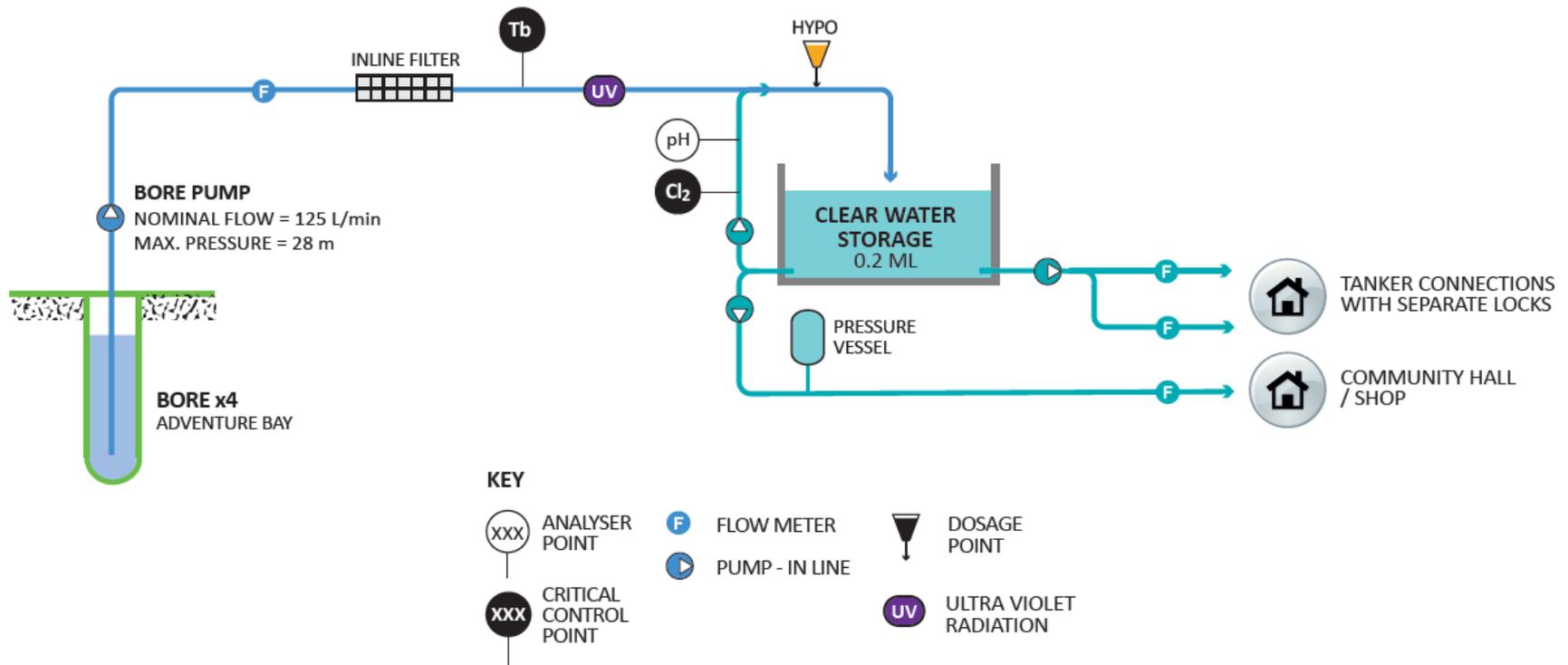
- Adventure Bay drinking water system
- What we have done
- Understanding your views
- Yield assessment
- Next steps
  - Long-term

# Adventure Bay Drinking Water System: Overview

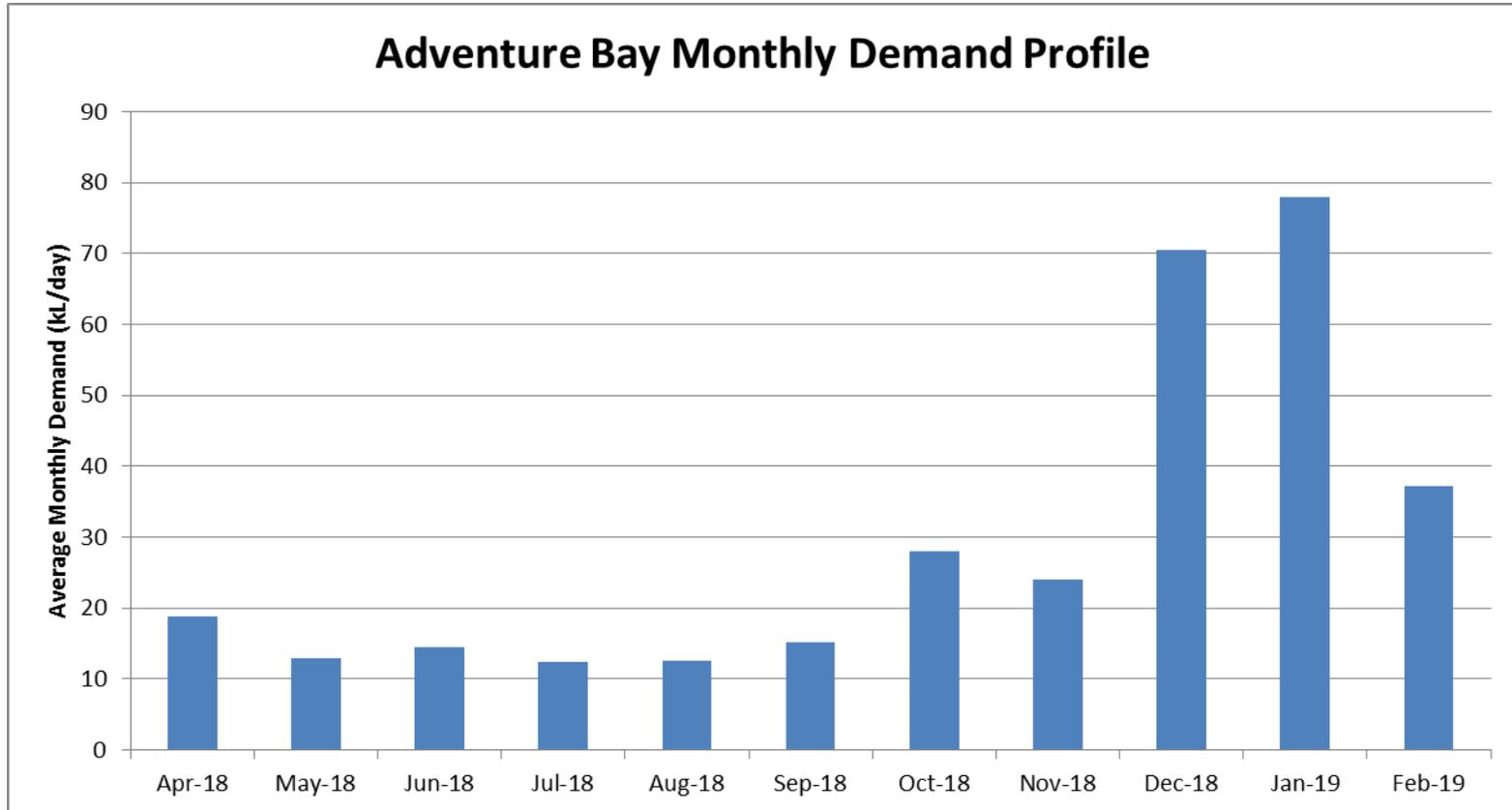


# Adventure Bay Drinking Water System: Process Flow Diagram

## ADVWT01 - ADVENTURE BAY WATER TREATMENT PLANT



# Adventure Bay Drinking Water System: Demand Profile



- Average Day Demand: 29.6 kL/day
- Mean Day Max Month Demand: 78 kL/day
- Peak Day Demand: 154.7 kL/day

# What we have done

TasWater's Long-Term Strategic Plan Customer Outcomes	Past performance on Bruny Island?	What have we done to date?
You are satisfied with our service	<ul style="list-style-type: none"> <li>Community, business and stakeholder concerns raised with TasWater Chairman and Government Ministers</li> </ul>	<ul style="list-style-type: none"> <li>On-island community information sessions</li> <li>Used Bruny Life Survey (2018) to understand community preferences with respect to water supply on the Bruny</li> </ul>
The local economy benefits from our investment and capacity building	<ul style="list-style-type: none"> <li>Growing demand on the water supply system</li> </ul>	<ul style="list-style-type: none"> <li>Work is underway to develop the Bruny Island Long-Term Drinking Water Supply Strategy</li> </ul>

# What we have done

TasWater's Long-Term Strategic Plan Customer Outcomes	Past performance on Bruny Island?	What have we done to date?
Your drinking water is clean and safe to drink	<ul style="list-style-type: none"> <li>Upgrades to water treatment plant and improvements to visibility of plant performance required</li> </ul>	<ul style="list-style-type: none"> <li>Chlorine added.</li> <li>Further optimisation work underway</li> <li>Installed plant performance monitoring and link to TasWater's 24-hour Operational Control Centre</li> <li>Visibility of water quality available on TasWater website</li> </ul>
You have a reliable supply of water	<ul style="list-style-type: none"> <li>Groundwater supply can become drawn down during periods of peak demand and may be at risk of saline intrusion</li> </ul>	<ul style="list-style-type: none"> <li>Installed aquifer level monitoring and link to TasWater's 24-hour Operational Control Centre</li> <li>Installed customer demand monitoring</li> <li>Recently completed a yield assessment on the Adventure Bay aquifer</li> </ul>

# Understanding your views

- TasWater were involved in the Bruny Life Community Survey
- There were four questions in relation to water:

How confident are you in accessing enough clean water to meet your Bruny household's needs?

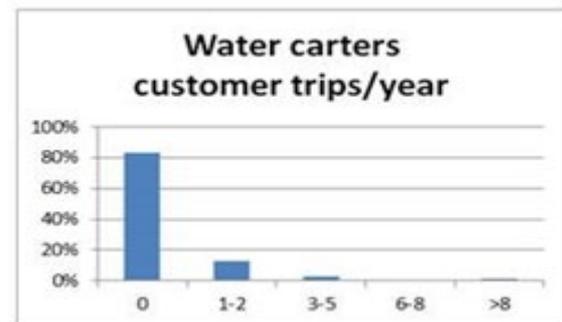
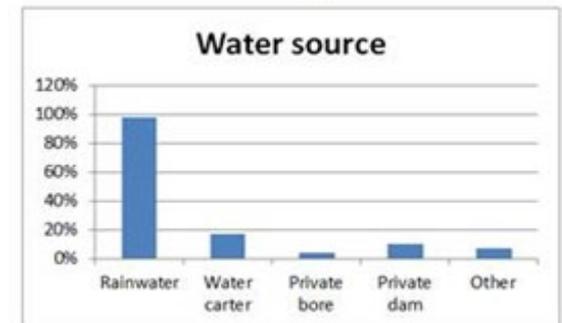
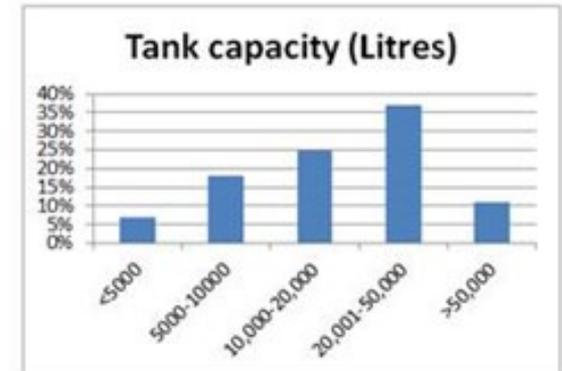
What sources of domestic water are used at your Bruny property?

What's the capacity (in litres) of the domestic water tanks at your Bruny property?

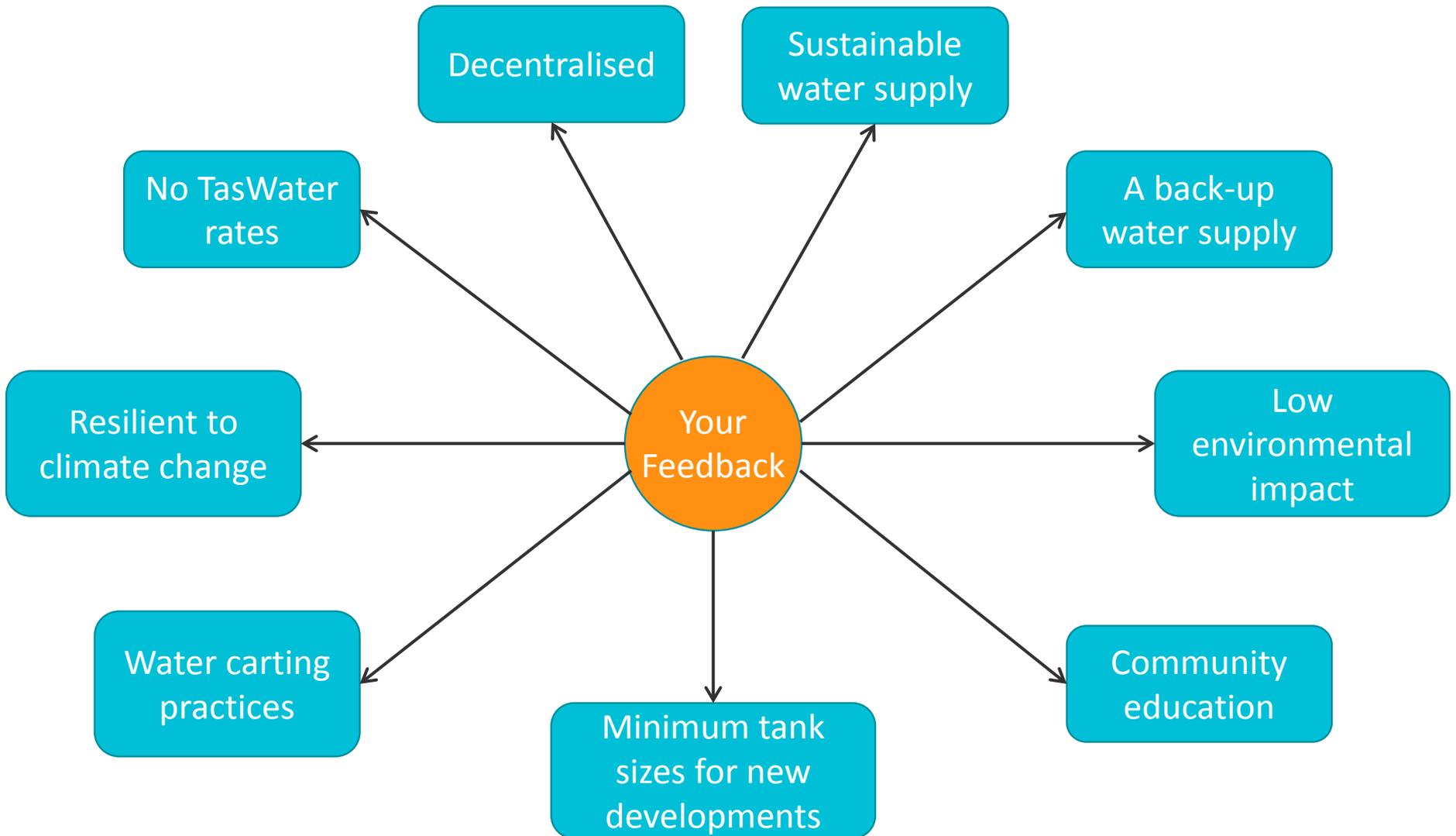
In the last 12 months, how many times did a water carter deliver water to your Bruny property?

# Understanding your views – What Bruny Life told us

- Most private water tank capacities are between 20-50KL
- Most drinking water is sourced from roof rain water harvesting
- Most drinking water tanks require little to no top up from water carters
- Of the 20% of residents requiring carted water – over half only require 1-2 trips per year
- 20% customers have supplementary supplies i.e. bores, dams etc.
- Permanent residents are more likely than shack owners to have larger tanks but are more likely to use a water carter



# Understanding your views – themes arising from Bruny Life



## Understanding your views – did we get it right?

Have we accurately distilled your preferences and views into a set of criteria that we can use to drive development of strategic options?

# Adventure Bay yield assessment

- The raw water in the system is sourced from an unconfined Quaternary sand aquifer and recharges through natural ground recharge, inflow from the Captain Cook Creek and inflow from rain/surface water.
- The analysis considered various rainfall scenarios including average rainfall, no rainfall and a dry year. Various climate and demand scenarios were also investigated.
- The analysis revealed that the aquifer will meet average day demand. However, water security will be severely impacted during times of peak demand.
- Long-term use of the aquifer will likely heighten the risk of saline intrusion.

## Next steps: long-term

- Using the feedback from today's session and the outcomes from the recent Adventure Bay yield assessment, we will develop a range of strategic options for the long-term water supply strategy, including:
  - Investigating augmenting and upgrading current Adventure Bay water supply
  - Investigating a supplementary site on Bruny
  - Community education around water tank health and private water supply requirements
  - Demand management
- We will continue to work with you in the development of these options.

## Contact details

Our contact details:

- Community Engagement team on 13 6992
- [communityengagement@taswater.com.au](mailto:communityengagement@taswater.com.au)
- GPO Box 1393, Hobart TAS 7001
- [taswater.com.au](http://taswater.com.au)
- [yoursay.taswater.com.au/brunyisland](http://yoursay.taswater.com.au/brunyisland)
- Eleanor on 0428 248 144 or [eleanor.laud@taswater.com.au](mailto:eleanor.laud@taswater.com.au)



## Questions and feedback

