

Upper Barwon River Forum

Saturday 22nd October
Forrest Public Hall

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Water for our Future strategy

Our water future is

A secure future where our rivers flow,
our foods grow and our impact is low.

Resilient, innovative and sustainable, with
abundant water from a range of sources
and where we actively protect and improve
water for the environment.

Ethical, healthy and responsible, with affordable
and equitable access for everyone.

A shared responsibility, by valuing and
conserving water and respecting the diverse
needs of our community, cultures, and
the environment.



- 52 community members (27 male, 25 female)
- 3,000 hours
- Vision for our water future
- 5 principles
- 23 metrics
- 34 ideas and options recommended for future consideration

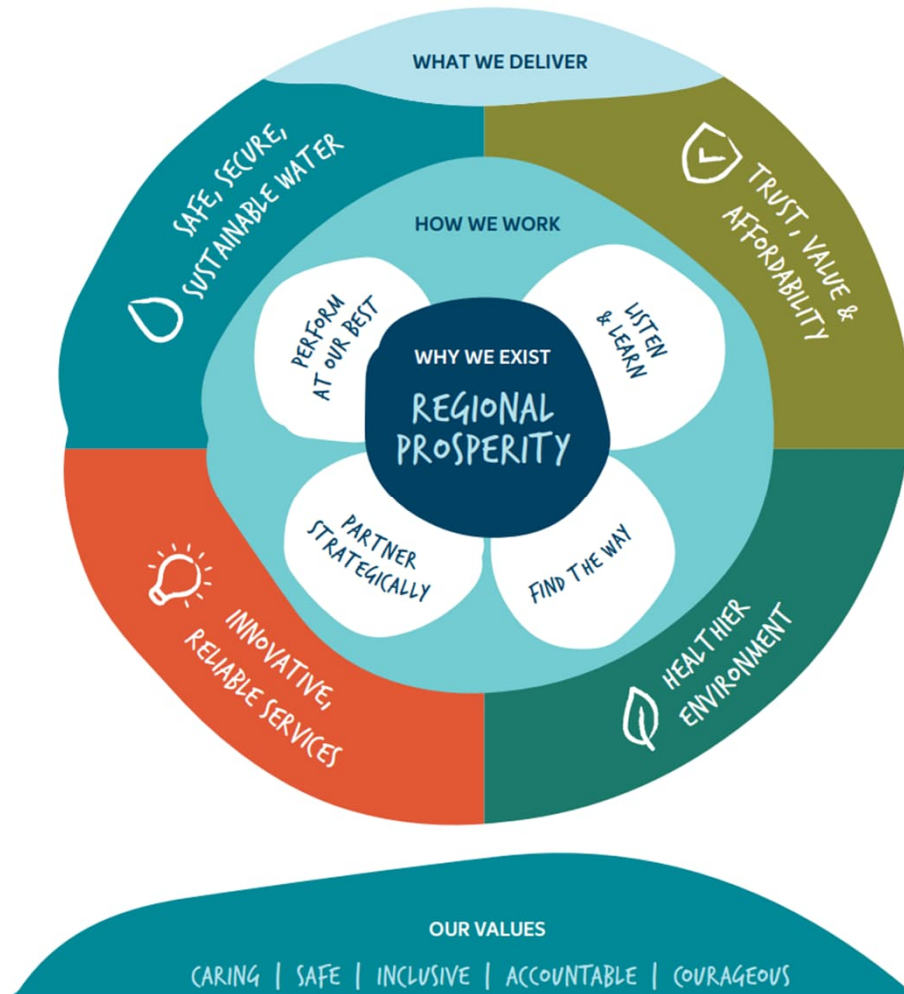
Water for our Future Strategy

Even though storage levels are healthy today, our region is growing rapidly and we are seeing a long-term shift towards a hotter, drier climate

Our priority is to deliver a secure water future through actions that transition us to more climate resilient manufactured water, embrace integrated water management opportunities and facilitate smarter water use.



Strategy 2030



Our challenge

POPULATION GROWTH

343,700 (2021)

448,600 BY 2036



THE REGION

- AGRICULTURAL LAND & PLANTATIONS 67%
- NATIONAL PARKS AND CONSERVATION 12%
- URBAN AREAS 8%
- WATER BODIES 1%



CHANGE IN RAINFALL BY 2040

DECREASE BY 14%
WITH MORE-INTENSE RAINFALL IN SOME YEARS

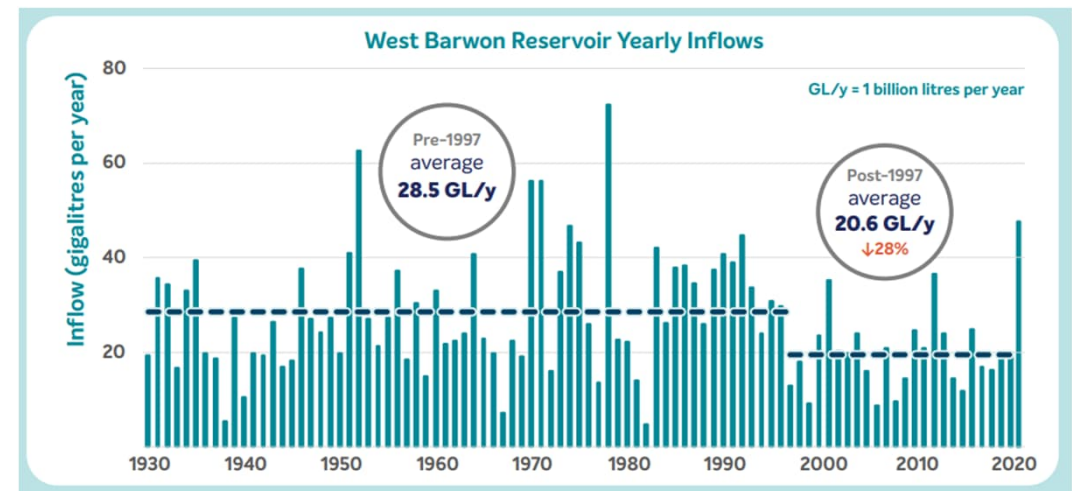


TEMPERATURE

AN INCREASE OF 0.6-1.5C IN BARWON SOUTH WEST BY 2040

CONDITION OF WATERWAYS

	BARWON	MOORABOOL
GOOD:	4%	0%
MODERATE:	37%	57%
POOR:	41%	5%
VERY POOR:	17%	38%



Declining health of our rivers

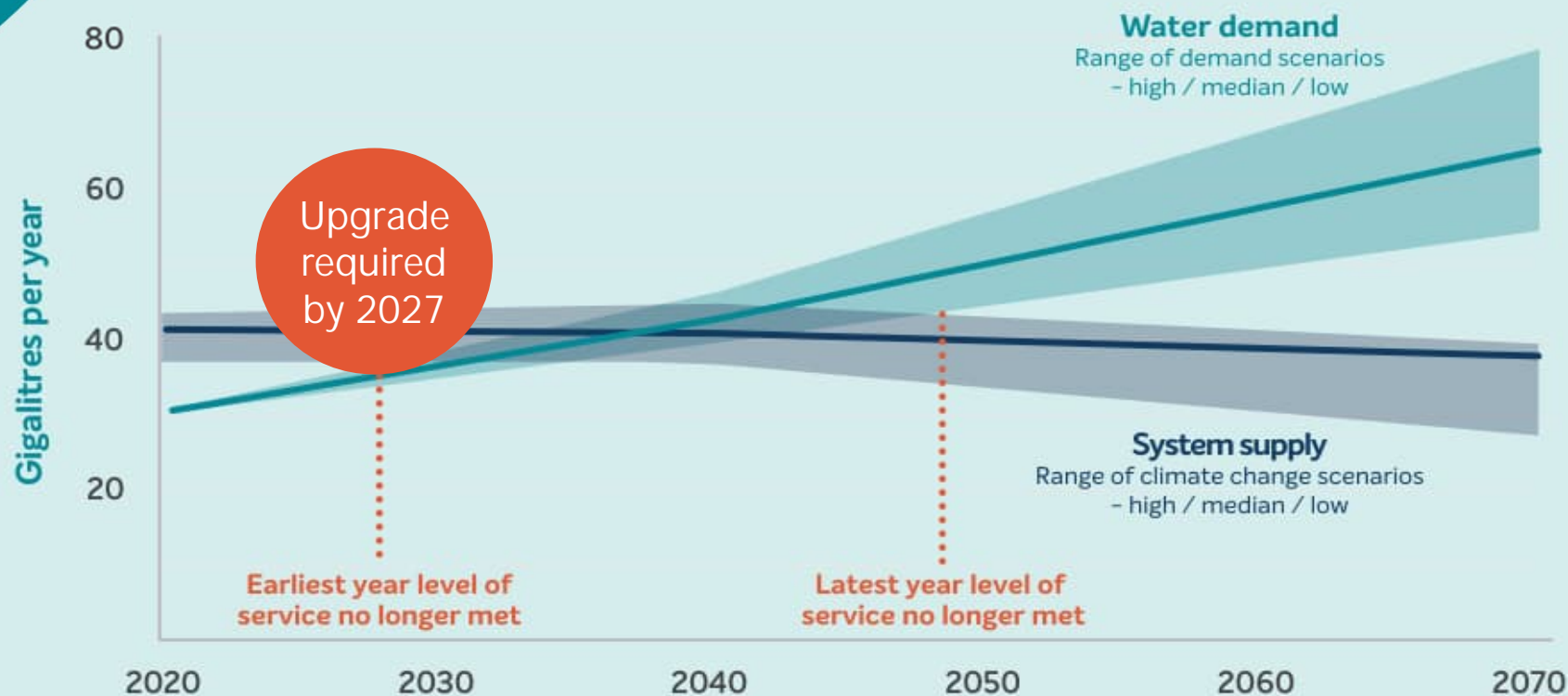
- Our rivers are some of the most flow-stressed in Victoria
- The amount of water available in both the Barwon and Moorabool River basins has declined by 11 per cent and 19 per cent respectively since 2005 due to a drying climate.

Redressing water injustice of Traditional Owners

- The Barwon and Moorabool Rivers have significant cultural values for our Traditional Owners and their connection to Country

Next major supply upgrade

Geelong, Golden Plains, Bellarine & Surf Coast



	2022	2023	2024	2025	2026	2027	2028	2029	2030	2040	2050	2060	2070
Median Growth / Median Climate Change	9,500	8,900	8,300	7,600	6,300	6,300	5,700	5,100	4,400	-1,900	-10,400	-18,900	-27,400
High Growth / High Climate Change	4,600	3,800	3,100	2,300	1,500	700	0	-800	-1,600	-9,700	-23,600	-37,500	-51,500

Our response

In the next 5 years, we will deliver 10 actions for the Geelong, Golden Plains, Bellarine and Surf Coast system to increase water supply capacity by 4,800 million litres, shifting the timeframe for the next major supply upgrade from 2027 to 2032.



Find more water

GG1 Extend the reach of the Melbourne-Geelong Pipeline so that it can supply growing demand and allow for water to be returned to the Moorabool River (\$22.4M) – (8,500 ML/year of entitlement to rivers by 2032).

GG2 Put more recycled water to productive use

GG3 Continue to investigate and increase our readiness to implement long-term actions



Smarter water use

GG4 Work with customers to save water through our sustainable water use program (\$2.5M)

GG5 Expand our use of smart technology to help reduce costs and save water (\$8.4M digital meters)

GG6 Maintain efforts to continually optimise our system (\$17.5M)



Integrated water management

GG7 Start delivery of the IWM plan for the Northern and Western Geelong Growth Areas (\$28.3M)

GG8 Work with the City of Greater Geelong, Golden Plains Shire, Surf Coast Shire and Borough of Queenscliffe to progress localised IWM opportunities

GG9 Support improved flows and waterway health (\$7.3M- Catchment and Waterway health incl. sponsorship citizen science, Landcare, water quality protection, sponsorships, willow removal & (\$2.9M in remediation for Boundary Creek / \$0.8M decommissioning Barwon Downs)

GG10 Investigate the feasibility of a large-scale alternative water grid to distribute recycled water and stormwater to boost water supply for agriculture and primary industries

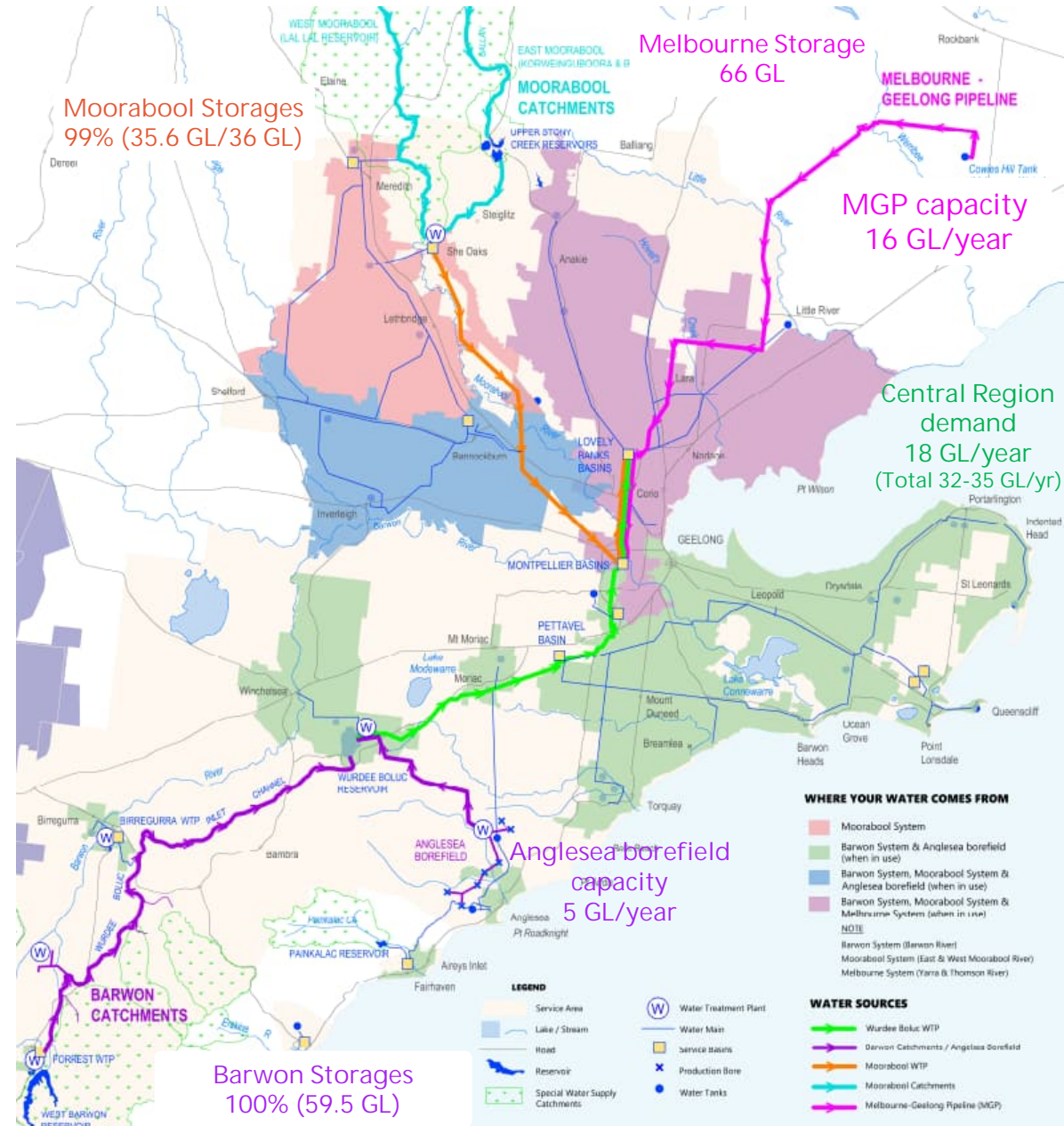


+ 4,800 ML

Water supply system

*Total Geelong region
water storages
99% (94.5 GL / 95.6 GL)*

Storage levels as @ 17 October 2022



Upper Barwon system

Under our Upper Barwon Bulk Entitlement (BE) we can harvest water from West Barwon reservoir, East Barwon river, Callahan creek, Dewing creek, Matthews creek and Pennyroyal creek.

In addition to complying with our BE conditions we also aim to balance water supplies across our network

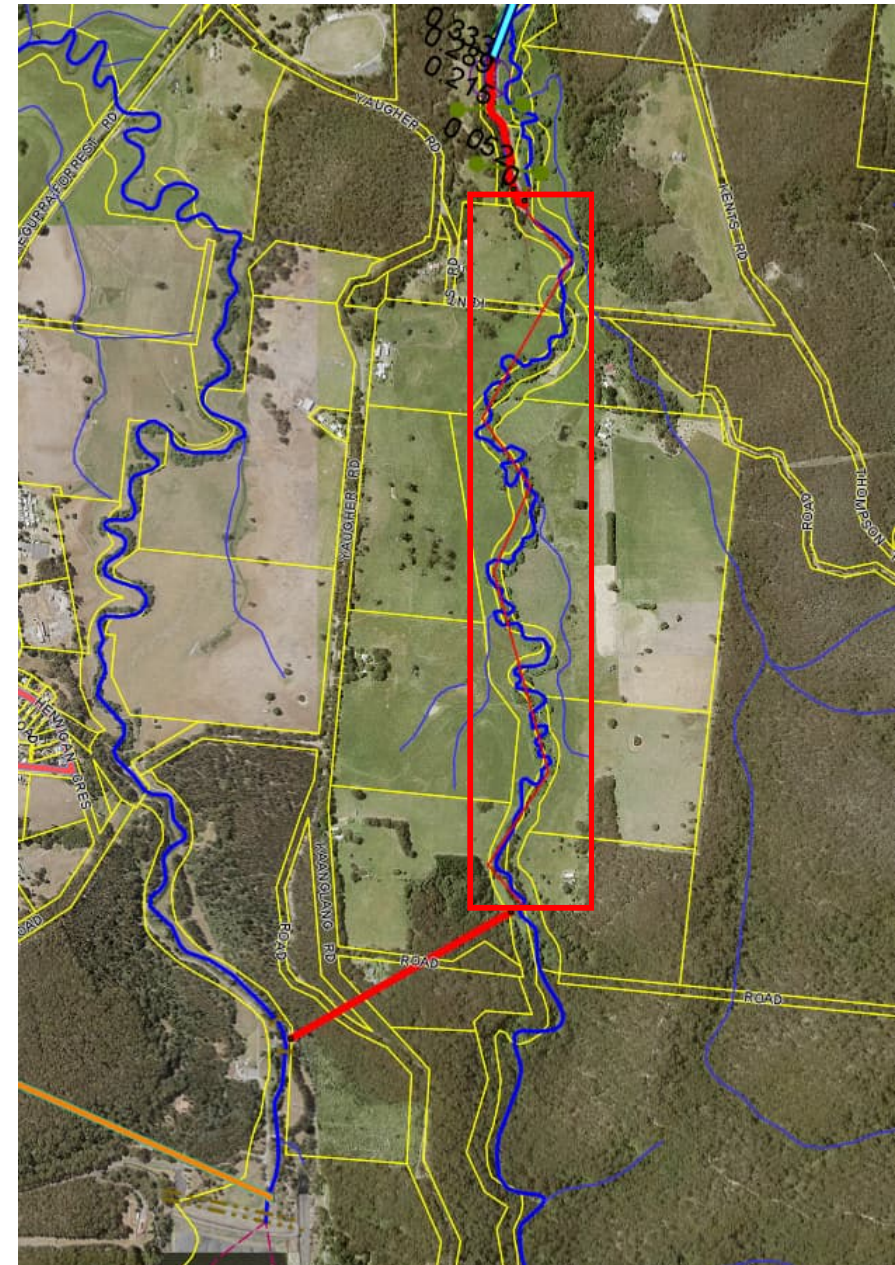
The BE specifies conditions & obligations including:

- Rules about when water can be taken
- How much water can be taken
- Environmental flows requirements
- Metering, accounting and reporting obligations



East Barwon willow removal project

- BW utilise this reach of river to transfer water from West Barwon Reservoir to the Wurdee Boluc Inlet Channel
- The willows were inhibiting the flow of water which resulted in
 - A water security risk
 - More regular localised flooding/water logging of neighbouring properties
 - Water quality risks – Safe Drinking Water Act



Questions?

Our challenge

- Increased demand from:
 - Population increase
 - Industry
 - Agriculture
- Climate is changing (hotter & drier)
- Declining environmental health of rivers
- Maintaining affordability

