#WaterForTomorrow FACT SHEET

Climate change and our drinking water

Busselton is surrounded by water. From our spectacular coastlines and stunning beaches to the rich, lush forests and native bushlands that abound in our region, we rely upon water in all its forms for our way of life. So, imagine for a moment, where we'd be without it?

Climate change is bringing a world without water much closer. Warmer temperatures, reduced rainfall and extreme weather events are already having an impact on Busselton's precious water sources, the Yarragadee and Leederville aquifers.

How is climate change affecting Busselton's groundwater?

Put simply, Busselton's drinking water supply is reliant on groundwater – it is our only drinking water source.

This groundwater source is replenished by rainfall – so when there's a decline in rainfall, our groundwater is not 'topped up' as much or as often as it once was.

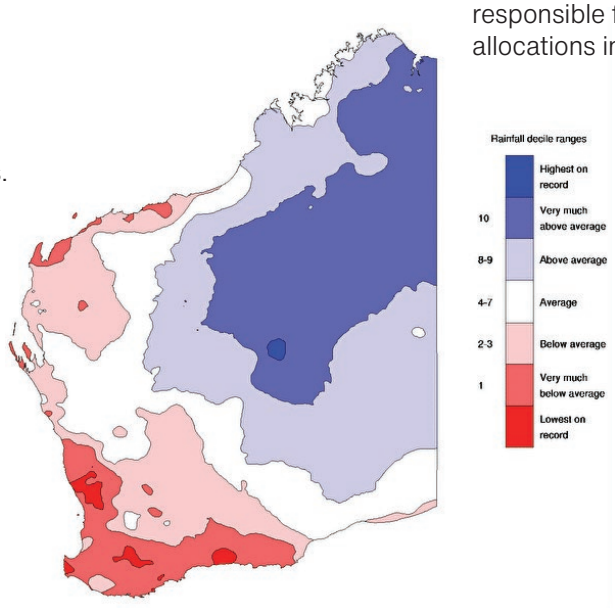

Image credit: Bureau of Meteorology

Rainfall in the South West has dropped around 20 per cent since the 1970s and is projected to continue to decrease. In fact, winter rainfall is forecast to decrease by 15 per cent by 2030.

At the same time, temperatures are expected to increase (by up to 4°C), so too the number of hot days over 40°C. These hotter, drier conditions result in less soil moisture – so even when it does rain, there's less run-off into our water catchments and into our groundwater.

With these changes in rainfall significantly affecting our groundwater supplies, our groundwater allocations may change. The Department of Water and Environmental Regulation (DWER) is responsible for groundwater allocations in the region.

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What can you do to help?

Adapting to climate change means our local community – including individuals, businesses and industry – must use water more efficiently. We all have a role to play in responding to the challenges climate change brings to our region.

It's never been more important to be waterwise. We already know that our customers are committed to water conservation, striving for 110kL per person per year by 2030. It's important we continue these efforts to reduce water use in our homes, businesses and community.

But it cannot be our only response.

In addition to reducing our water use, more sustainable water practices and the use of climate independent water sources will also help to preserve our precious water supplies.

Climate change impacts

NOW

- Longer fire seasons and increased fire risk due to warmer, drier conditions
- Rates of sea-level rise on almost three times the global average
- Rainfall down 20 per cent since 1970
- Temperatures up 1.1°C since 1910

IN THE FUTURE

- Drought will increase
- Rainfall will continue to decline – 15 per cent by 2030; up to 45 per cent by 2090
- Temperatures will increase by up to 4°C, with more hot days over 40°C
- Sea levels will continue to rise

What is Busselton Water doing to mitigate the impacts of climate change?

- Education programs with students and the community
- Waterwise programs for businesses, households and irrigators
- Modelling and specialist advice to map our future water use and guide our operations in the context of climate change
- Reducing our carbon footprint through electric vehicles, solar panels and other operational efficiencies
- Sustainable infrastructure planning to determine the nature and location of future bores, water treatment plants and other infrastructure to cater for growth and mitigate the impacts of climate change on our finite water supply

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