

Water Sharing in the Latrobe Valley

Mine Land Rehabilitation Authority Forum
2 February 2021



Water Sharing in the Latrobe Valley: presentation structure

1. Introduction to the legal framework and principles underpinning entitlements to water in Victoria
2. Snapshot of the different water uses in the Latrobe Valley and their entitlements to surface water and groundwater
3. Overview of long-term planning processes for water security



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Water Entitlements in Victoria

Water Act 1989

- Defines how government manages the allocation of water resources
- The Minister for Water is the relevant decision-maker and must follow the statutory processes outlined in the Act

Victoria's Water Entitlement Framework

- Defines how water is shared, held, used and traded to support agricultural, urban, industrial, Traditional Owner and environmental water needs
- Provides certainty and flexibility for water managers and water users

Water Entitlements

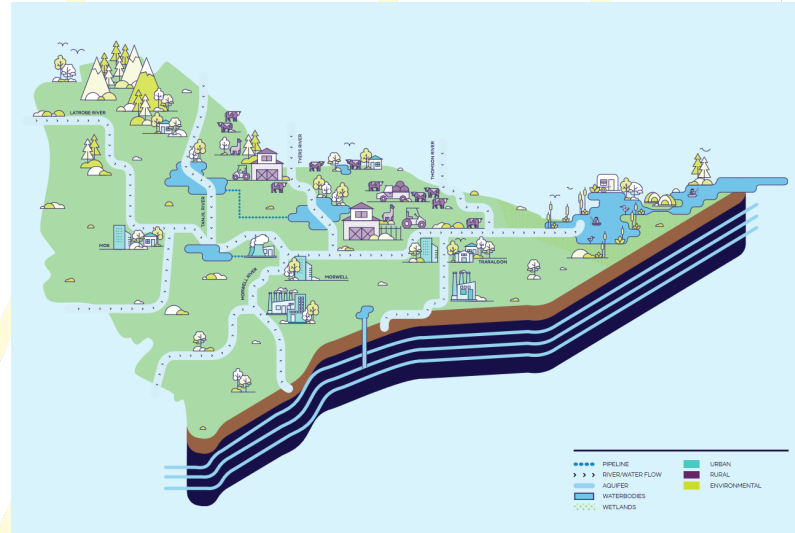
- Include surface water and groundwater resources for both consumptive and environmental purposes
- Have limits to ensure water taken under one entitlement does not impact reliability of supply to other entitlement holders, or environmental values

Principles of the Water Entitlement Framework

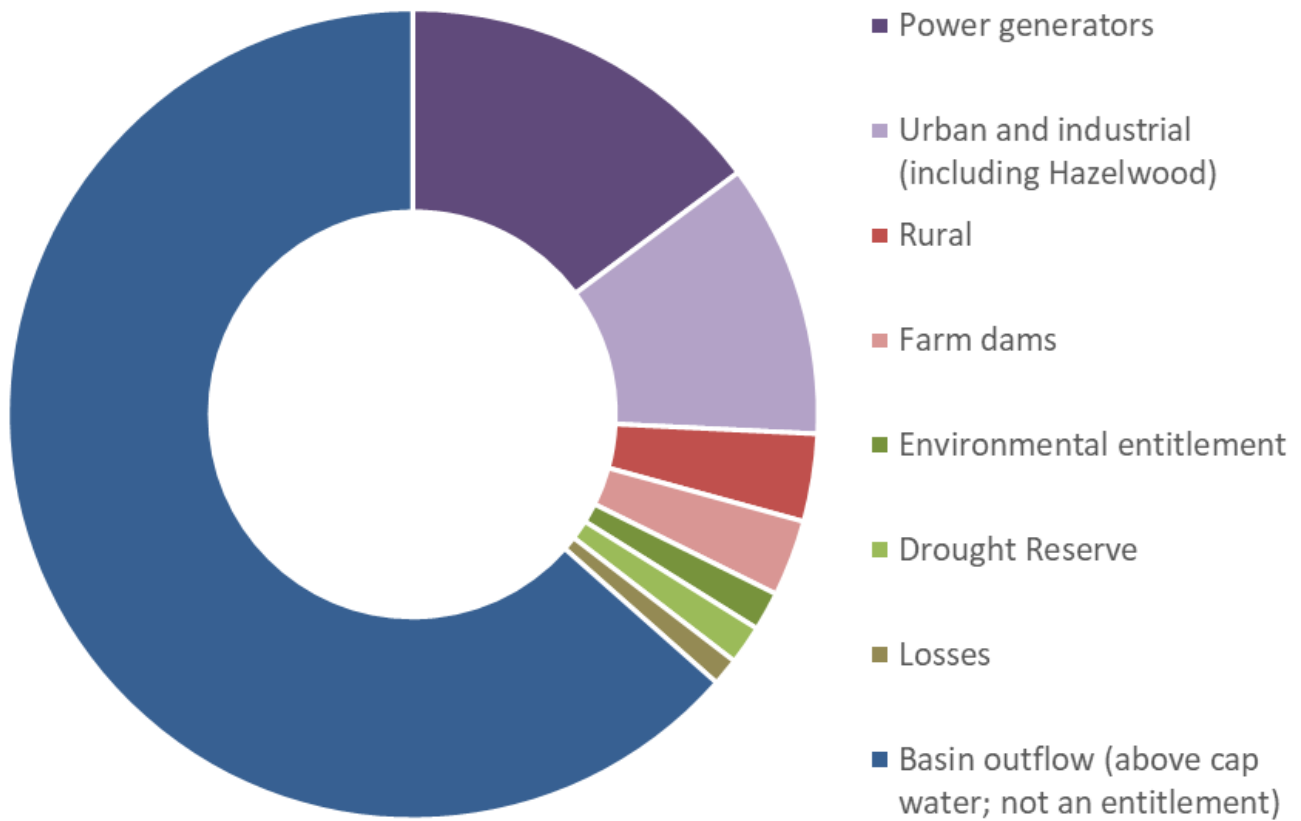
- Secure water entitlements
- Sets limits on water entitlements – caps on consumptive use
- Clear consultative processes for entitlements
- Clear rules to allocate water under entitlements
- Entitlement holders manage their own water needs

Water Entitlements in Latrobe: surface water

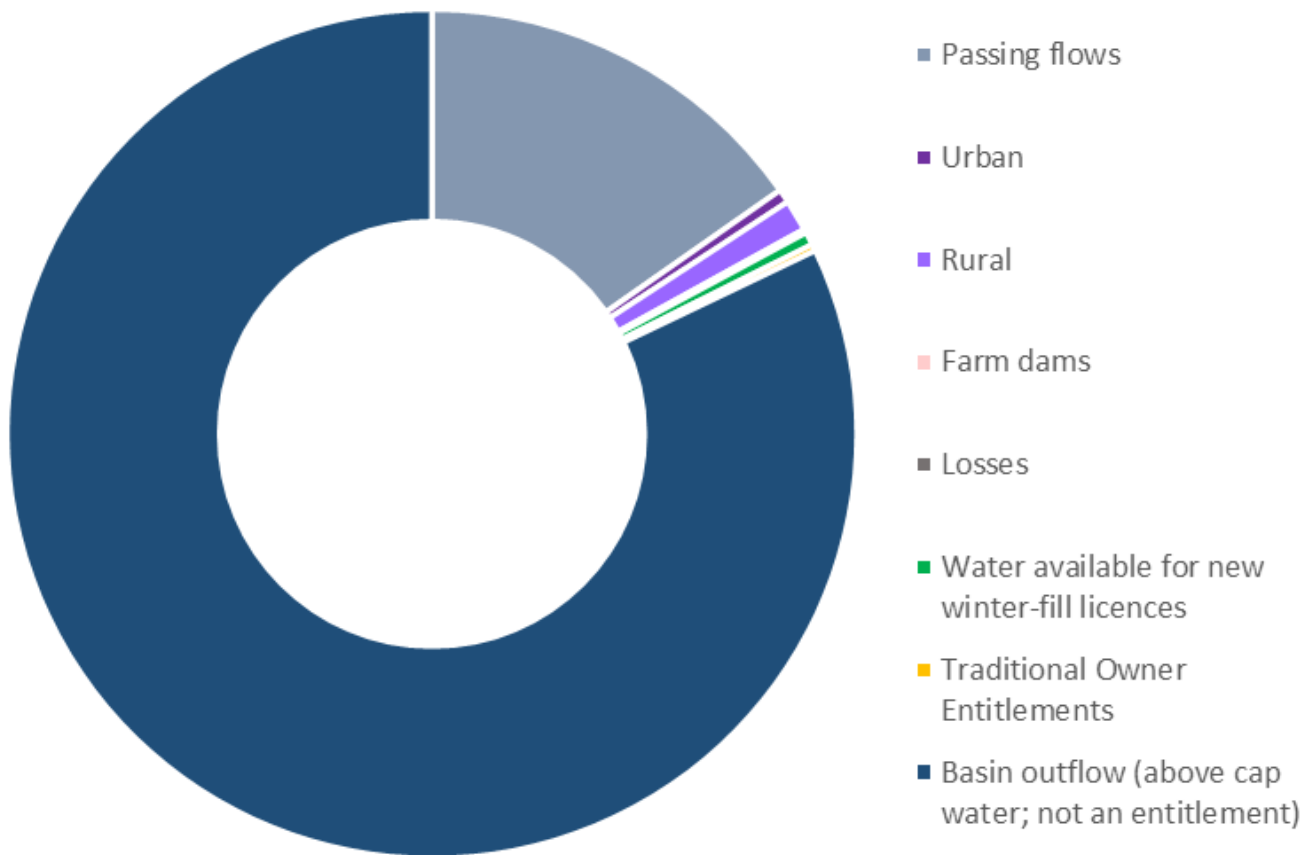
- There are many uses for water across the Latrobe region – power generation, urban and industrial uses, farming and then environment.
- These uses hold entitlements for water
- Surface water in the Latrobe River system (and aquifer system) is fully allocated
- There are also values in the Latrobe River system where no entitlement is currently held:
 - There are operating rules in place to support recreational benefits (Lake Narracan is operated to support water skiing)
 - Traditional Owners have a strong cultural connection to the river system and associated wetlands.



Latrobe Basin Surface Water Availability



Mitchell Basin Surface Water Availability



Water for power generation

- Latrobe River system provides a reliable supply of water to the coal-fired power generators who are the largest consumptive users of water in the Latrobe Valley.
- Latrobe Valley power stations have used, on average, 78 GL/year of water from the Latrobe River and released around 23 GL/year back to the system as return flows.
- Return flows are used by irrigators and provided benefits to the environment.



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Water for towns and industrial uses

- Gippsland Water supplies the urban centers of the Latrobe valley from the Latrobe river system, including Moe, Morwell and Traralgon.
- Gippsland Water holds bulk entitlements to water in Blue Rock and Moondarra Reservoirs, as well as Narracan Creek.
- Total water supplied to towns (excluding industry) is approximately 13 GL/year.
- Gippsland Water also provides water to major industrial customers that support the regional economy, such as Australian Paper.
- Historically, Gippsland Water provided significant volumes of water to Hazelwood and Morwell power stations.
- Gippsland Water develops an Urban Water Strategy every 5-years.

Water for farming

- To take and use water from a waterway, irrigators and other users must have a section 51 licence.
- Southern Rural Water supplies section 51 licences along the lower Latrobe River using water from a bulk entitlement held for this purpose.
- On average, about 7 GL/year of surface water is used by irrigators along the lower Latrobe River.



Water for the environment

Victorian Environmental Water Holder has two environmental water entitlements:

Lower Latrobe wetlands Environmental Entitlement (2010)

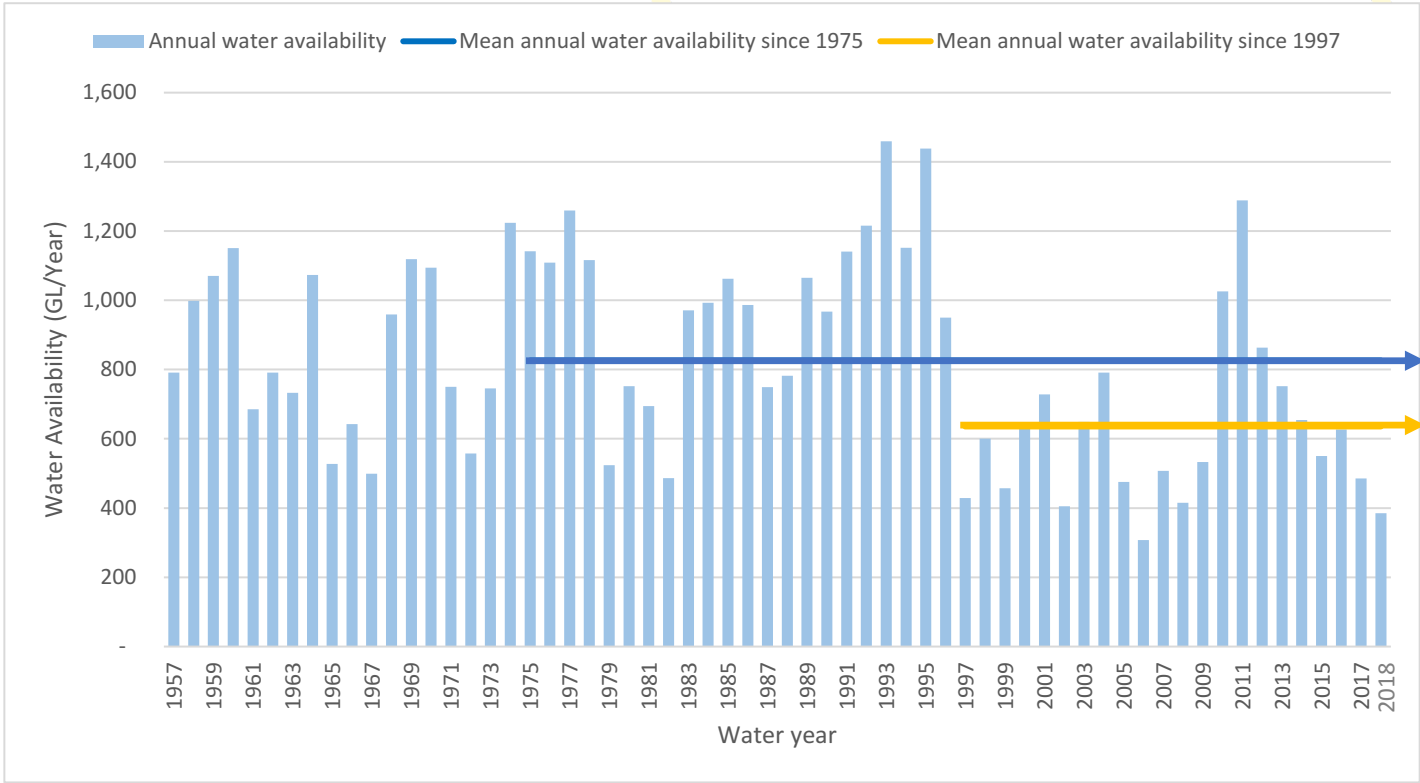
Blue Rock Environmental Entitlement (2013)

The environmental water reserve also includes water that is set aside for the environment by placing limits on how much water can be taken from the system.

This “above-cap water” makes up over 95% of water for the environment in the Latrobe Valley, but is the first to be lost when the climate gets drier.



Declining water availability: Latrobe River



Latrobe Reserve

- Southern Rural Water manages a reserve in Blue Rock Reservoir that may be accessed by Latrobe system entitlement holders.
- The primary purpose of the reserve is to protect the reliability of supply and reduce the risk of water shortage for entitlement holders.
- A portion of available water from the reserve is set aside for irrigators so that they do not have to compete financially against urban and industrial water users.
- Irrigators purchased water from the Latrobe Reserve in 2018-19 and 2020-21.



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Sustainable Water Strategies: Long-term planning for water security

- DELWP has commenced the development of the Central and Gippsland Region Sustainable Water Strategy - a comprehensive plan for the sustainable use of water resources in the region.
- The Strategy will consider how water resources are best shared to provide for all uses and values for water.
- The Gippsland community will have an opportunity to provide input into the Strategy later this year.



Sustainable Water Strategy and LVRRS: different strategies; different purposes

- Latrobe Valley Regional Rehabilitation Strategy provides information and policy directions to support rehabilitation of Latrobe Valley coal mines to safe, stable and sustainable landforms.
- The new Central and Gippsland Region Sustainable Water Strategy will look specifically at water security – at a regional scale – for all water users.
- The Sustainable Water Strategy will cover the area South of the great divide including Barwon Water Region which covers Geelong and surrounds all with way through to far East Gippsland.

LVRRS implementation action:

Provide high-level guidance to mine licences on the types of conditions that may be placed on any new water entitlements that may be issued in the Latrobe system for the purpose of mine rehabilitation—should the current, or a future, Minister for Water approve such an application—to ensure that other users and values are not negatively impacted.

Groundwater

- To take and use water from a groundwater bore also requires a section 51 licence.
- Access to groundwater in the confined aquifers of the Latrobe Valley is shared mainly by the three coal mines.
- A number of irrigators have access to groundwater in the region and Gippsland Water also have access to a small volume.
- About 31 GL/year of groundwater is extracted from the Latrobe Valley aquifers with:
 - 75% taken by the three coal mines to reduce the aquifer pressure and maintain the stability of the mine voids
 - 25% for irrigation