Corop Lakes Community Information Pack

Questions and Answers
Corop Lakes

August 2019

The Corop Lakes area includes Gaynor Swamp, Lake Cooper and Greens Lake. Greens Lake is managed by Goulburn Murray Water. The Department of Environment, Land, Water and Planning manages Lake Cooper. Gaynor Swamp is managed by Parks Victoria with environmental water being delivered by Goulburn Broken Catchment Management Authority.

DEPARTMENT OF ENVIRONMENT, LAND, WATER AND PLANNING (DELWP)

1. How is water allocated in Victoria and who is responsible for the allocation of water in Victoria?

The *Water Act 1989* is the legislation that governs the way surface water and groundwater entitlements are issued and allocated in Victoria.

It defines water entitlements, establishes the mechanisms for managing Victoria's water resources and relates to the governance and operation of rural and urban water corporations.

Generally, water is issued to individual users by the relevant water corporation via a water share or a licence. In addition to the licences that are formally issued, *The Act* enables users to take water for domestic and stock purposes from a range of surface water and groundwater sources without a licence. These stock and domestic rights are defined in Sections 8.1 and 8.4 of *The Act* and are not formally issued. They include farm dams for domestic and stock purposes.

Entitlements are rights to take/use/extract/have water delivered that may be limited by conditions. **(**http://waterregister.vic.gov.au/water-entitlements/bulk-entitlements).

Different entitlements are necessary depending on where and how water is taken, and how it is subsequently used.

The most common types of entitlements are water shares, delivery shares, water-use licences, take and use licences, water allowances, supplies by agreement and works licences.

The Victorian Water Entitlement Framework establishes entitlements in the context of limits so that water taken under one entitlement does not reduce the reliability of supply to other entitlement holders or adversely impact environmental values.

It also provides the entitlements with integrity by outlining clear consultative processes to make any changes to water entitlements.

The Minister for Water issues entitlements under the *Water Act 1989*. These include:

- Bulk entitlements;
- Environmental entitlements;
- Water shares; and
- Water licences.

Water entitlements consider surface water and groundwater resources for both consumptive and environmental purposes at all phases of the water cycle.

An **environmental entitlement** is a legal right to take and use water granted under the *Water Act 1989* for the purpose of maintaining an Environmental Water Reserve or improving the environmental values and health of the water ecosystems and other users that depend on environmental condition. Environmental entitlements can be held by the Victorian Environmental Water Holder (VEWH) http://www.vewh.vic.gov.au/

Water for the environment can mean any water in a river or wetland that benefits the environment. When the VEWH talk about 'water for the environment' (or 'environmental water') they are referring to water that's set aside in storages such as reservoirs and dams which is managed for plants and animals.

Allocation of water is based on two criteria:

1. Water that is available to use or trade in any given year, including new allocations and carryover.

2. The water that is in a water storage facility in any given year is allocated against water shares. The seasonal allocation is the percentage of the water share volume available under current resource conditions, as determined by the Resource Manager.

The Resource Manager makes seasonal determinations for all northern Victorian regulated river systems including the Goulburn, Broken, Campaspe, Loddon, Bullarook and Murray regulated river systems.

The Minister for Water appointed GMW to undertake the role as Resource Manager in accordance with Victorian water sharing rules https://nvrm.net.au/seasonal-determinations/how-allocations-work. See Appendix 1.

2. Will Lake Cooper be allocated any water for recreational purposes?

Lake Cooper is situated in the Goulburn Irrigation System that sits within the Murray-Darling Basin, which is subject to the Sustainable Diversion Limit (SDL). The SDL caps the volume of water that can be allocated under entitlements.

The surface water in the Goulburn System is fully allocated under existing entitlements which means the only way additional water can be accessed in the Goulburn System is via the water market.

Water could only be provided to Lake Cooper if it was purchased from the market. Due to the large size of Lake Cooper this would require a significant investment, with ongoing delivery and storage costs. The availability of water to purchase on the market would also be a significant consideration.

A community member or group could seek to purchase this water themselves, seek local government or other government agency support to purchase the water (subject to available funding and relevant policy), or seek philanthropic donation of water – for example, from local industry.

At present, as a signatory to the Murray-Darling Basin Plan, the Victorian Government has a priority commitment in the northern region to meet environmental water recovery targets which is likely to affect the transfer of environmental water for other uses.

3. What is going to be done to manage weeds that will emerge in Lake Cooper while it remains dry?

DELWP is responsible for vegetation or weed control works at Lake Cooper. However, DELWP has limited budget to undertake maintenance on Crown land sites across the state. Any maintenance at Lake Cooper would have to be considered within existing budgets and priorities.

Maintenance or clearing of native vegetation in the lake bed would likely be subject to legislation.

4. What are the natural processes of that occur when a lake bed dries out?

Lake Cooper is a low-lying lake that is usually dry but fills with water for brief periods during and after rainfall.

When an ephemeral lake dries out there are several natural processes that occur.

Vegetation changes happen which may involve the transformation from an aquatic vegetation type to a terrestrial vegetation type on the dry lakes and/or an increase of pest plants and agricultural weed species. The removal of fallen or standing dead timber can also change the available habitat of the fauna in the area.

High winds can cause the sediments, which make up the lake bed, to blow around. The natural formation of sand dunes around most of the lakes is a clear indication that this process has occurred previously and is quite natural.

However, in the short term, erosion of the lake bed and subsequent deposit of those sediments over land or water does move nutrient and particle matter over long distances. It can also impact any vegetation near the lake bed.

Terrestrial pest species, such as rabbits, pigs or foxes, may invade the dry lake area and lake land managers need to comply with the relevant legislation to control these species.

GOULBURN BROKEN CATCHMENT MANAGEMENT AUTHORITY (GB CMA)

5. Will Lake Cooper be receiving any environmental water?

Water for the environment is water set aside to improve and protect the health of rivers and wetlands and the plants and animals that rely on them.

Catchment Management Authorities are responsible for identifying priority waterways for environmental water use.

Priority waterways are identified according to their environmental values. Environmental values considered include the number, diversity and conservation significance of native plants and animals supported by a waterway and the role of the waterway in their lifecycle.

Like many other waterways in the catchment, Lake Cooper does have environmental values, but it has not been identified as a priority waterway to receive environmental water in the current Goulburn Broken Waterway Strategy. Priority waterways will be reviewed and updated in the next iteration of Goulburn Waterway Strategy which will be developed by 2022.

Environmental water managers always try to maximise other benefits, such as recreational or tourism activities, when making decisions about environmental watering, where this can be done without compromising environmental outcomes.

6. How is environmental water allocated across Victoria?

Management of water for the environment involves a range of people and organisations, including local communities, waterway managers, storage managers, environmental water holders, Traditional Owners, land managers and scientists.

The management 'cycle' starts with the scoping of potential environmental watering activities and environmental objectives in a particular region for that year. These potential activities are outlined in Seasonal Watering Proposals developed by the GB CMA.

The environmental water holders then prioritise where the finite amount of available water for the environment is best used across the state, and then deliver the water at the right time, and in the right amount, to meet those objectives. Current climatic and environmental conditions always influence decisions to deliver the water. Finally, reporting the results of the watering is a key component of the annual management cycle.

7. How is water distributed throughout the Corop Lakes area?

Water for the environment was delivered to Gaynors Swamp – part of the Corop Lakes area - for the first-time last year to maintain the health of the wetland's vegetation and provide habitat for a variety of waterbirds, including the brolga.

The wetland is listed in the 'Directory of important wetlands in Australia', and is a place of high cultural significance to the Traditional Owners.

Birdlife was not the only beneficiary of the environmental watering with red milfoil, vulnerable cane grass stands and huge densities of aquatic invertebrates, which provide food for species further up the food chain, all responding well.

The GB CMA, Parks Victoria and GMW are continuing to explore opportunities to improve the wetting and drying regime of the hydrologically connected One Tree, Two Tree, Wallenjoe and Mansfield Swamps.

GOULBURN VALLEY WATER (GVW)

8. Why is Corop on non-potable water?

GVW are unable to guarantee that the water supplied to residents in Corop will be safe for drinking purposes. Therefore, in 2008 under Section 6 of the *Safe Drinking Water Act (2003*), the Minister for Health declared the water supply as regulated to protect public health.

9. Will Corop ever have a potable water town supply?

Under the Price Submission 2018 – 23, GVW have committed to reviewing the quality of water supplied to Corop. This does not guarantee that this will result in a potable supply but works will be undertaken to ensure an improvement in the quality of water supplied.

ENVIRONMENT PROTECTION AUTHORITY (EPA)

10. What causes the dust from Lake Cooper?

Lakes that are in a natural flood plain, like Lake Cooper, generally fill when there is excess water in the system. However, when full it is still only two metres deep at its deepest point. This means that it is pretty much a natural evaporation basin and is also saline.

EPA understands that dust occurs when a lake dries out naturally.

CAMPASPE SHIRE COUNCIL (COUNCIL)

11. How can I keep dust out of my water tank?

Council can offer advice to residents on proactive ways to minimise the impact of dust into water tanks.

Residents are encouraged to contact the Campaspe Shire Council's Environmental Health Team at 5481 2200 or email environmental.health@campaspe.vic.gov.au to discuss a range of viable options.

12. What works will Council do in and around Lake Cooper to improve road visibility and discharge of stormwater into the Lake?

Council will manage the roadways around this catchment as per the Council endorsed Road Management Plan.

Community members seeking information or support on maintaining the safety of roads please contact Council on 5481 2200.

DEPARTMENT OF HEALTH AND HUMAN SERVICES (DHHS)

13. Can dust in the air cause health issues?

Airborne dust reduces air quality and visibility, and may have adverse effects on health, particularly for people who already have breathing-related problems.

Dust particles vary in size from coarse (non-inhalable), to fine (inhalable), to very fine (respirable). Coarse dust particles generally only reach as far as the inside of the nose, mouth or throat. Smaller or fine particles, however, can get much deeper into the sensitive regions of the respiratory tract and lungs. These smaller dust particles have a greater potential to cause serious harm to your health.

Commonly, particles in airborne dust tend to be coarse or non-respirable and do not pose a serious health threat to the general public. However, people with respiratory conditions, such as asthma and emphysema, may experience difficulties.

14. Can people get sick from drinking dusty water?

To minimise the amount of dust entering your rainwater tank install a first-flush diverter or contact Council as above. See Question 11.

For further information regarding private drinking water supplies, contact the Department of Health and Human Services on 1300 761 874 or visit: https://www2.health.vic.gov.au/public-health/water/private-drinking-water

GOULBURN MURRAY WATER (GMW)

15. Why hasn't water be delivered to Lake Cooper?

GMW's role is to deliver water to those who have a right to use it – known as water entitlement holders and are bound by law to deliver water to them – where and when they order it.

There are no entitlements for Lake Cooper or for customers to extract water from Lake Cooper.

Lake Cooper is also not a part of GMW's delivery network, so we have not used it as a storage facility.

If those with the right to use water – our water entitlement holders – order water to Lake Cooper, we would be required to deliver it.

16. Why has GMW stopped pumping water into Greens Lake?

Greens Lake is no longer needed as a storage facility in GMW's delivery network and the five pumps that pump water out of the lake are expensive for GMW and therefore, irrigators. GMW are committed to driving the most efficient business possible and this is one way we can help do this.

17. Can water be pumped from Greens Lake into Lake Cooper?

GMW's role is to delivery water to those who have the right to use it, the water entitlement holders.

GMW is bound by legislation to deliver it when and where they order.

If those with the right to use water – our water entitlement holders – order water to Lake Cooper, we would be required to deliver it.

18. Why was money invested in Greens Lake and not Lake Cooper?

GMW is the land manager and nominated waterway manager at Greens Lake. See Question 16.

19. Is water skiing permitted at Greens Lake?

Under Schedule 60 of the *Marine Act, 2010* GMW is the nominated waterway manager and permits water skiing as per the waterway rules. Boating zones on the lake are gazetted by Marine Safety Victoria.

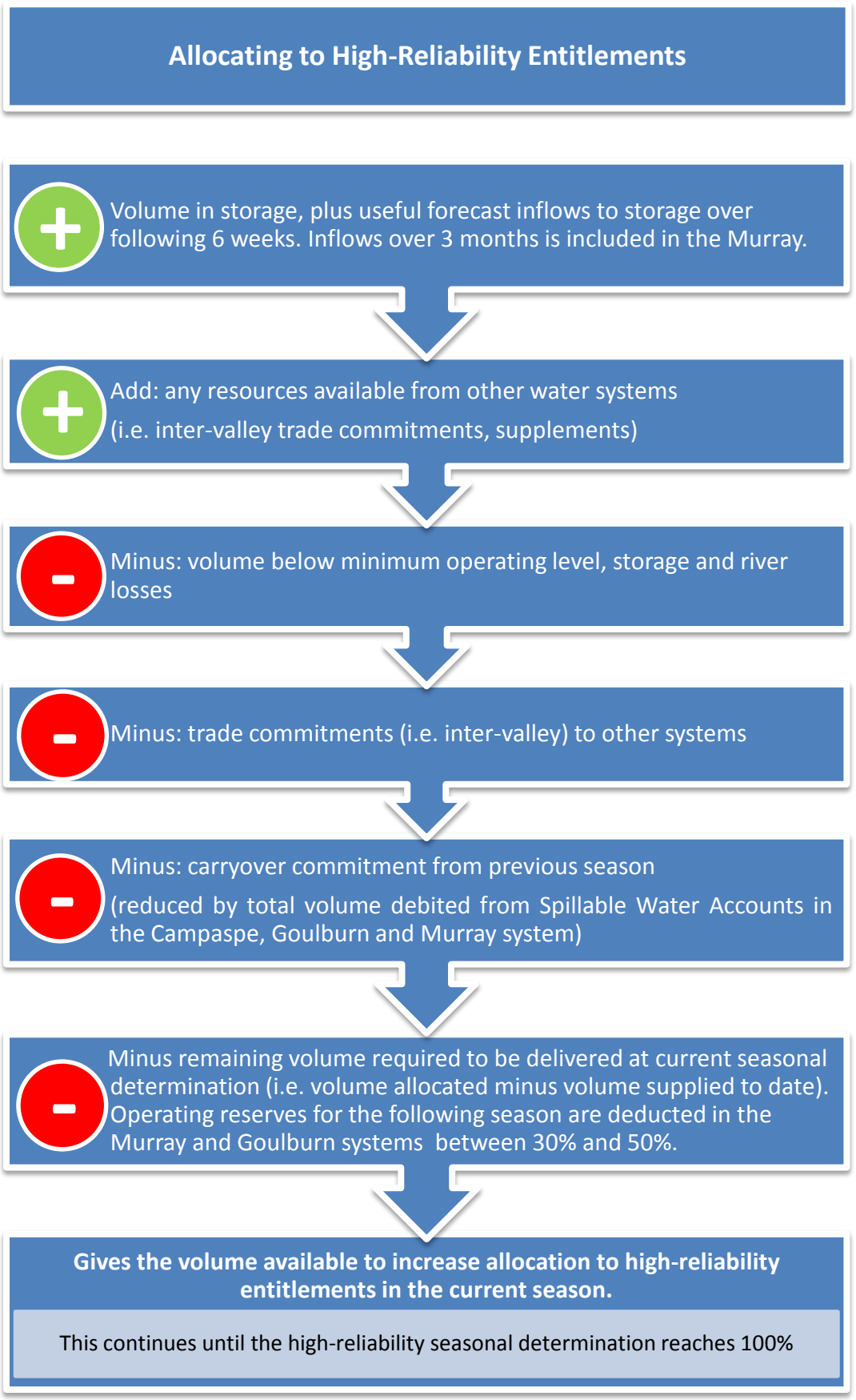
Appendix 1

How Seasonal Determinations are made

(sourced from Resource Manager Northern Victoria)

How Seasonal Determinations Are Made:

The following flow chart describes the steps taken to make seasonal determinations for all northern Victorian regulated river systems.



Note: Victoria has access to 50% of the capacity and inflows to the Murray storages and GMW has access to 82% of the storage capacity and inflows to Lake Eppalock.

Allocating to Low-Reliability Entitlements

Murray, Goulburn, Campaspe and Loddon:

Once 100% high-reliability is achieved, additional resource is attributed to a reserve for the following season.

Reserve is based on high-reliability entitlements and modelled operating commitments for the second year. Inflows expected 99 years in 100 over the forecast period are assumed in this calculation. In the Murray and Goulburn systems, part of this reserve is allocated between seasonal determinations of 30% and 50% high-reliability.

Once reserve is established, any additional resource is attributed to increasing allocation to low-reliability entitlements, up to 100% of the low-reliability entitlement volume.

Broken and Bullarook:

Once 100% high-reliability is achieved, additional resource is attributed to increasing allocation to low-reliability entitlements, up to 100% of low-reliability volume.

More information on how seasonal determinations are made for the Murray, Goulburn and Loddon systems:

How seasonal determinations are calculated for the Murray, Goulburn and Loddon systems is defined in the respective bulk entitlements held by Goulburn-Murray Water.

You can find these bulk entitlements on the Victorian Water Register website by clicking the link below.

http://waterregister.vic.gov.au/water-entitlements/bulk-entitlements

Once you are on this website, you can find the method for making seasonal determinations in the relevant bulk entitlement for each system by following the steps below:

1. From the "River Basin or GMU" drop down menu select *Murray*, *Goulburn* or *Loddon*.
2. From the "Authority" drop down menu select *GOULBURN MURRAY RURAL WATER CORPORATION*.
3. Click the "GENERATE" button. This will bring up a link to the Goulburn Murray Water Bulk Entitlement for the selected system.
4. Click on this link to the bulk entitlement below the "GENERATE" button. This link will appear as *River Murray – Goulburn-Murray Water* for the Murray system*, Eildon – Goulburn Weir* for the Goulburn system and *Loddon system – Goulburn-Murray Water* for the Loddon system.
5. A link to the *Consolidated Bulk Entitlement* for the selected system will appear, click on this link.
6. A pdf document of the consolidated version of Bulk Entitlement for the selected system will open.

- For the Murray system, go to schedule 3 of the document which outlines the required steps to making a seasonal determination in this system
- For the Goulburn system, go to schedule 8 of the document which outlines the required steps to making a seasonal determination in this system
- For the Loddon system, go to schedule 4 of the document which outlines the required steps to making a seasonal determination in this system.