Southern Rural Water
Managing Water. Serving Communities.

Deutgam Water Supply Protection Area Local Management Plan

Version 1

April 2023

Version Control

Version	Change summary	Date
1	Removed from previous Catchment Statement and presented as a stand-alone Local Management Plan for Deutgam WSPA. Minor administrative updates included.	April 2023

Contents

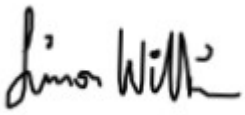
Purpose of this document

This Local Management Plan (LMP) documents the current management arrangements for the Deutgam Water Supply Protection Area (WSPA). The objective of the plan is to ensure the equitable sharing and long-term sustainability of the groundwater resource.

The plan aims to clearly and simply explain how groundwater is managed in this area, this includes information on the boundaries and depth of the management area, the cap on total annual groundwater licensed volume, how groundwater licences can be accessed (via a trade of entitlement), the arrangement for sharing water during times of water shortages, and the metering requirements.

The plan provides licence holders with information around how Southern Rural Water (SRW) manages the risk of seawater intrusion into the aquifer and it provides details about how SRW makes restriction decisions. The intent is to eliminate reactive decisions mid-season to restrict groundwater use, instead, decisions will be made ahead of the season to give groundwater users a level of certainty about access to groundwater.

The LMP will be reviewed on an as-needs basis. The aim of future reviews will be to improve management and, where possible, to make management less complex, while ensuring equitable sharing and long-term sustainability of the resource.



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General Manager Service Delivery

12 April 2023

Deutgam WSPA Local Management Plan

Statutory Management Plan

There is no statutory management plan for groundwater resources in this area.

Objective of the Local Management Plan

The objective of the Local Management Plan is to make sure that the groundwater resources in the Deutgam Water Supply Protection Area (WSPA) are managed in an equitable and sustainable manner.

Area description

Deutgam WSPA is shown below. The plan is lodged with the Central Plan Office, reference number LEGL./97-230.

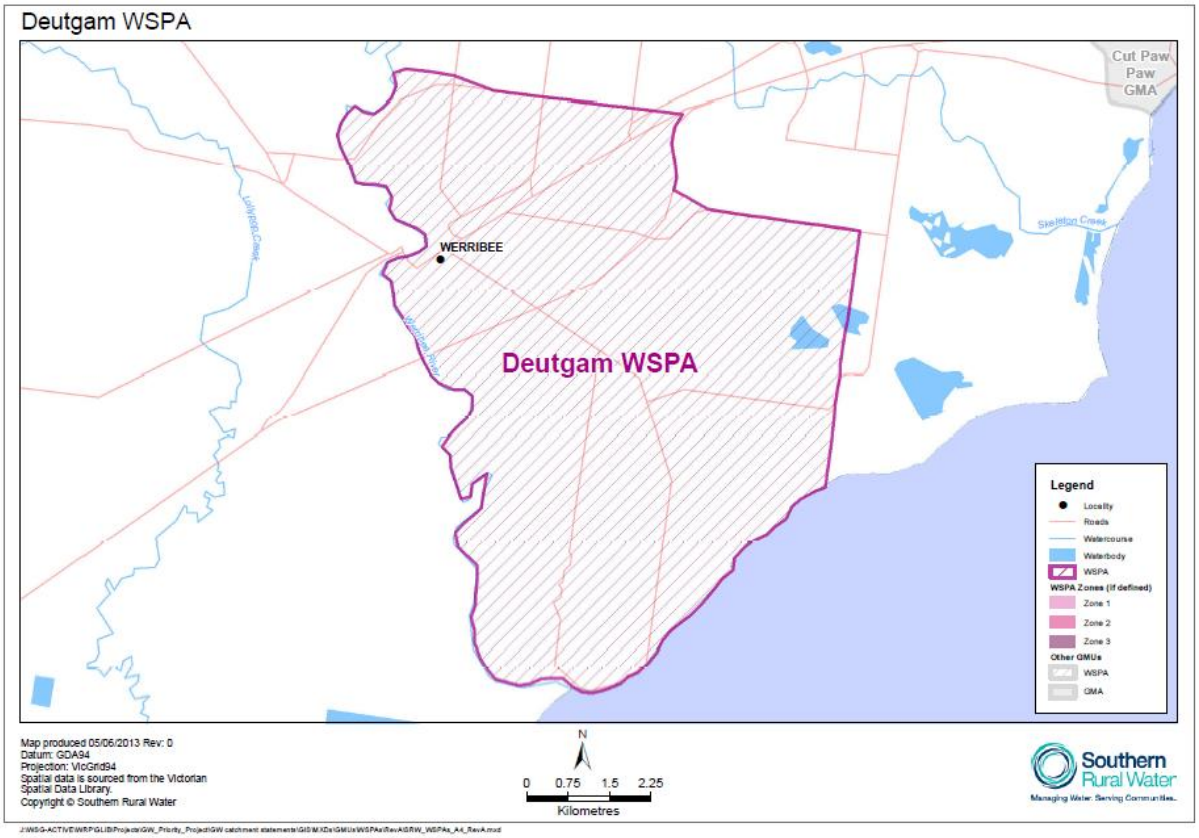

Figure 1: Map of Deutgam Water Supply Protection Area

Permissible Consumptive Volume

A Permissible Consumptive Volume (PCV) currently applies to the Deutgam WSPA. The PCV is a cap on the amount of groundwater allocated in this management unit. The PCV for Deutgam WSPA is 5,100 ML/yr.

The PCV applies to the area covered in Figure 1, for all formations from the surface to 30m below the surface.

Water entitlements

The extraction of groundwater for purposes other than domestic and stock use is authorised under a groundwater licence. There are 149 groundwater licences in the Deutgam WSPA that authorise a total of 3461.8 ML[1]. Over 95% of groundwater is licensed for irrigation purposes, with a small volume licensed for industrial or commercial purposes.

Licence holders must comply with all conditions of their licence.

People have rights to take groundwater for domestic and stock use without a groundwater licence.

Monitoring

Groundwater bores are monitored in the Deutgam WSPA to manage the threat of saline intrusion from Port Phillip Bay and the Werribee River. To assess this threat, groundwater in the watertable and underlying aquifers is monitored for groundwater level and salinity.

- Groundwater levels are monitored in 13 observation bores monthly (shown in Figure 2)
- Salinity sampling is undertaken from up to 6 observation bores monthly
- Additional groundwater monitoring in key bores along the river and coast may be conducted by SRW if deemed necessary

Groundwater levels and salinity data is collected and reviewed by SRW's hydrogeologists monthly against historical data, irrigation deliveries, rainfall, river flow and river salinity.

[1] As of July 2020

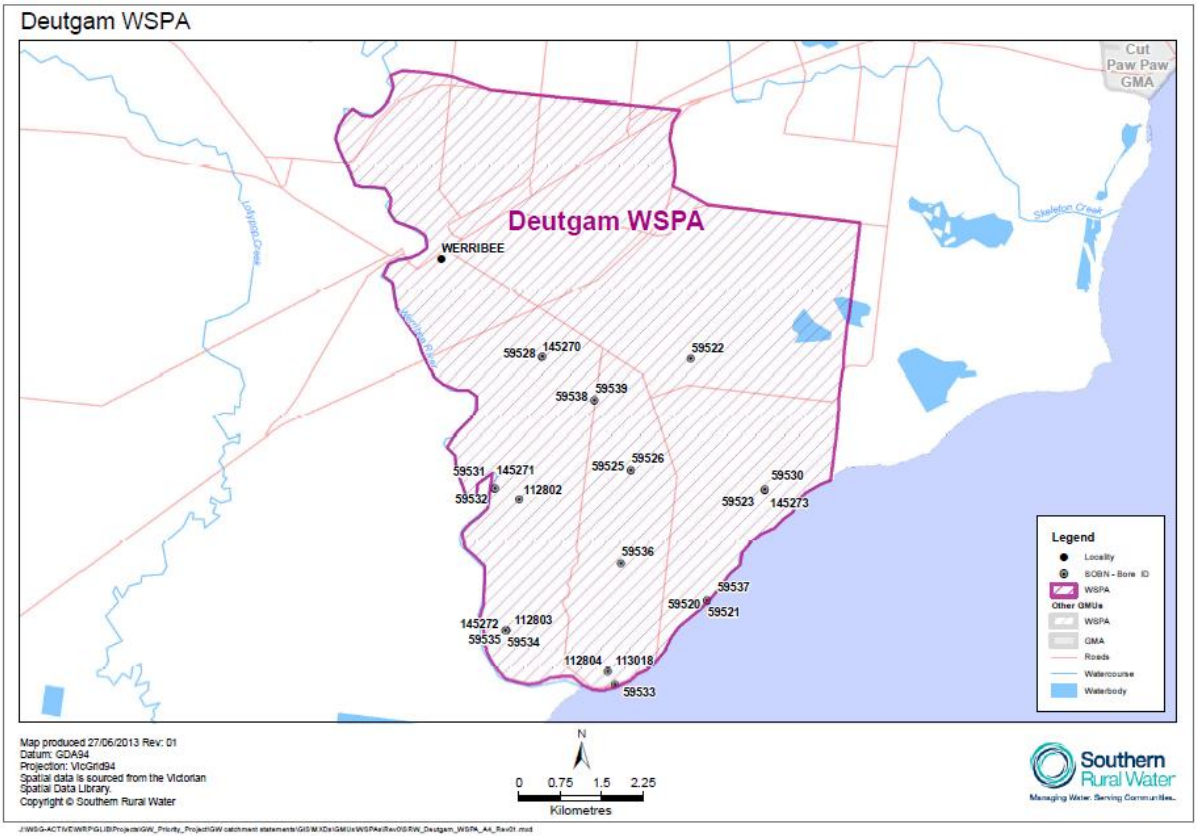

Figure 2: Groundwater monitoring bores in the Deutgam WSPA

Groundwater allocation

To protect against saline intrusion into the aquifer from the estuarine reaches of the Werribee River and Port Phillip Bay, groundwater levels must remain well above sea level (0 mAHD) at the coast and at the tidal extent of the river. Inland groundwater levels (bore 59539) should also be significantly higher than sea level to maintain the overall groundwater flow direction and discharge to the bay.

SRW will determine a groundwater allocation for Deutgam on 1 July each year. The groundwater allocation will depend on:

- groundwater level triggers;
- the river water allocation;
- availability of recycled water; and
- the seasonal rainfall and temperature outlook.

Groundwater level triggers are shown below. Three or more bores have to set off the trigger before a response is required.

Bore ID	50% Allocation Trigger	25% Allocation Trigger	0% Allocation Trigger
	Head (mAHD)	Head (mAHD)	Head (mAHD)
145273 (coast)	3.9	3.6	3.2
145272 (river)	2	1.5	1
145271 (river)	1.25	1	0.75
145270 (inland)	9	8.25	7.5
113018 (coast)	1.2	0.9	0.75

As groundwater in the area recharges during Summer (with help from river and recycled water), allocation will be reviewed regularly through the season and may be increased, if conditions allow.

Allocation will not be reduced during the season.

Groundwater allocation will be 100% if groundwater levels are above the 50% allocation trigger in three or more bores.

Groundwater extraction ban

In extreme circumstances, a ban on all groundwater extraction, including private rights (domestic and stock), may be imposed under section 33AAA of the Water Act through a water shortage declaration and qualification of rights.

Communication

Customers shall be notified of groundwater allocation via text message and SRW's website. To ensure that water users consider water availability in their planning, SRW will provide regular groundwater level updates on our website and as much advance notice as possible before making an allocation decision.

In the event of a complete groundwater extraction ban, customers shall be notified in writing and the community shall be notified via a public notice in the local newspaper.

Trading

In considering an application to transfer a licence (temporarily or permanently), SRW must undertake a thorough assessment of the application. An application to transfer a licence is not automatically approved. In deciding whether or not to approve an application, SRW must consider section 40 of the Act, including:

- Availability of water now and in the future;

- Adverse effects that an approval may have on existing users, on waterways and aquifers and on the environment; and
- Existing and projected water quality in the area.

When an application is made, SRW will assess whether groundwater extractions at the new site will cause adverse and material interference to any nearby groundwater user. If interference is likely, SRW may set transfer conditions to minimise interference, or it may refuse the application. Approval of an application to transfer may be subject to technical assessments to determine bore interference and impact on surface water bodies.

In the Deutgam WSPA:

- Permanent transfers are permitted
- Temporary transfers are permitted for a period of up to five years

New licences

Although total licensed entitlement is slightly lower than the PCV, no new entitlement will be issued due to the threat of saline intrusion. The availability of any unallocated entitlement will be determined in accordance with State Policy on unallocated water.

Metering

SRW meters new and existing groundwater users with an annual volume greater than 20ML[2]. This allows SRW to keep track of how much water is being used and enables licence holders to keep within their allocated volume.

The meters are supplied by SRW, and the licence holder is responsible for paying the full cost of the meter and initial installation. The meter remains the property of SRW and SRW is responsible for maintenance and replacement.

Meters are read at least twice per year.

Consultation

SRW will consult with licence holders and relevant stakeholders before making changes to the Local Management Plan, other than administrative changes or clarifications.

The Local Management Plan will be reviewed on an as needs basis.

[2] Except where metering is physically impractical, or where it is high risk from a health and safety perspective