Annual Groundwater Season Summary 2023/2024

West Wimmera Groundwater Management Area

Introduction

This season summary provides an overview of groundwater levels and use of groundwater in the West Wimmera Groundwater Management Area (GMA).

The West Wimmera Local Management Plan (LMP) 2019 is the primary reference document for groundwater management in the West Wimmera GMA and can be found on the GWMWater website www.gwmwater.org.au/WW-GMA.

In 2024, a second five year technical review was completed by consultants GHD, evaluating data collected to assess whether or not the management arrangements in the LMP are appropriate and effective.

Status of the groundwater resource

Groundwater levels in the GMA are continuing to respond to the level of extraction. Where groundwater extraction is more intensive such as Neuarpur there has been a decline in groundwater level since the late 1990's, while where extraction is more disperse, groundwater levels are generally stable. The recent rate of decline in groundwater level in Neuarpur is less than previously observed. In the east of the Yanipy sub-zone, south of Kaniva, there are relatively large seasonal water level trends due to the effect of local pumping.

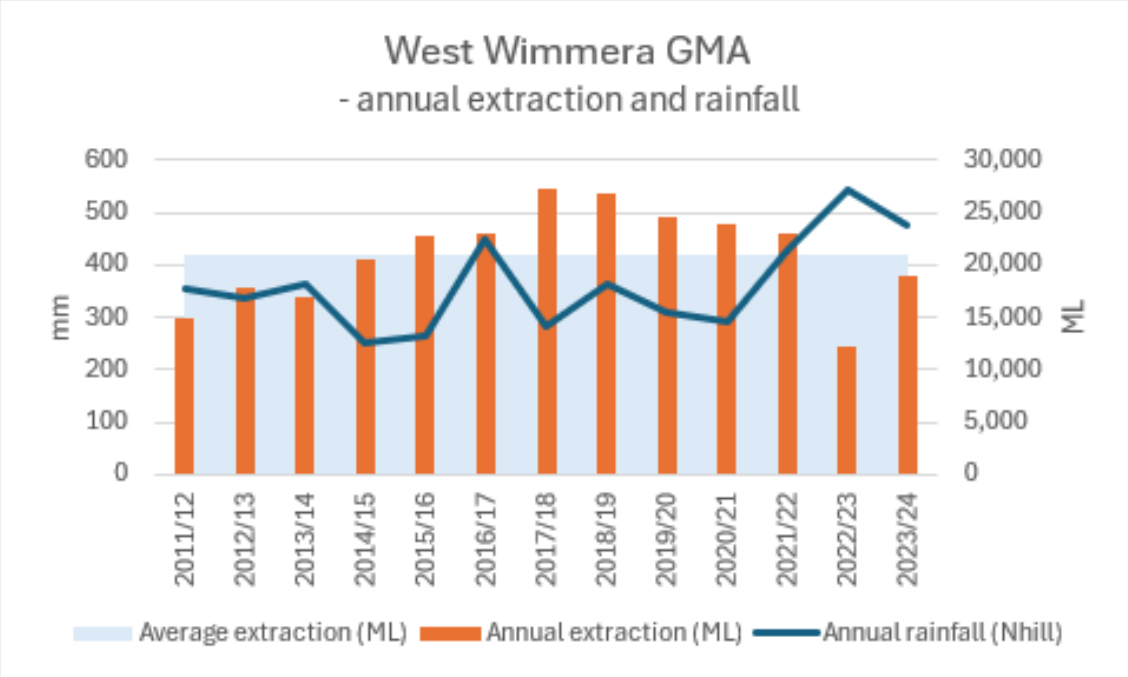
Groundwater levels are stable in the remaining zones of the GMA. Groundwater level hydrographs and maps are illustrated on the following pages.

Licensed groundwater use

Groundwater use in 2023-24 was 19,004 ML or 36% of total entitlement. The volume of recorded use was greatest in the Neuarpur Zone where the majority of the licence entitlement for the GMA is held. The total volume extracted was approximately 2,000 ML less than the average annual extraction in the period since 2011/12.

Management Zone	Zone limit* ML	Number of Licences	Licence Volume ML	Extraction (Usage) 2023/24 ML
Neuarpur	24,750	44	24,691	11,109
Northern	22,390	66	21,932	5,823
Southern	6,469	36	5,680	1,930
Gymbowen	2,000	11	1,052	141
Total	55,609	157	53,355	19,004

**Tertiary Limestone Aquifer*

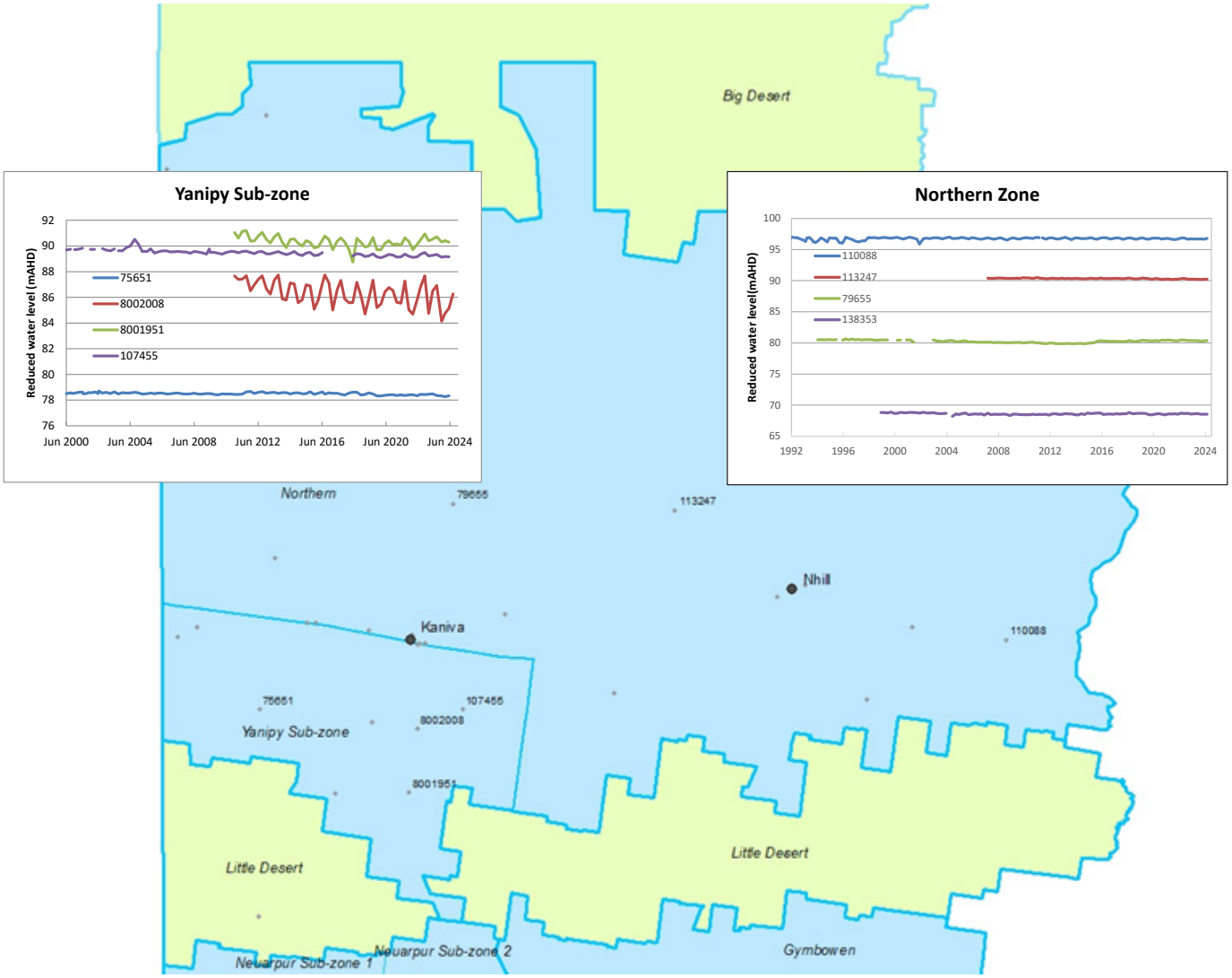


Restrictions and groundwater use

Restrictions have been in place since 2011 to address the declining groundwater levels observed in Neuarpur sub-zone 1. All licences in Neuarpur Sub-zone 1 were restricted to 80% of entitlement in 2023/24. The current rate of restriction will continue for season 2024/25. Licences within the remaining zones of the West Wimmera GMA remain at 100% of licence entitlement.

Groundwater trading

Water entitlements in most of the groundwater management zones are capped. Trade can occur on a temporary or permanent basis within the groundwater management area in accordance with rules within the local management plan which can be found on our website.
In 2023/24 there were three temporary transfers of water entitlement and three permanent trades. There was one new licence issued for a volume of 50ML from the unallocated volume in the Southern Zone (Ullswater Sub-zone).



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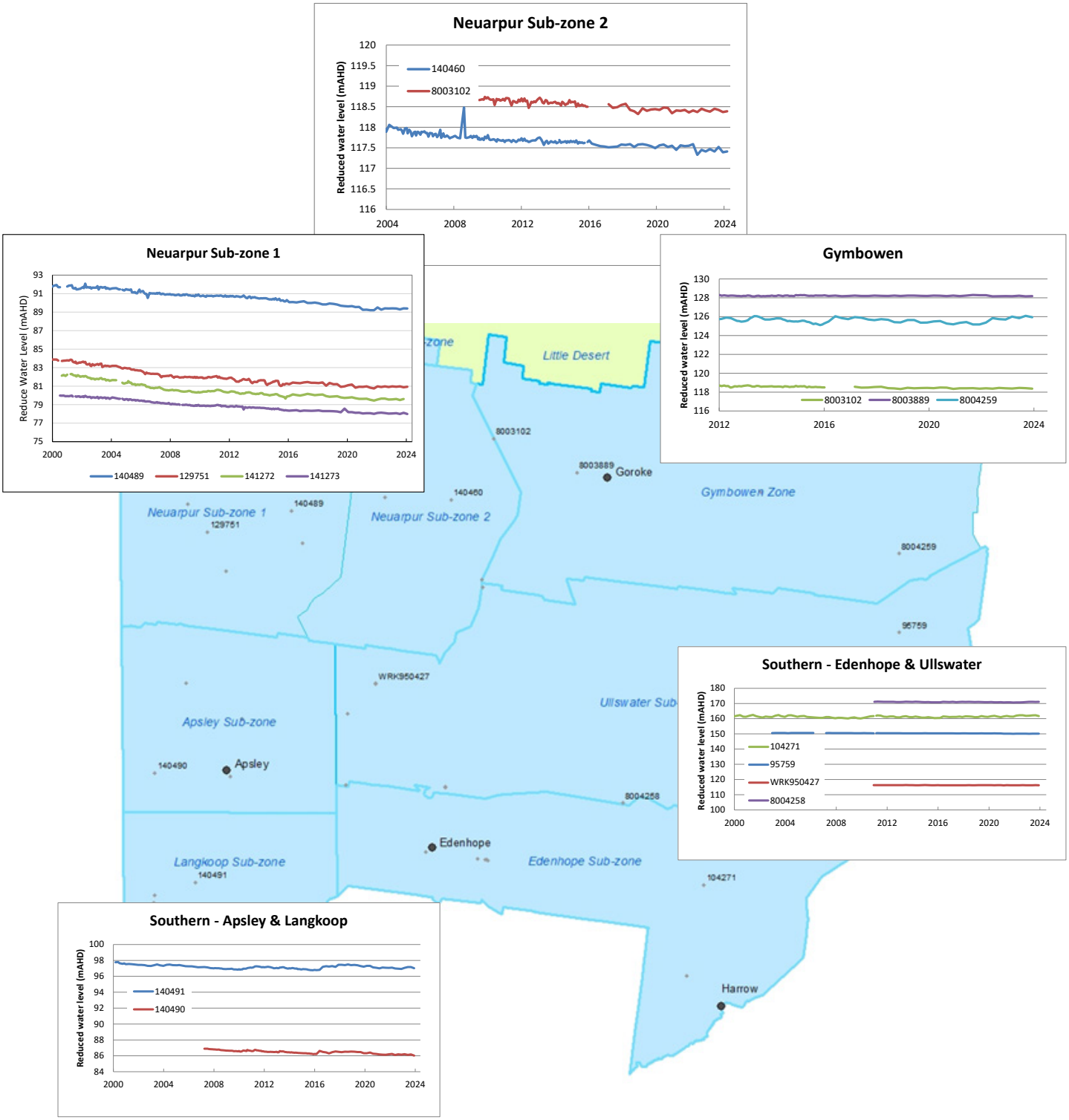
Neuarpur Sub-zone 2
Reduced water level (mAHD)
140460
8003102
Neuarpur Sub-zone 1
Reduce Water Level (mAHD)
140489
129751
141272
141273
Gymbowen
Reduced water level (mAHD)
8003102
8003889
8004259
Little Desert
Goroke
Gymbowen Zone
Neuarpur Sub-zone 1
Neuarpur Sub-zone 2
Apsley Sub-zone
Apsley
Ullswater Sub
Edenhope
Edenhope Sub-zone
Langkoop Sub-zone
Harrow
Southern - Edenhope & Ullswater
Reduced water level (mAHD)
104271
95759
WRK950427
8004258
Southern - Apsley & Langkoop
Reduced water level (mAHD)
140491
140490

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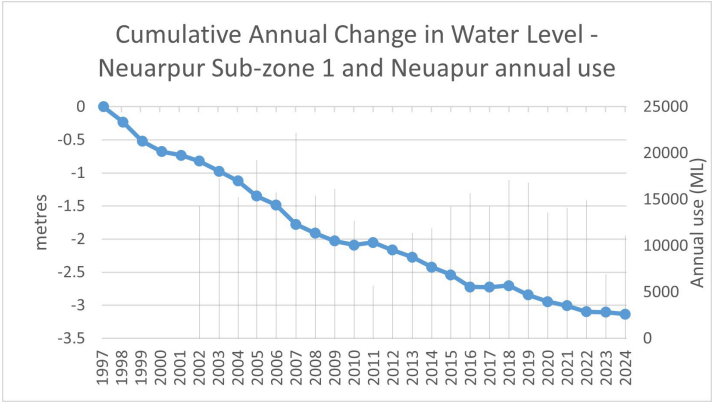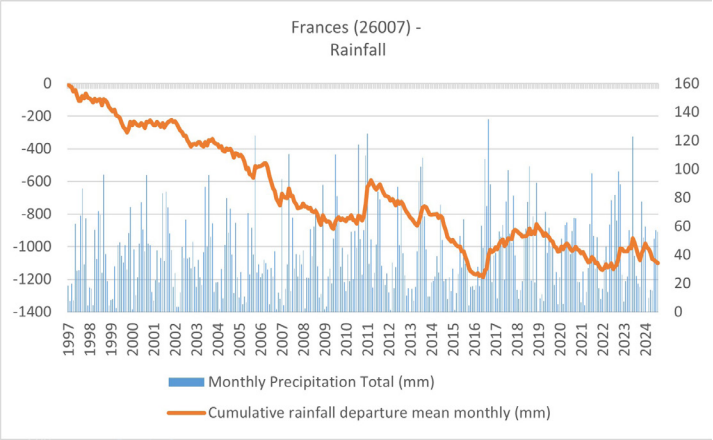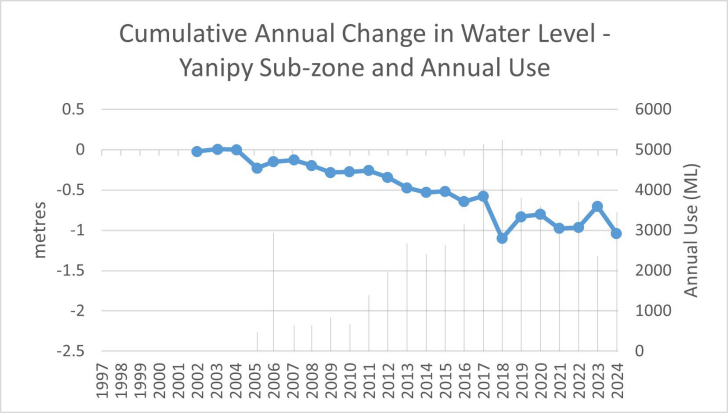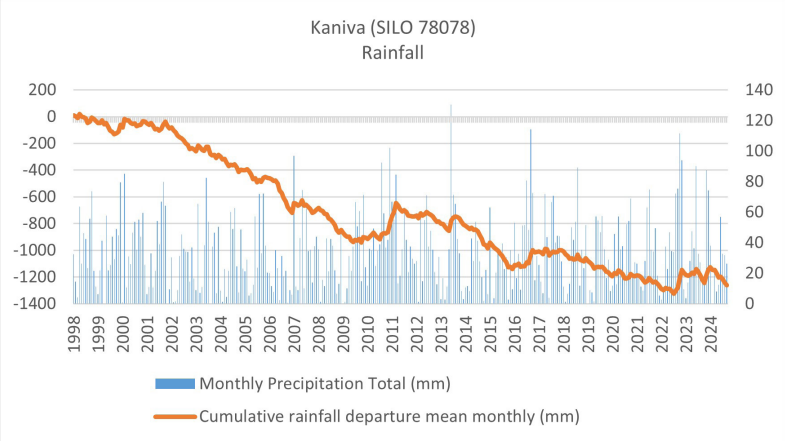
Groundwater level changes are influenced by usage (including cross border use) and rainfall.