Summary of CAMPASPE REGION

From the Guide to the proposed Basin Plan

This publication summarises proposals outlined in the Guide to the proposed Basin Plan as they relate to the Campaspe region.

THE REGION

The Campaspe region is named after its most significant river, which rises in the Great Dividing Range near Woodend and then flows 150 km northwards to the River Murray at Echuca. The region is bounded by Mount Alexander to the west, Mount Macedon to the south and the Cobaw Range to the east. The major towns in the region are Kyneton, Rochester and Heathcote.
**WATER USE**

The Authority has compiled the current limits for all forms of water extraction in the Murray–Darling Basin. For surface water these current diversion limits include watercourse diversions for town and community water supplies, irrigation and industries, floodplain harvesting, and interception activities such as farm dams and forestry plantations. For groundwater they include all water diverted from the aquifers of the area. Current diversions are limited by existing transitional and interim water resource plans where these are in place. These are existing plans, prepared by Basin states, and recognised under the Water Act 2007 (Cwlth) (the Act). Where there are no existing plans, or plans do not apply to certain types of water extraction, the current diversion limit reflects the current level of use.

The surface water long-term average current diversion limit for the Basin as a whole has been estimated at around 13,700 GL/y and at 155 GL/y for the Campaspe region. The Basin wide groundwater long-term average current diversion limit is 1,786 GL/y.

![Campaspe River near Elmore, Victoria](image)

<table>
<thead>
<tr>
<th>Campaspe Region surface water current diversion limit (GL/y)</th>
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<tbody>
<tr>
<td>Interceptions Watercourse diversions Total</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>115</td>
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The Campaspe’s water resources are important for supplying water for consumptive and environmental uses. Not only do they contribute to satisfying these water needs within the region, but they also supply irrigated agriculture on the riverine plain from south of Rochester to the River Murray.

Dairy, horticulture and mixed farming are the main irrigated enterprises, covering much of the northern riverine plains between Rochester and Echuca. Here the landscape allows gravity-fed irrigation water to be supplied via an extensive network of channels and canals. In addition to the Rochester–Campaspe Irrigation Area, many individual irrigation farms pump river water directly or use groundwater. Small areas of irrigated winter cereal crops are grown in the region’s north-west and small areas of horticulture occur in the region’s south.

Dryland farms use much less water, usually only for domestic and stock use. Some of these users draw water from waterways, the irrigation district or from reticulated water supplies, while others use groundwater or tanks to provide stock and domestic supplies. Other users of water resources in the region include gas suppliers, pipe manufacturers, wineries and food-processing plants.

In the Campaspe Region there are a number of factors indicating poor ecological condition. For example vegetation condition is poor, with very low levels of remnant vegetation in the catchment and along watercourses. Fish communities are very poor with low native species diversity. Hydrological conditions in the region are considered moderate and macroinvertebrate communities exhibit moderate to high diversity. Overall stream condition is moderate. The Campaspe River experiences high salinity, high nutrient and low dissolved oxygen levels.

**ASSESSING ENVIRONMENTAL WATER NEEDS**

Many of the environmental assets and functions of the Murray–Darling Basin have been degraded by the over-extraction of water from the Basin’s rivers. The Act and Basin Plan seek to address the over-extraction of water to restore and maintain the Basin’s key environmental assets and key ecosystem functions.

To determine sustainable diversion limit (SDL) proposals it is necessary to work out how much water is needed to sustain the health of the Basin’s river systems, wetlands and floodplains. To do this, the Authority has undertaken an assessment of the environmental water requirements of key environmental assets and key ecosystem functions across the Murray–Darling Basin. In the most part, the assets assessed are large flood-dependant
wetland and floodplain systems that support populations of waterbirds and fish, and large forests and woodlands. The assessment of key ecosystem functions gave particular attention to the environmental water requirements of rivers, and systemwide processes such as connectivity between rivers and floodplains.

Together, these assessments included specific analysis of flows at 106 hydrologic indicator sites across the Basin (88 sites to assess the water needs for the Basin’s key ecosystem functions and 18 to assess the water needs for key environmental assets), as well as analysis of end of system flows in each region.

The environmental water requirements at a Basin scale have been estimated between 22,100 GL/y and 26,700 GL/y (an increase between 3,000GL/y to 7,600GL/y from the 19,100 GL/y currently available for the environment).

In the Campaspe region, 13 key environmental assets have been identified. Of the 106 hydrological indicator sites across the Basin the Campaspe region contains four hydrological indicator sites for key ecosystem functions.

The environmental water requirements for the Campaspe region have been estimated between 52 GL/y and 101 GL/y (an increase between 28 GL/y and 77 GL/y from the 24 GL/y currently available for the environment).

Further information on assessing the environmental water requirements of the Basin is available at www.mdba.gov.au/basin_plan/water-assessment-report.

SUSTAINABLE DIVERSION LIMIT PROPOSALS AT THE BASIN AND REGIONAL SCALE

The Authority is required to establish new long-term average SDLs for surface water and groundwater. SDLs represent the long-term average amount of water which can be used for consumptive purposes after meeting the environmental water needs that have been identified.

In the Guide, the Authority presents the SDLs as a range of scenarios for discussion at this stage, rather than choosing a particular value in this range. This range takes into account all the available evidence, the quality of that evidence, and the inherent uncertainty of modelling.

The Authority has determined that 3% of the current diversion limit (around 410 GL/y for the Basin as a whole and around 5 GL/y for the Campaspe region) is an appropriate allowance to account for the effect of climate change on surface water SDL proposals. The SDL proposals for groundwater do not include a climate change component.

The SDL proposals would require a reduction in the current long-term average surface water diversion limit at the Basin scale from 13,700 GL per year to between 10,700 GL and 9,700 GL per year (reduction between 3,000 GL and 4,000 GL per year or 22% to 29%).

For the Campaspe region this would equate to reduction in the current long-term average surface water diversion limit from 155 GL/y to between 115 GL and 103 GL per year (reduction between 40 GL 52 GL per year or 26% to 33%).

The SDL proposals would also require a reduction in the current long-term average groundwater diversion limit at the Basin scale by an aggregate 186 GL or an average reduction of 10% across the Basin. The reductions in current diversion limits are required in only 11 of the 78 groundwater SDL areas. No reductions are proposed for the remaining 67 groundwater SDL areas where the current diversions are assessed as sustainable.

SDL proposals for the surface water and groundwater SDL areas of the Campaspe region are set out on page 5.

SUPPORTING COMMUNITIES

The Murray–Darling Basin Authority acknowledges that implementing SDLs may have significant social and economic implications for individual entitlement holders and communities across the Basin.

However, the Australian Government has committed to recovering sufficient water access entitlements to fully offset the impact of SDLs across the Basin, including the Campaspe region. This will be achieved through a combination of purchasing entitlements in the market and investments in more efficient irrigation infrastructure.

Consequently, should these targets be met, there are likely to be no reductions in individual water entitlement holder allocations.

For further information about these activities go to www.environment.gov.au/water.
### SUSTAINABLE DIVERSION LIMITS PROPOSALS

**CAMPASPE REGION**

#### SURFACE WATER

<table>
<thead>
<tr>
<th>Area</th>
<th>Current diversion limit</th>
<th>SDL proposal</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campaspe</strong></td>
<td>155 GL/y</td>
<td>from 115 GL/y to 103 GL/y</td>
<td>from 40 GL/y (26%) to 52 GL/y (33%)</td>
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</tbody>
</table>

#### GROUNDWATER

There are two groundwater SDL areas wholly or partly contained within the Campaspe region.

1) **Loddon–Campaspe Highlands**

<table>
<thead>
<tr>
<th>Area</th>
<th>Current diversion limit</th>
<th>SDL proposal</th>
<th>Reduction</th>
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</thead>
<tbody>
<tr>
<td><strong>Current diversion limit</strong></td>
<td>9.4 GL/y</td>
<td>9.4 GL/y</td>
<td>Nil</td>
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</table>

2a) **Victorian Riverine Sedimentary Plains:** shallow Shepparton formation

<table>
<thead>
<tr>
<th>Area</th>
<th>Current diversion limit</th>
<th>SDL proposal</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current diversion limit</strong></td>
<td>83.3 GL/y</td>
<td>83.3 GL/y</td>
<td>Nil - potential for unassigned water</td>
</tr>
</tbody>
</table>

2b) **Victorian Riverine Sedimentary Plains:** deep Renmark Group and Calivil Formations

<table>
<thead>
<tr>
<th>Area</th>
<th>Current diversion limit</th>
<th>SDL proposal</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current diversion limit</strong></td>
<td>89.6 GL/y</td>
<td>89.6 GL/y</td>
<td>Nil - potential for unassigned water</td>
</tr>
</tbody>
</table>

There is one surface water SDL area in the Campaspe region.
ABOUT MDBA

The Murray–Darling Basin Authority (MDBA) is the statutory agency that manages, in conjunction with the Basin states, the Murray–Darling Basin’s water resources in the national interest.

MDBA is responsible for preparing and overseeing a legally-enforceable management plan — the Basin Plan.

The Basin Plan will:

• optimise social, economic and environmental outcomes
• set and enforce environmentally sustainable limits on the quantities of water that may be taken from Basin water resources
• set Basin-wide environmental, water quality and salinity objectives
• develop efficient water trading regimes across the Basin
• set requirements for state water resource plans
• improve water security for all Basin users.

This document has been prepared by the Murray–Darling Basin Authority for public consultation purposes, using the best efforts to ensure that the material it presents is current and accurate. The opinions, comments and analysis (including those of third parties) expressed in this document are for consultation purposes only.

FURTHER INFORMATION AND FEEDBACK

For further information on the Guide to the proposed Basin Plan, visit the MDBA website at: www.mdba.gov.au

Our website also provides details about community information sessions and ways to provide feedback on the Guide.

You can also find out about upcoming events and information releases by subscribing to our engagement email and the monthly E-newsletter.

You may also phone us on 1800 230 067 (free call) or write to us at:

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PHOTOGRAPHER CREDITS

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