Since the millennium drought, irrigation use by GMW districts and LMW diverters has been significantly greater than the volume of high-reliability entitlements tied to land in those areas.

In 2017-18, GMW districts used 151% of the volume of entitlement tied to the district, and LMW diverters used 204% of the volume tied to their land.

Irrigators are now more reliant on allocation trade in the market and carryover to help meet their water needs. In 2017-18, active irrigators in GMW districts carried over 585 GL (44% of their use) and traded in 184 GL (14% of their use). LMW diverters carried over 52 GL (12% of their use) and traded in 189 GL (44% of their use).

**Table 1: Where did northern Victorian irrigators source their water from in 2017-18**

<table>
<thead>
<tr>
<th>Location</th>
<th>Carryover into 2017-18</th>
<th>Allocation</th>
<th>Net trade in</th>
<th>Use</th>
<th>Net trade out</th>
<th>Carryover to 2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMW districts</td>
<td>578</td>
<td>885</td>
<td>179</td>
<td>1,318</td>
<td>0</td>
<td>294</td>
</tr>
<tr>
<td>GMW diverters</td>
<td>59</td>
<td>129</td>
<td>0</td>
<td>115</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>LMW districts</td>
<td>30</td>
<td>117</td>
<td>0</td>
<td>108</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>LMW diverters</td>
<td>51</td>
<td>225</td>
<td>186</td>
<td>424</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>718</strong></td>
<td><strong>1,359</strong></td>
<td><strong>365</strong></td>
<td><strong>1,965</strong></td>
<td><strong>23</strong></td>
<td><strong>385</strong></td>
</tr>
</tbody>
</table>

How are irrigators sourcing their water?

Reliance on allocation trade

In 2017-18, there was 373 GL of net trade in by active irrigators in GMW districts and by LMW diverters.

The increased reliance of irrigators on allocation trade to support their water use is dependent on individual circumstances, but would include farmers:

- Whose business model acknowledges the risks of the variability of allocation prices from season to season;
- Who previously held more entitlement but sold water shares to retire debt;
- Who have sold entitlement to fund improvements in on farm water efficiency;
- Who are building their business and do not yet have the capital to own enough entitlement to meet their needs; or
- Who are holding all or part of their entitlement not tied to their land.

The increased reliance on allocation trade will lead to competition for the available water amongst water users, especially when there are zero or low available water determinations for NSW general security entitlements. This will be exacerbated when Victorian high reliability allocations are reduced in dry conditions.

Use of carryover by irrigators

Irrigators are using carryover to manage their risks and their water availability in drier years.

For example, after the wet year in 2016-17, 718 GL was carried over by active irrigators into 2017-18. With drier seasonal conditions in 2017-18, this volume was drawn down by 333 GL, with 385 GL carried over in active irrigation accounts into 2018-19.

Who is carrying over water?

Private individuals, water corporations and environmental water holders all carry over water to manage their water supplies between seasons.

Carryover helps to reduce the risks of limited water availability in dry seasons. Irrigators who carry over water can reduce their reliance on the market going into dry years when market prices are highest.

This year, half of the amount carried over is by private entitlement holders. The vast majority of this is in the accounts of active irrigators. 41% of the volume carried over was by environmental water holders and 9% by water corporations.

Most of the water carried over by private individuals this year is in the accounts of active irrigators in the GMW districts (294 GL). Another 39 GL was carried over by GMW diverters, and 52 GL by Sunraysia irrigators.

The latest market trends report shows that the holders of entitlements not tied to land are only carrying over a small proportion of their water – there remains negligible sign of any hoarding. This volume includes farmers who choose to hold their water not tied to land and other investors, some of whom carry over water under contracts for irrigators.