Improved allocation announcements for River Murray irrigators

The South Australian Government is committed to giving greater support to River Murray irrigators to help them in their forward planning. We are now seeking your feedback on how we can best deliver water allocation announcements to help meet your business needs.

WHY ARE WE REVIEWING OUR APPROACH TO WATER ALLOCATION ANNOUNCEMENTS?

We have heard that the approach to allocation announcements can be improved to better inform irrigators’ business planning. Specifically, you told us you want regular forecasting data to help better plan for your business needs.

A proposed new approach is set out in this information sheet. We would like to know what you think of this approach and whether you have any other suggestions to improve the announcement process.

WHAT IS THE PROPOSED APPROACH TO ALLOCATION ANNOUNCEMENTS?

A minimum opening allocation announcement would be made by no later than mid-April, based on the ‘worst case’ forecast of water availability for the next water year as provided by the Murray-Darling Basin Authority (MDBA). This minimises the risk that allocations may be reduced within a water year, as was the case in 2006-07.

Entitlement holders would receive a range of water allocation outlook information, including:

- the projected minimum opening allocation
- the projected minimum amount of water that will be delivered to South Australia as part of its Entitlement for the following water year
- information on how much water is held in storage for private carryover (see Figure 2 on page 4)
- updated rainfall outlook information across the Murray-Darling Basin from the Bureau of Meteorology (see Figure 3 on page 4)
- information on potential allocations for a range of probability scenarios at specified points in time (see Table 1 and Figure 4 on page 5).

Beginning in mid-April, when opening allocations are projected to be less than 100 per cent, the Department for Environment and Water (DEW) would update the projected minimum opening allocations on a monthly basis as well as provide updated allocation outlook information.

Actual opening allocations would be announced on 15 June (or the next business day). This will be based on the actual volume of water available to South Australia, which may have increased since projected minimum opening allocations were announced.

During a water year when irrigation allocations are less than 100 per cent, DEW would provide updates to allocations on a fortnightly basis and provide updated water outlook information on a monthly basis.

In a given water year, no further announcements would be made after allocations reach 100 per cent.

Figure 1 on page 3 shows a proposed allocation announcement timeline.

WHAT ARE PROBABILITY SCENARIOS?

Probability scenarios provide a guide to the likelihood of future irrigation allocation increases. They are based on River Murray system modelling, undertaken by the MDBA, and South Australia’s River Murray Water Allocation Framework, included in the Water Allocation Plan for the River Murray Prescribed Watercourse.

The probability scenarios are not predictions, but rather a tool to help better understand potential future water availability. They represent allocations under different water availability scenarios (based on historical variability in rainfall and temperature, in combination with current policy and operational settings).
The modelling sets all storages and flows in the system to current conditions and uses historical inflow and climate conditions to create over 100 unique inflow sequences for the next 12 months. These simulations are used to calculate the probability scenarios included in Table 1.

**WHAT ABOUT PRIVATE CARRYOVER?**

Allocations in the probability scenarios do not include carryover.

Going forward, private carryover availability would also be announced by no later than mid-April to align with the announcement of minimum opening allocations.

Changes to the private carryover policy included in the Water Allocation Plan for the River Murray Prescribed Watercourse are proposed. Further information can be found in the Private Carryover fact sheet.

**IS THIS CONSISTENT WITH INTERSTATE APPROACHES?**

South Australia’s River Murray Entitlement and water sharing rules vary from those interstate. The proposed approach is tailored to South Australia’s specific circumstances, whilst providing information in a manner that is consistent the approach taken by New South Wales and Victoria.

Allocation announcements would be based on the same water availability information used interstate.

**CAN ALLOCATION ANNOUNCEMENTS BE MADE PRIOR TO APRIL?**

Our water allocation and carryover announcement timing relies on timing of the MDBA’s announcement of water available to South Australia. We are working closely with the MDBA to make announcements as early as possible. In most years, water availability information for the upcoming water year is not considered sufficiently reliable to announce minimum opening allocations prior to April.

In some very wet years, however, announcements may be made earlier.

**HOW DO THE PROPOSED CHANGES AFFECT WATER USERS?**

These changes do not affect the reliability of entitlements. The changes provide increased certainty about the timing of allocation announcements and greater consistency with the approach in New South Wales and Victoria.

Providing probability scenarios increases access to information that can help people make decisions based on their business needs and risk appetite.

This additional information should allow irrigators to make better business decisions and continue to contribute to regional economic growth.

**HOW CAN I PROVIDE FEEDBACK?**

We value your feedback in improving and refining the water allocation announcement process. We are running a two month consultation around how we can give greater support to River Murray irrigators. Please review the information in this fact sheet, and the examples of what could be provided in Attachment 1 and let us know:

- What additional tools or information would be most beneficial to you in planning for your business?
- How would you like to see this information presented?
- What changes would you like to see to the proposed approach to allocation announcements?
- How would you like to receive water outlook information?

**WHEN CAN I EXPECT TO HEAR MORE?**

The consultation period runs until 14 September 2018. During this time, we will collect your feedback and then provide a revised draft to stakeholders November 2018.

We will provide a final format of the additional information by the end of January 2019, with the aim of rolling out this information on a regular basis from April 2019.
FIGURE 1 – TIMELINE OF ALLOCATION AND CARRYOVER ANNOUNCEMENTS

*When allocations are less than 100 percent they will be increased over time if there are improvements in water availability.
ATTACHMENT ONE: PROPOSED WATER OUTLOOK INFORMATION FOR IRRIGATORS

This attachment includes EXAMPLES of the types information that are proposed to be included as part of allocation announcements, when allocations are less than 100 per cent. Irrigation allocations since 2002-03 can be found here.

1. The projected minimum opening allocation is XX per cent.
2. The projected minimum amount of water that will be delivered to South Australia as part of its Entitlement for the following water year is XX GL, up to 1850 GL (excluding additional environmental water deliveries, e.g. water held by the Commonwealth Environmental Water Holder).
3. Carryover will [or will not] be provided.
4. XX GL of water is currently held in storage for private carryover - see Figure 2.

FIGURE 2 – SOUTH AUSTRALIAN STORAGE RIGHT VOLUME (APRIL 20XX)

5. The Bureau of Meteorology’s mid-range rainfall outlook information across the Murray-Darling Basin suggests that it is going to be a drier [or wetter] than average across the Basin in the next three months - see Figure 3.

FIGURE 3 BUREAU OF METEOROLOGY SEASONAL RAINFALL OUTLOOK
6. Table 1 and Figure 4 provide information on potential allocations for a range of probability scenarios that could be provided in advance of the water year. The projected minimum opening allocation is XX per cent. This is reflected in the 1 July allocation under the minimum allocation scenario (in this EXAMPLE it is 36 per cent).

Probability scenarios are based on River Murray system modelling and South Australia’s River Murray Water Allocation Framework. They represent allocations under different water availability scenarios based on historical variability in rainfall and temperature, in combination with current policy and operational settings (this includes Basin-wide storage volumes).

**TABLE 1 - PROBABILITY SCENARIOS FOR IRRIGATION ALLOCATIONS (APRIL EXAMPLE)**

<table>
<thead>
<tr>
<th>Projected allocation as a percentage (All Purpose Class 3) - correct as of 01 April 20xx *</th>
<th>1 July</th>
<th>1 Sept.</th>
<th>1 Nov.</th>
<th>1 Jan.</th>
<th>1 April</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected minimum allocation for 20xx water year</td>
<td>36</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Extreme dry - 95% likelihood allocation will be at least</td>
<td>44</td>
<td>49</td>
<td>41</td>
<td>64</td>
<td>81</td>
</tr>
<tr>
<td>Very dry - 90% likelihood allocation will be at least</td>
<td>47</td>
<td>53</td>
<td>86</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Dry - 75% likelihood allocation will be at least</td>
<td>61</td>
<td>81</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Average - 50% likelihood allocation will be at least</td>
<td>75</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

* Based on the volume of water held in River Murray Storages at the end of March 20xx
This data is provided for information only. Historical performance is not necessarily an indicator of future outcomes. The Government of South Australia, its agents, instrumentalities, officers and employees: make no representations, express or implied, as to the accuracy of this information and data; and accept no liability however arising for any loss resulting from the use of any information and data or reliance placed on it.

**FIGURE 4 - PROBABILITY SCENARIOS FOR IRRIGATION ALLOCATIONS (APRIL EXAMPLE)**
7. Table 2 and Figure 5 provide information on potential allocations for a range of updated probability scenarios that could be provided during the water year. The actual allocation in September is XX per cent. This is reflected in the 1 September allocation under the minimum allocation scenario (in this EXAMPLE it is 61 per cent).

**TABLE 2 - PROBABILITY SCENARIOS FOR IRRIGATION ALLOCATIONS (SEP. EXAMPLE)**

| Projected allocation as a percentage (All Purpose Class 3) - correct as of 01 September 20xx * |
|--------------------------------------------------|---------------------------------------------------|------------------|-------------------|
| Projected minimum allocation for 20xx water year | 1 Sept. | 1 Nov. | 1 Jan. | 1 April |
| Extreme dry - 95% likelihood allocation will be at least | - | 75 | 100 | 100 |
| Very dry - 90% likelihood allocation will be at least | 100 | 100 | 100 | 100 |
| Dry - 75% likelihood allocation will be at least | - | 100 | 100 | 100 |
| Average - 50% likelihood allocation will be at least | - | 100 | 100 | 100 |

* Based on the volume of water held in River Murray Storages at the end of August 20xx.
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**FIGURE 5 - PROBABILITY SCENARIOS FOR IRRIGATION ALLOCATIONS (SEP. EXAMPLE)**

* Based on the volume of water held in River Murray Storages at the end of August 20xx.
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