

## Connectivity Stakeholder Reference Group

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*The second meeting of the Connectivity Stakeholder Reference Group was held on 7 October and focused on potential climate change impacts and draft dry condition triggers for temporary restrictions on water take.*

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The Connectivity Stakeholder Reference Group (the group) has been established to provide feedback to the Department of Planning, Industry and Environment's approach on river connectivity as part of the development of the Western Regional Water Strategy.

While this process does not replace public consultation with the community and other stakeholders, the participation of this group provides the department with a range of diverse perspectives on connectivity before public consultation on the draft Western Regional Water Strategy.

The group consists of representatives from Koori, Murri and Goori nations, water user groups, conservation groups, local government, the Murray Darling Basin Authority and the Commonwealth Environmental Water Office.

A summary of the second meeting is provided below.

### The second meeting

Due to COVID-19 considerations, the meeting took place online via MS Teams from 9.30am – 1.00pm on 7 October 2021. The objective of this meeting was for all members to:

- discuss how climate change could influence extended drought conditions
- develop a shared understanding of draft critical dry condition triggers for temporary restrictions on water take (referred to as s324 orders) that can be used for first flush management.

A presentation was shared about the potential impacts of a more variable or drier climate on inflows to the Barwon-Darling River, what actions have already been implemented to improve connectivity and draft targets for initiating and lifting s324 restrictions during and after prolonged dry periods. A summary is outlined below.

#### 1. Impacts of a more variable or changing climate

##### Summary of data:

A dry climate change scenario could result in:

- continued wet and dry periods
- potential long-term decline in inflows into the northern catchments, and more frequent times when the northern valleys do not connect with the Barwon-Darling
- longer cease to flow events under a worst case scenario
- seasonal changes to tributary flows with a reduction in winter and spring flows and a delay in peak flows from summer to autumn.

The group discussed the relative contributions of flows from different valleys into the Barwon-Darling

Given the potential impacts of climate change driving extended cease to flow events, the group discussed whether connectivity actions should focus on shorter cease to flow events which could be more influenced by water sharing arrangements, or extended cease to flow events which are driven by the climate.

### Key points raised by members of the group

Members queried the source of figures presented about the contribution of flows from northern tributary valleys into the Barwon-Darling. An updated percentage flow contribution will be included in the presentation from the meeting and published on the website.

Some stakeholders suggested that water management planning should not be based on a worst case 1 in 10,000 year event, but should consider more realistic scenarios.

There were different views on whether new interventions should focus on addressing shorter or longer dry periods.

There needs to be a greater focus on Murri and Koori people and Aboriginal knowledge.

## 2. Draft triggers for temporary water restrictions (section 324 orders) under the *Water Management Act 2000*

### Summary of data:

DPIE-Water presented the following draft triggers for initiating temporary water restrictions in the northern tributaries and Barwon-Darling for discussion.

| Location  | Draft trigger  |
|---|--|
| <b>Barwon-Darling River at Wilcannia</b>                          | Flows below 20 ML/day for 120 days at Wilcannia flow gauge                         |
| <b>Upper Menindee Lakes (Lakes Wetherell, Tandure, Pamamaroo)</b> | Storage volume is below 195 GL   |
| <b>Northern Tributaries</b>                                       | Northern tributary (Macquarie, Namoi, Gwydir, Border Rivers) is in Drought Stage 4 |

It is proposed that the Section 324 orders would be applied to:

- A, B and C class access in the Barwon-Darling
- floodplain harvesting in the Barwon-Darling and northern valleys
- supplementary access in the northern regulated valleys and
- large unregulated river access in the lower sections of the northern valleys.

The following triggers were also presented around managing water releases from Menindee Lakes and into the Lower Darling to improve water quality.

| Location       | Draft trigger  |
|----------------|--|
| <b>Weir 32</b> | Dissolved oxygen < 5 mg/L<br>Algal concentration > 4mm <sup>3</sup> /L<br>when flows below 1ML/day at Weir 32 flow gauge |

|                       |  |
|-----------------------|--|
| <b>Pooncarie Weir</b> | Dissolved oxygen < 5 mg/L<br>Algal concentration > 4mm <sup>3</sup> /L<br>when flows below 1ML/day at Weir 32 flow gauge |
| <b>Burtundy Weir</b>  | Dissolved oxygen < 5 mg/L<br>Algal concentration > 4mm <sup>3</sup> /L<br>when flows below 1ML/day at Weir 32 flow gauge |

A discussion paper will be released on the proposed triggers for public comment.

### Key points raised by members of the group

Stakeholders had a variety of views on these triggers which included:

- S324 orders are not desirable, and water sharing plan rules that have been negotiated through community processes are a better option
- The triggers need to be applied fairly, and there needs to be clearly defined rules about when restrictions will be implemented and lifted
- There are trade-offs between being able to actively and adaptively manage events when they occur.
- Stakeholders raised questions on what the scientific reasoning was behind the draft triggers. The department committed to circulating a discussion paper on this for comment.
- There needs to be more data collection, real time water monitoring and information about how often the draft triggers for restrictions would likely be met.

There was discussion about how cultural water needs and floodplain harvesting fit in the hierarchy of water priorities under the *Water Management Act 2000*

All documentation will be posted on the Department of Planning, Industry and Environment Water website.

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