

Factsheet on Barwon-Darling Water Sharing Plan Review

- An intense drought, significant upstream water extraction, an apparent climate shift and the rules of the *Water Sharing Plan for the Barwon-Darling unregulated and alluvial water sources 2012* have all contributed to poor ecological, social and cultural outcomes.
- The *Water Management Act 2000* clearly prioritises firstly protection of the water source and dependent ecosystems, secondly basic landholder rights, then town water and other extractive uses.
- Changes are needed to the Plan to meet the priorities specified in the Act.



Environment Key Findings

- The current cease to flow period of over a year at Bourke is the longest in recorded history.
- Site visits in 2019 identified large numbers of dead river mussels ranging from a few to thousands, representing a greater impact on riverine biota than the fish deaths.
- Tributary inflows have been significantly reduced over the life of the Plan with actual flows 40% of the long term modelled average. This is likely due to drought and upstream extraction.
- Further, CSIRO estimates that by 2030 there will be a further 10% reduction in end of system flows under climate change.
- The Barwon-Darling is a highly variable system – cease to flow periods are part of the natural flow regime. One of the key Plan mechanisms to protect flows are the cease to pump thresholds.
- Critical low flows are essential to provide the minimum environmental flows to maintain species and ecosystem health, especially for vulnerable and endangered species such as the Murray Cod and Olive Perchlet.
- The Plan's cease to pump rules have resulted in an increased allowance for extractive use at lower flows that are critical to the environment.
- Expert hypothesis is that the Plan rules have pushed the Barwon-Darling system below Bourke into persistence of very low flow conditions three years earlier than the river upstream.

Social Key Findings

- All LGAs have had to implement critical water supply management strategies and are shifting to bore water for town drinking water needs. Bourke, Collarenebri and Walgett are subject to the highest level water restrictions.
- All LGAs in the Plan area have experienced population decline between the census years 2011 and 2016.
- Water scarcity, poor water quality and water restrictions are impacting residents' physical and mental health, and limiting recreational activities such as swimming, fishing, sports and gardening.
- Aboriginal communities are disproportionately impacted sharing these problems as well as suffering from damage to culturally significant places, and a limited ability to maintain and teach cultural practices and knowledge.
- In 2015 the native title rights of the Barkandji and Malyangapa traditional owners were legally recognised. Further native title land and water parcels were added in 2017. These rights have not been allocated a share of water under the Plan.

Economic Key Findings

- Landuse in the Barwon-Darling catchment is dominated by grazing (78%). Irrigated cropping, predominantly cotton varies with seasonal conditions and water availability. Cotton is the most valuable crop in the region.
- Of the 94 A Class licence holders who can extract low flows, the top 5 control 56% of the total share.
- Irrigators have in recent years been unable to extract water with average annual take 0.1% of tributary inflows in 2018-19.

Key actions

- Immediate changes are required to the cease to pump thresholds for A Class licences to protect critical low flows if and when they occur.
- Reforms underway by the Department of Planning, Industry and Environment to implement rules that protect low flows including resumption of flows, environmental water and individual daily extraction limits should be implemented immediately.
- Rules need to acknowledge native title rights to water in the Plan area and provide for interim allocations for Aboriginal nations.
- NSW Government water management reforms including improved metering and monitoring, Reasonable Use Guidelines and Floodplain Harvesting policies should be expedited.
- There is a need for an open, evidence based, and independently peer reviewed process to develop a new plan by 2023.

For the full review of the Barwon-Darling Plan see the Commission's website:
<https://www.nrc.nsw.gov.au/2018-2019-wsp-reviews>

