

**Submission
No 77**

FOOD PRODUCTION AND SUPPLY IN NSW

Organisation: Nature Conservation Council of NSW

Date Received: 14 March 2022



Nature Conservation Council

The voice for nature in NSW

14 March 2022

Select Committee on food production and supply in NSW
NSW Parliament House
Macquarie Street
Sydney NSW 2000

Email: environmentplanning@parliament.nsw.gov.au

To the Committee Chair,

Submission to the inquiry on food production and supply in NSW

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 170 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC welcomes the opportunity to provide input into this inquiry. This submission will comment briefly on the Committee's Terms of Reference:

- 2 – Reducing food waste and destruction.
- 4 - Preserving productive land and water resources.
- 5 - Managing the impact of climate change.

Water is a scarce resource in Australia and climate modelling indicates water resources will diminish further. Effective and sustainable management of our water resources is therefore a critical responsibility of the NSW Government.

We acknowledge the existing expertise and solutions proposed by recent inquiry and reporting. Much existing material reveals the extent of the threats that food waste, water extraction and climate change pose to food production and supply in NSW. We commend this work, referenced in this submission, to the Committee.

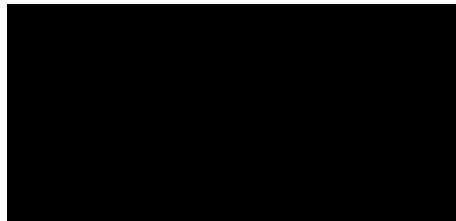


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Your key contact point for further questions and correspondence is Jacquelyn Johnson, Strategy and Operations Director, available via [REDACTED] and [REDACTED]. We welcome further conversation on this matter.

Yours sincerely,



Chris Gambian
Chief Executive
Nature Conservation Council

Recommendations

That the NSW Government:

1. Regulate floodplain water take in such a way that guarantees ecologically sustainable water flows right through to the end of the river system.
2. Put environmental water needs first, determined by the best available science, before water is allocated to other uses in all water resource planning and management.
3. Support evidence-based resilience and adaptation in the food-supply chain and take all possible steps to move Australia towards its commitments under the Paris Agreement.



NSW Nature Conservation Council submission on food production and supply in NSW

Preserving land and water resources requires sustainable use of our river systems; there is no agriculture on a dead river.

Australia is facing a water crisis.

Safe and sufficient water is one of the substantive components of the right to a healthy and sustainable environment. Water pollution, water scarcity and water-related disasters impinge on the access of communities to many human rights, including healthy and affordable food. Vulnerable and marginalised groups experience a disproportionate denial of these rights.

The mighty rivers and wetlands west of the Great Dividing Range are the lifeblood of our state and are home to an extraordinary diversity of native plants and animals. However, chronic overallocation of water is threatening livelihoods, communities, and all life that depends upon healthy rivers.

The Barwon-Darling River system is a case study in the impacts of over extraction. A small number of large-scale irrigators in northern NSW have massively increased water extraction, causing one of Australia's greatest environmental catastrophes downstream along the Darling-Baaka River. There has been a quantifiable drop in flows and the river has changed from a connected system to a fragmented system.¹ The freshwater systems of the Darling-Baaka River are listed as endangered and include multiple threatened species. Insufficient flows that are a direct result of over-irrigation threaten the viability of the system, its wildlife and the communities that depend on the water for their livelihoods and wellbeing.²

Similar situations are emerging on other rivers, including the Macquarie and Gwydir.

We note that cotton is by far the largest irrigated crop in the Barwon-Darling catchment. However, the water take for cotton is relevant to the remaining water that is sustainably available for food agriculture. Extraction of water from the river system impacts the economic viability of all pastoral operations downstream of major irrigation areas.³

The laws, regulations and procedures set by the NSW Government regarding water resource use are enabling unsustainable outcomes that will deeply impact Australia's food supplies. There are too many straws in the glass.



In particular, the failure of the NSW Government to properly regulate floodplain harvesting, and significant uncertainties around policy imperatives, have undermined the trust and confidence of river communities in the government's management of water.

Any licensing of floodplain water take must guarantee ecologically sustainable water flows right through to the end of the system. The connection between rivers and their floodplains must be restored to keep critical ecosystems healthy. Rivers must connect for native fish survival and drought resilience. End of system flow targets, and clear consistent definitions of environmental water must form the basis of the rules that establish how water is shared. Anything less will have a devastating impact on river health and downstream farmers and communities.

All agricultural pursuits in NSW should be managed in a way that protects the biological and ecological integrity of the state's hydrological systems.

Environmental water needs must be met before water is allocated to other uses. When water extraction is permitted, adequate water must remain in the environment to maintain biodiversity and ecological processes. Water resource planning and management must be firmly grounded in the best available science.

Global warming, which is making the climate drier and hotter, is exacerbating the problem of water over-allocation, and fundamentally changing landscapes and industries.

Connected with past, present and future water policy settings on farming and the food supply chain is the impact of climate change. Climate change is already impacting our rivers and wetlands, and recent NSW flooding events are a raw and devastating demonstration of its impact on communities and agriculture.⁴

Climate variability is expected to permanently shift the fundamental characteristics and connectivity of the Murray Darling basin. In 2021, the Select Committee on the Multi-Jurisdictional Management of and Execution of the Murray Darling Basin Plan identified that higher temperatures, reduced rainfall, increased evaporation, reduced river flows, longer droughts, more heatwaves, and more frequent bushfires are predicted. When rainfall does occur, it is expected to be more intense and difficult to manage.

This will mean less water available for all users. There will be increased pressure for efficient water use, reduced water quality, river ecosystems under stress, changing, competing water demands across sectors and growing livability challenges in regions.⁵



Along with keeping water-take from NSW rivers and across the basin states to sustainable levels, limiting the warming of the globe to 1.5 degrees will limit the threats to Australia's food production and supply. Clear policy signals, commitments and actions from governments at all levels on deep emissions cuts this decade will help the farming and entire Australian community avoid the worst impacts of climate change on our food supply chains.

Farmers for Climate Action has released a report that articulates the challenge of climate change on Australian agriculture. It concludes that in addition to supporting resilience and adaptation in the food-supply chain, Australia must take all possible steps to meet its commitments under the Paris Agreement.⁶

Food waste is filling landfill and producing emissions equivalent to Australia's highest emitting coal-fired power station.⁷

According to a submission provided to this Inquiry by NCC Executive member Chris McElwain, of the University of NSW, this state will fail to achieve the national and NSW food waste target of halving the amount of wasted food by 2030.

Wasted food emits an equivalent of around 3.5% of Australia's emissions and uses more than 2.5 thousand gigalitres of water each year.

NSW should act to divert more waste away from landfill and back into the productive economy.

NCC supports Mr McElwain's submission and its recommendations.



References

¹ Mallen-Cooper, M & Zampatti, B, 2020 “Restoring the ecological integrity of a dryland river: Why low flows in the Barwon-Darling River must *flow*”

² Mallen-Cooper, M & Zampatti, B, Ibid

³ Natural Resources Commission, 2019, Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012, available: <https://www.nrc.nsw.gov.au/Barwon-Darling%20WSP%20review%20-%20Final%20report%203MB.pdf?downloadable=1>

⁴ May, N, 2022, Floods and livestock losses leave NSW and Queensland farmers reeling from third disaster in three years, the Guardian Australia 2 March 2022, available: <https://www.theguardian.com/australia-news/2022/mar/02/floods-and-livestock-losses-leave-nsw-and-queensland-farmers-reeling-from-third-disaster-in-three-years>

⁵ Commonwealth of Australia, the Senate, 2021, Final Report of the elect Committee on the Multi Jurisdictional Management and Execution of the Murray Darling Basin Plan.

⁶ Bartos, S., 2022, Fork in the Road: impacts of climate change on our food supply, Farmers for Climate Action, available: https://farmersforclimateaction.org.au/wp-content/uploads/2022/03/Fork-in-the-Road_V5.pdf

⁷ FIAL, 2021, National Food Waste Strategy Feasibility Study - Final Report, available https://afccc.org.au/images/news%20nat%20food%20waste%20feas%20study/FIAL%20NFWS%20Feasibility%20Study%20Report_FINAL.pdf