



Consultation draft
Fitzroy-Derby water resources management plan:
policy and guidance
Michael Murray, June 2026

The Fitzroy Derby Draft Water Plan

Submission prepared by Cotton Australia General Manager,
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ABOUT COTTON AUSTRALIA

Cotton Australia is the peak body for Australia's cotton growers, representing up to 1,500 cotton farms mainly in New South Wales and Queensland but also in the Northern Territory and Western Australia. Cotton Australia works with growers and stakeholders to ensure the Australian cotton industry remains viable.

Cotton Australia supports the Australian cotton industry to be globally competitive, sustainable and valued by the community. It drives the industry's strategic direction, retains a strong focus on research and development, promotes strength of the industry, manages sustainability reporting and implements policy objectives.

1. Executive summary

Cotton Australia welcomes the opportunity to provide this submission in response to the Western Australian Government's Fitzroy-Derby Water Resources Management Plan (the Plan). Cotton Australia is the peak body representing Australia's cotton growers, and has a strong interest in ensuring water policy settings across northern Australia support sustainable and productive agricultural development.

Cotton Australia commends the Western Australian Government for developing this inaugural Plan and for its commitment to adaptive management and a conservative approach to water allocation. The submission highlights the strong complementarity between cotton production and the region's existing cattle industry, and the significant economic development potential that irrigated cotton agriculture could offer the Fitzroy-Derby region and its communities, including Traditional Owners.

The submission's primary focus is on the Plan's near-exclusive reliance on groundwater for irrigation. Cotton Australia proposes that the Plan be expanded to include a volumetric overland flow licensing framework — consistent with approaches already in use in Queensland and the Northern Territory — which would enable economically viable irrigated agriculture at the scale needed to support a productive cotton industry without compromising the free-flowing nature of the Fitzroy River system.

2. Recommendations

Cotton Australia makes the following recommendations in relation to the Fitzroy-Derby Water Resources Management Plan:

1. **Introduce an overland flow licensing framework:** The Department should develop and implement a volumetric overland flow use policy as part of the Fitzroy-Derby Water Resources Management Plan, consistent with approaches applied in Queensland and the Northern Territory. This would enable economically viable on-property capture of wet season flows, providing a more viable foundation for irrigated agriculture than groundwater extraction alone.
2. **Initiate a conservative overland flow licensing trial:** As an initial step, the Department should consider offering no more than three overland flow licences of up to 6,000 megalitres each. This conservative approach maintains the free-flowing nature of the Fitzroy River while enabling a genuine assessment of irrigated agriculture viability in the region.
3. **Support Traditional Owner participation in agricultural water use:** The Plan should include measures that actively facilitate pathways for Traditional Owners to participate in and benefit from irrigated agriculture, including co-managed farming arrangements and direct access to water entitlements, in keeping with the Plan's existing commitment to Traditional Owner rights.
4. **Recognise the complementarity of cotton and cattle industries:** The Plan and associated government strategies should acknowledge and seek to leverage the strong synergies between cotton production and the existing northern cattle industry, including cottonseed as a high-value livestock feed supplement, to support economic diversification and resilience in the Fitzroy-Derby region.

3. Submission response

Cotton Australia welcomes the opportunity to provide this brief submission to the Western Australian Government's draft plan for regulating, allocating and managing water resources in the Fitzroy-Derby Plan Area.

Cotton Australia congratulates the Western Australia government in taking the initiative to develop this inaugural Fitzroy-Derby Water Resources Management Plan, and for its commitment to adaptive management, and a generally conservative approach to allocating the available water resources. Eastern States experience has shown it is far better to gradually release access to water, rather than having to implement program to wind back access to released water entitlements.

Cotton Australia does not intend to make a detailed technical submission to this draft, but rather provide commentary, some industry context and some suggestions regarding inclusions in the plan.

3.1 CATTLE AND COTTON ARE COMPLEMENTARY

Cotton is the world's number one natural fibre, and the Australian cotton industry of today is immensely different to the industry of three or four decades ago.

It is an industry that has been investing in research and new technologies for decades. The combination of the industry's best management practice program "myBMP" and an extension delivery service CottonInfo¹ has been key to delivering practice change and production efficiencies.

Compared to the 1990s growing a bale of cotton now uses:

- 52% less water
- 97% less insecticides
- 34% less land

Over the last decade there has been a significant interest in broadacre cropping in northern Australia, including strong interest and investment in cotton production.

The re-emergence of cotton has a cornerstone crop across the Ord Irrigation area is a case in point, and development has not only resulted in a \$70 million investment in a cotton gin but has supported many of the small businesses that are located in Kununurra and has generated additional activity out of the Port of Wyndham.

What is less well known about cotton is that for every tonne of cotton fibre that is produced, there is approximately 1.2 tonne of cotton seed produced.

Cottonseed is a high protein oil seed with an oil content of between 15% and 20%. It can be crushed, with the oil used for a whole range of uses including as a high smoking temperature cooking oil, for soaps, skin care products and food processing.

¹ <https://www.cottoninfo.com.au/who-are-we>

However, it is also a highly valued livestock feed, especially for cattle. Its high protein and oil content make it ideal for inclusion in finishing rations, but it can also be fed direct to cattle who will self-regulate intake, and there is no risk of “grain poisoning” or similar issues.

This makes cotton production highly complementary to the Western Australia northern cattle industry, especially where producers are looking to finish cattle either for export or to meet year-round meat works demand.

The value of cottonseed as a livestock feed is clearly demonstrated by the fact that some seed this season is being transported from Kununurra to south of Perth to be fed to cattle.

Cotton Australia believes there are great synergies between the two industries, with cotton production not only offering economic diversification for pastoralists, but also a key input to fully capitalise on their key input.

3.2 IT TAKES A COMMUNITY TO GROW COTTON

There is a widely accepted saying that it takes community to grow cotton successfully, and in that lies great potential for economic development and diversity in the Fitzroy-Derby Region.

Cotton is a resource intensive crop to grow – it requires expertise, it requires labour, it requires machinery, it requires capital, and it requires an overall economic and social infrastructure.

A review of Kununurra’s community over the past decade will have seen the positive impacts on employment through the construction and now operation of the cotton gin, the increase in agronomic and machinery services, contractors, greater activity in the financial services sector, greater demand on transport, boost in accommodation demand, and this will flow on through to increase school enrolments and the like.

However, to foster the community, the industry does need a degree of scale at a reasonably local level. It would be unrealistic to expect the industry to thrive, if the area was only able to host 1000ha of cotton or less.

While it is hard to be definitive as to what would be considered a viable area, but assuming in the foreseeable future production was sent to Kununurra for ginning, a short to medium term viable area may be in the order of 3,000 to 6,000ha.

It can’t be underestimated the degree of economic diversity and new employment the industry could offer a region like the Fitzroy-Derby.

This economic diversity would flow through to a wide-range of employment opportunity from semi-skilled roles to professional positions. There would be opportunities for employees, contractors, small businesses and corporate employers.

The diversity offered by cotton, could also offer counter-cyclical economic activity during periods of pastoral industry downturn, and recent experience in the Gulf region of Northern Queensland also highlighted the opportunity to speed up recovery from natural disaster, with shorter seasonal nature of cropping, allowing for a return of cashflow while waiting for herds to rebuild.

3.3 OPPORTUNITIES FOR TRADITIONAL OWNERS

Cotton Australia recognises the very strong linkage in the draft plan to the Traditional Owners, both in terms of genuine engagement and consultation, but also in ensuring Traditional Owners have direct access and ownership of water resources.

Cotton Australia does not purport to have any direct relationships with the Traditional Owners within the Fitzroy-Derby draft plan area.

However, it is confident that with respectful and appropriate engagement with and between Traditional Owners there would be a range of opportunities for Traditional Owners including direct ownership.

As owners of significant pastoral leases and access to dedicated water reserves under the draft plan, Traditional Owners will have opportunities to become part of the cotton industry if that is what they want.

The MG Corporation in the Ord, is one example, where there is partnering with Indigenous landowners for co-managed farming projects or leasing land for agricultural use to foster trust and support Aboriginal economic development opportunities.

3.4 THE PLAN AND COTTON

Cotton Australia fully respects the position of the Western Australian Government not to allow the building of headwater storages on the Fitzroy River or its tributaries.

However, it is surprised about the plan's almost single focus on groundwater, and it would like to have this plan review process actively consider an alternative approach.

Despite myths to the contrary, cotton is not a thirsty crop. If planted side-by-side, in the same environment, with a crop like corn, it will use approximately the same amount per hectare to grow. The actual amount it takes, depends on soil type, climate and actual crop demand.

It is estimated in the general Fitzroy-Derby area, a cotton crop planted either immediately before, or during a lull in the wet season, may use around 10 megalitres per hectare to grow. Therefore, simply maths would suggest a 3000 megalitre ground water licence might be able to support 300ha of cotton.

However, due to the expected relatively low extraction rates from bores within the region, a 300ha cotton crop would not be able to be serviced by a single bore, but most likely would be serviced by numerous bores, connected to numerous centre pivot irrigators.

The result is the capital investment required to sink and equip the bores, and instal the centre pivots, along with the pumping and pressurisation costs are likely to make such irrigation uneconomic, if done on a scale that would be required to support the "cotton community".

An alternative would be to allow volumetric licencing of overland flow. This approach is used quite widely in Queensland, and is the approach allowed under the relatively recently released Northern Territory Wet Season flow policy

(<https://nt.gov.au/media/docs/environment/water/licensing-and-permits/surface-water-take-wet-season-flow-policy.pdf>) .

Under this model, the land holder would be able to capture, in on property storage infrastructure, wet season flows that are crossing the landscape.

Landholders would be approved to construct infrastructure on or near low order water courses.

The system automatically adapts to seasonal conditions, as captured flows would be capped at a maximum volume (with the maximum volume only being achieved in wet years) where in years of weaker wet season, the rain would simply not generate the flows that could be captured.

Total licencing could be captured at a very low per centage of the total catchment flows but still be significant enough to underwrite a viable irrigation industry at a scale that would support broadscale irrigated agriculture.

Cotton Australia would be supportive of the government adopting a conservative approach, maybe by only offering three 6000 megalitre overland flow licences in any initial releases.

Further releases could be considered after appropriate reviews.

This approach would maintain the free-flowing nature of the Fitzroy River system.

Cotton Australia recommends that the Department considers and implements an overland flow use policy, and it initiates a trial as part of Fitzroy-Derby Water Resources Management Plan.

4. Conclusion

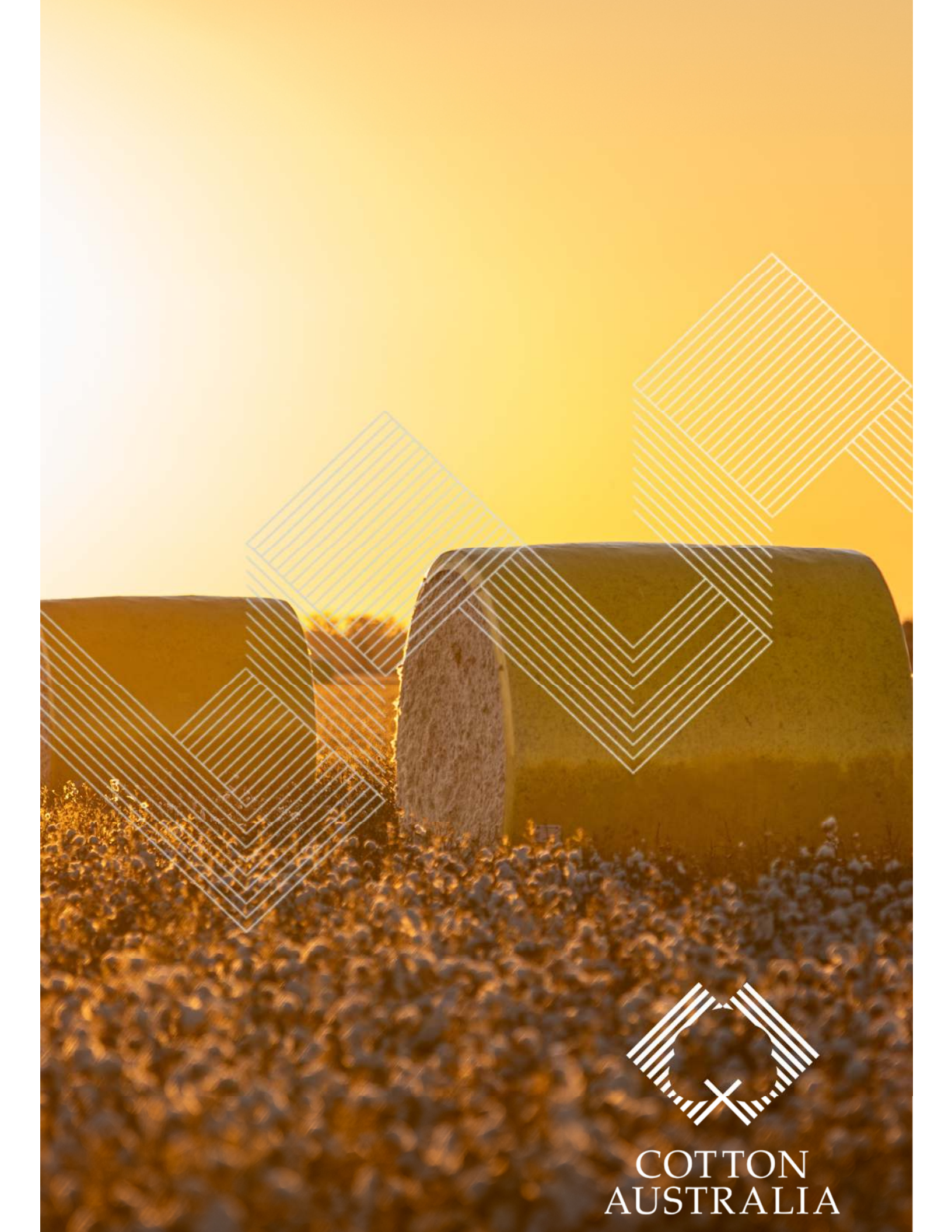
Cotton Australia strongly supports the Western Australian Government's initiative to develop the Fitzroy-Derby Water Resources Management Plan and commends its commitment to a conservative, adaptive approach to water resource management. Eastern Australian experience clearly demonstrates the wisdom of gradually releasing access to water resources, rather than over-allocating and then being forced to claw back entitlements.

Cotton Australia's primary suggestion is that the Plan consider expanding beyond its current near-exclusive reliance on groundwater by introducing a volumetric overland flow licensing framework. Such an approach — already proven in Queensland and now introduced in the Northern Territory — would allow landholders to capture wet season flows in on-property storage infrastructure, providing the irrigation volumes required to support a viable cotton industry at the scale needed to generate meaningful community and economic benefits. Critically, a well-designed overland flow policy can be implemented in a way that preserves the free-flowing character of the Fitzroy River, which Cotton Australia fully respects and supports.

The Fitzroy-Derby region has the potential to host a thriving irrigated agriculture sector that complements and strengthens its existing cattle industry, provides new economic pathways

for Traditional Owners and generates diverse employment and business opportunities for local communities. Cotton Australia looks forward to continued engagement with the Department on the Plan's development and is available to provide further information or to meet to discuss the matters raised in this submission.

If you would like to discuss this submission further, please contact Michael Murray, General Manager – michaelm@cotton.org.au or 0427 707868



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