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Committee Secretary
Senate Standing Committees on Rural and Regional Affairs and Transport
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The integrity of the water market in the Murray-Darling Basin

Dear Inquiry,

Introduction

Cotton Australia is the key representative body for Australia's cotton growing industry.

We represent more than 1000 cotton growers and their families, the majority of whom operate in the Murray-Darling Basin, stretching from Swan Hill in the south to the Darling Downs in the north.

The Australian cotton industry earns our economy over \$2 billion (farmgate) each year, and is the lifeblood of many rural communities in western NSW and south-western Queensland.

Australia is a world-leading cotton producer, with yields three times the global average, and is recognised by major retail brands as a supplier of sustainably produced cotton.

Access to water for irrigation is critical to our industry, and therefore we have always been active and constructive participants in the national water debate.

Cotton Australia is also an active member of National Farmers Federation (NFF), National Irrigators Council (NIC), Queensland Farmers Federation (QFF) and NSW Irrigators Council, and endorses their submissions to this Inquiry.

However, should there be any inconsistency between the views expressed in this submission and those contained in the submissions lodged by the above organisations, the views contained here are the ones that should be attributed to Cotton Australia.

We welcome the opportunity to provide this submission to the Inquiry, and would be delighted to address the Inquiry should the opportunity arise.



Inquiry Terms of Reference

The integrity of the water market in the Murray-Darling Basin

-) The allegations of theft and corruption in the management of water resources in the Murray-Darling Basin,
-) The investigation and public disclosure by authorities, including the New South Wales Government and the Murray-Darling Basin Authority, of reported breaches within the Murray-Darling Basin, including the Barwon-Darling Water Sharing Plan,
-) The actions of member states in responding to allegations of corruption and the potential undermining of the Murray-Darling Basin Plan,
-) The use of Commonwealth-owned environmental water for irrigation purposes, and the impact on Basin communities and the environment,
-) The operation, expenditure and oversight of the Water for the Environment Special Account, and
-) Any other related matters.

In preparing this response to the Inquiry Cotton Australia has taken the meaning of “the water market in the Murray-Darling Basin” to mean the overall management and regulatory framework around this resource, rather than a narrower definition focused solely on the trade of entitlement and annual allocations.

This submission will address each Terms of Reference in turn.

Executive Summary

Cotton Australia accepts that the Australian public must have confidence that its water resource is managed in a highly professional manner and that includes having a robust compliance system which provides confidence that all water use is within the rules.

Like many Australia Cotton Australia was disturbed by the Four Corners programme “Pumped”, and understands the motivation for this inquiry and the numerous others that were announced in the aftermath of the programme.

That being said, Cotton Australia cautions this inquiry not to accept the allegations made in “Pumped” as fact, but use this inquiry, and the others, to determine the truth. Cotton Australia believes it is patently unfair that a number of individuals were named in the programme and have in effect been tried by “media”.

While Cotton Australia accepts that the water compliance system has flaws, it is far from broken. Cotton Australia is confident that the overwhelming number of irrigation entitlement holders have transparent systems that measure take, and all States have functioning, if not perfect compliance systems.

Australia, and the Murray-Darling Basin remains a world leader in water management, and any claims that suggest the allegations that have been levelled recently undermine the fundamental basis of the Basin Plan are absurd.

Cotton Australia recommends:

That the Inquiry specifically ask the NSW Government to provide a full report on all rural water compliance activity undertaken by either DPI Water or WaterNSW (and its predecessors) over the past five years.



Advancing Australian Cotton

That this Inquiry request the NSW Government and/or the Murray-Darling Basin Authority to review Barwon-Darling flow events since the commencement of the Basin Plan and determine whether there has been any instances where environmental flows have triggered a pumping event.

That all Basin jurisdictions publicly recommit to the implementation of the Basin Plan.



The Barwon Darling

Given the impetus of this Inquiry was the allegations made on the Four Corners programme “Pumped” aired in late July 2017, Cotton Australia believes it is appropriate to provide a briefing on the Barwon-Darling section of the Murray-Darling Basin, as that was the focus area of the programme, and it differs from many other parts of the Basin.

Where is the Barwon-Darling River System?

It is in North-West NSW and Far Western NSW

The Barwon-Darling River runs from Mungindi on the Queensland border in the north-west of NSW down to Menindee in the far west. Major tributaries of the Barwon-Darling are the Culgoa, Macintyre, Gwydir, Namoi, Castlereagh, Macquarie and Bogan Rivers.

It takes in the Barwon River, from upstream of Mungindi at the confluence of the Macintyre and Weir rivers, to where the Barwon meets the Culgoa River. At this point the river channel becomes the Darling River and the Barwon–Darling system extends downstream to the Menindee Lakes.

More information on the Barwon-Darling can be sourced from the Murray-Darling Basin Authority (<https://www.mdba.gov.au/discover-basin/catchments/barwon-darling>)

How is access to the waters of the Barwon-Darling River system managed?

All water access across NSW is managed by legislation and regulation, as well as the Commonwealth Water Act and the Murray-Darling Basin Plan

The primary management regulation for the Barwon-Darling River system is the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012. The full plan can be found here - <https://www.legislation.nsw.gov.au/#/view/regulation/2012/488/id1>

And a summary sheet of Water Sharing Plan rules can be found here - http://www.water.nsw.gov.au/_data/assets/pdf_file/0007/548683/wsp_barwon_darling_rules_summary_barwon_darling_unregulated_river_water_source.pdf

The Water Sharing Plan, like all NSW Water Sharing Plans, is made under the auspices of the *New South Wales Water Management Act 2000*.

With the introduction of the Commonwealth Water Act in 2007 and the Murray-Darling Basin Plan (2012), the management of the Barwon-Darling must be consistent with the Commonwealth legislation.

What does the term “Unregulated” mean?

It refers to the fact that water flow is not “regulated” into and by large, upstream government-owned dams

The term “Unregulated” does in no way mean that access to water is unregulated. Stringent rules do apply, as they do across the entire Murray-Darling Basin. “Unregulated” simply means that there are no large, government-owned dams on the system, allowing the controlled capture and “regulated” release of water.



On the Barwon-Darling system how much water is reserved for the environment?

In excess of 94% of all flows in the Barwon-Darling River are reserved for the environment

There are very minor variations in how the NSW Government and the Murray-Darling Basin Authority measure how much of the river flow is reserved for the environment, however both agree that well in excess of 90% of the flows are reserved for the environment (i.e. not available for extraction by irrigators or other water users such as Town Water Supplies).

The NSW Water Sharing Plan states that the Plan preserves 94% of the Long-Term Average Annual Flow to the environment (Part 4, Clause 17).

The Murray-Darling Basin Authority states the average annual flow through Bourke is 3500GI, and the Base Line Diversion limit (water being extracted for all use) at the start of the Basin Plan was 198GI, therefore reserving 94.3% for the environment. The Commonwealth has since acquired (or is in the process of acquiring) 32.6GI of irrigation entitlement. The reservation of this water for the environment will increase the percentage reserved for the environment to more than 95%.

How much water flows through the Barwon-Darling system?

A lot - on average, 3500GI passes through Bourke each year, but actual yearly flows vary enormously

The Barwon-Darling is a very episodic river system. In its natural state the level of flows in it depend entirely on the rainfall conditions in its catchments and the catchments of its tributary systems.

Wet periods result in high flows, while droughts will cause the river to stop flowing. Documented stories of the old 1800's Darling River paddle-steamer captains clearly show that in some periods they were able to navigate well upstream of Bourke, while at other times they were stranded for several years, waiting for rain to make the rivers flow.

During extreme floods, flows in excess of 500GI per day have been recorded through Bourke, while Bourke gauge records also show no flow at all for 153 days between July 2, 1943 and December 2, 1943

Within the context of the Murray-Darling Basin, what contribution to flows does the Barwon-Darling make?

Extractions from the Barwon-Darling account for just .05% of all flows across the Murray-Darling system

The Murray Darling Basin Authority estimates that total water run-off across the Basin is approximately 32,500GI, with average extractive diversions at the start of the Plan being 13,700GI. When finalised, the Basin Plan will decrease diversions by 3200GI, with total allowed diversions for 10,500GI, meaning close to 68% of all flows across the Basin will be preserved for the environment.

With allowed diversions in the Barwon-Darling being reduced from 198GI to 165.4GI, diversions in the Barwon-Darling will account for just 0.5% of all flows across the entire Basin.

Out of the allowed diversions of 10,500GI, the Barwon-Darling Diversions of 165.4GI accounts for just 1.6%.

To put the extraction level in further perspective, the Menindee Lakes system - which starts at the bottom of the Barwon-Darling - evaporates approximately 393GI/yr, more than twice the extraction on the Barwon-Darling system.



How is access managed for licensed irrigation entitlement holders along the Barwon-Darling system?

All irrigators wishing to extract water out of the Barwon-Darling system require a Water Access Licence (WAL), and other associated approvals.

The WAL is the key document: it sets out the number of shares the entitlement holder has in the available water resource. Each year the NSW Government determines the amount of actual water entitlement that can apply to that share. Generally speaking on the Barwon-Darling River each share is allocated one megalitre of water.

However, that water can only be extracted when certain flow conditions exist on the river. The river has to be at a certain required height before extraction commences. Typically, these flow conditions are expressed as a certain flow in megalitres per day through a nominated river gauge.

On the Barwon-Darling there is a mix of WALs that can be held – “A” Class, “B” Class and “C” Class. Water attached to an “A” Class licence can be extracted when river flows are at a lower level compared to “B” and “C” class licenses.

So for example, an irrigator holding an “A” Class licence just upstream of the Bourke Gauge can pump that component of his licences provided the flow at the Warraweena Gauge was at 400MI/d or higher and that flows at the Bourke Gauge were maintained at 350ml/d or higher.

Likewise for “B” access the flows would have to reach 1,330MI/d and 1,250MI/d respectively and for “C” Class access 1,330MI/d and 11,000MI/d.

Current irrigation licences on issue on the Barwon-Darling are:

“A” Class	
115 WALs	9,856 megalitres
“B” Class	
82 WALs	133,069.2 megalitres
“C” Class	
15 WALs	45,745.6 megalitres
Total	188,670 megalitres or 189GI

However, even if the flow conditions are met, an irrigator cannot pump if he or she has reached their volumetric limits as shown in their water accounts. Given the episodic nature of the flows in the river system, irrigators are able to carry forward water that they haven't been able to access in one water year to future water years.

Extraction management is controlled by the fact that no more than 189GI collectively can be accredited to irrigator accounts in any one year, ensuring the long-term average extraction cannot exceed the 189GI allowed under the Water Sharing Plan. It is important to note that the above access licence details include the 32.6GI of licence entitlement held by (or contracted to) the Commonwealth Government.



Is all water use recorded?

All irrigation licence entitlement holders are obliged by their licence condition to be able to demonstrate in volumetric terms their water take.

The exact requirements vary from licence to licence, and works approval to works approval. Accepted methods can include log books recording the use of pumps, remotely (e.g. a government-read water meter), and/or installed water meters.

All large volume pumps have meters installed and have had for more than 30 years.

How much water does the Commonwealth Environmental Water Holder own on the Barwon Darling?

As of May 2017 the CEWH held the following entitlements on the Barwon-Darling system:

Class	Volume (ML)
A Class	73
B Class	14,225
C Class	12,498
Total	26,796

However, there is approximately another 6GLs that has been contracted by the Commonwealth, but not formally transferred.



Response

Allegations of theft and corruption in the management of water resources in the Murray-Darling Basin

Cotton Australia has zero tolerance for water theft, and firmly believes allegations should be investigated in a timely and professional manner that respects the rights of all those involved.

That being said, Cotton Australia cautions this Inquiry not to put too much credence in the allegations as portrayed in the “Pumped” program, but to use this Inquiry and the numerous others that have been established to determine the truth.

Cotton Australia is aware, and the Interim Report of the Ken Matthews Inquiry has made reference to it, that at least some of those allegations have been refuted in comprehensive documentation that has been provided to the Matthew Inquiry by at least one entity named in the programme.

It is disappointing that the Interim Matthews Inquiry was unable to definitely determine whether the allegations of water theft and meter tampering were true or not, and we understand investigation/compliance action is ongoing.

Cotton Australia points to one specific allegation that alleged illegal pumping on the property “Rumleigh” on February 13, 2016.

Publicly available river height data clearly shows that “A” Class pumping would have been legal on that site, on that day. Unless, investigators are privy to additional information it would appear that this very damaging allegation is unfounded.

Cotton Australia does not believe it is acceptable that allegations can remain unresolved years after the alleged events, and the failure to have them resolved does point to some failure in the compliance framework.

However, Cotton Australia is also aware that the NSW water regulators have not been static in the area of water monitoring and compliance, and we understand that over the past few years, NSW officers have investigated more than 2000 incidents/complaints.

The response by NSW has varied from determining that an incident requires no further investigation, to rectification orders, right through to legal prosecution.

Cotton Australia was disappointed that the Interim Matthews Inquiry did not attempt to put NSW’s compliance activities into context, and just focused on a small number of specific allegations.

Cotton Australia recommends:

That the Inquiry specifically ask the NSW Government to provide a full report on all rural water compliance activity undertaken by either DPI Water or WaterNSW (and its predecessors) over the past five years.

Cotton Australia points to the NSWIC submission to this inquiry that shows that between 2012 and 2016 the NSW Independent Pricing and Regulatory Tribunal had allowed DPI Water to recover \$29,488,000 from water users to fund compliance activity, and this was boosted by a further \$16,736,368 from the Commonwealth to implement the Compliance and Enforcement Framework in NSW.



Until proven otherwise, it is Cotton Australia's position that compliance in NSW is more than adequately funded, and any failures are due to systemic reasons, rather than a lack of financial resources.

Apart from the specific allegations of theft and meter tampering made against named irrigators, the Four Corners programme strongly implied that Barwon-Darling Irrigators in general were "stealing" water that had been purchased for the environment.

The programme further alleged that the irrigation industry had lobbied for rule changes to the Barwon-Darling Water Sharing Plan to allow this access to occur.

Cotton Australia contends the following:

-) Irrigators, along with a whole range of other stakeholders, had equal opportunity to comment and submit on the Water Sharing Plan during its development.
-) The Plan came into force in October 2012, a month before the commencement of the Basin Plan, and the Water Sharing Plan has had no substantive amendments since.
-) The vast majority of the water acquired along the Barwon-Darling by the Commonwealth, either through direct purchase or through Water Use Efficiency programmes, was purchased post the commencement of the Basin Plan – therefore the Commonwealth purchased this water with full knowledge of all the rules associated around the plan, including the rules that govern water access.

The Barwon-Darling is an unregulated river - that is, one where there is no substantial headwater storage - and flows largely follow the natural pluses of the river system, responding to the climate.

Therefore, its management is different to regulated systems where water can be ordered and released on demand. The rules of access have been developed to take that into account, and all licence holders have a volumetric limit on take that they cannot exceed.

The claim that irrigators are somehow benefitting from accessing additional water from environmental flows appears to be based on the argument that water released or reserved for the environment, might trigger flow conditions that allow pumping and this pumping threshold would not otherwise been reached, except for the fact that the environmental water was in the system.

There are a number of flaws in this argument:

-) The volumetric limit rule means that over the long-term total allowed take cannot be exceeded, and the total environmental flow is preserved.
-) The rules that govern this access were in place prior to most of the water being purchased by the Commonwealth.
-) That while it might be theoretically possible that an environmental flow might trigger access rules, there appears to be no evidence to show that this has actually occurred (due to the fact that in an unregulated system where flows mimic natural flows, it is likely the flows would have triggered pumping thresholds anyway).

Cotton Australia recommends:

That this Inquiry request the NSW Government and/or the Murray-Darling Basin Authority to review Barwon-Darling flow events since the commencement of the Basin Plan and determine whether there has been any instances where environmental flows have triggered a pumping event.



Further, the Inquiry should be aware that this issue of “shepherding” environmental flows has to be addressed by the NSW Government as part of its commitment to the proposed Northern Basin Plan amendments, and this was agreed to by all Basin States at the June 2017 Ministerial Council meeting .

In addition, a number of Barwon-Darling irrigators initiated discussions with the NSW Government and the Commonwealth Environmental Water Holder (CEWH) at least 18 months ago, with the view of providing additional protection to specific environmental flows, if requested. Unfortunately, these commercial discussions appear to have stalled.

With regards to allegations concerning improper stakeholder consultation, Cotton Australia contends that it is up to the NSW Government to manage its relationship with stakeholders.

That being said, organisations like Cotton Australia will vigorously pursue all ethical options to present its case to all levels of government.

While Cotton Australia was not invited to be part of the specific Industry Reference Group identified in the Four Corners programme, if it had been it would have accepted the invitation.

Good government relies on good consultation, and Cotton Australia sees no problem in directly engaging with specific people who hold particular expertise and knowledge.

The Industry Reference Group was formed at a time when all Basin jurisdictions were considering their position on how best to implement the Basin Plan, and it is Cotton Australia’s view that it was appropriate for the NSW Government to consider specialist advice.

The investigation and public disclosure by authorities, including the NSW Government and the Murray-Darling Basin Authority, of reported breaches within the Murray-Darling Basin, including the Barwon-Darling Water Sharing Plan

Cotton Australia submits its expectation is that any allegations of non-compliant water management should be investigated in an appropriate and transparent manner.

It is also Cotton Australia’s view that the vast majority of all irrigation entitlement holders, in all jurisdictions and catchments, do the right thing. However, as with any cross-section of society there will be small minority who do not, and they need to be dealt with appropriately.

Like any viewer, Cotton Australia found the allegations in “Pumped” disturbing, and it is appropriate that compliance activities be reviewed.

However, Cotton Australia also strongly cautions against anyone taking those allegations at “face value”, and making rash decisions as a result.

Given the range of Inquiries currently underway, including this one, Cotton Australia believes the most appropriate course of action is for government and industry to respond as Inquiry reports are delivered and considered.

It is a given that all stakeholders must be confident that water theft will not be tolerated and there are sound systems in place for dealing with allegations when they occur.



Already, we have seen the NSW Government respond to the Matthews Inquiry with the decision to set up a specific Natural Resource Management Division within the Department of Industry and an independent Natural Resource Access Regulator.

Cotton Australia accepts the NSW Minister's decision to establish the Regulator, and it is now up to government to deliver a first class compliance system that is cost-effective, respectful of entitlement holders, and capable of giving the public confidence that a key natural resource is being managed to the law.

Cotton Australia also believes that it is appropriate for the Murray Darling Basin Authority to conduct its inquiry into compliance across the Basin. However, it needs to ensure that any recommendations it make are appropriate for each jurisdiction and catchment and it does not seek to apply a "one-size fits all" approach.

The Authority and those stakeholders considering its finding must also bear in mind that the Commonwealth only has limited powers in the area of compliance and most of the responsibility rests on the states. Cotton Australia does not argue for the Commonwealth to take over compliance across the Basin.

Cotton Australia congratulates the Queensland Government on its initiative to establish its own inquiry into water metering and compliance, to ensure it is at the standard it should be.

The actions of member states in responding to allegations of corruption and the potential undermining of the Murray-Darling Basin Plan

Cotton Australia well understands the interest that the Basin States have had in the allegations made in "Pumped". It is perfectly reasonable for them to seek assurance that all states are "playing by the rules."

As mentioned above, the Queensland Government has independently taken steps to review its metering and compliance system, and Cotton Australia contends that it is highly unlikely that any of the Basin states have perfect compliance systems.

However, as a nation we should also realise and accept that we are held up as world leaders in rural water use management, and while we may not be perfect we are certainly international leaders in the management and measurement of rural water use.

To suggest, as Four Corners did, that the allegations risked the undermining of the \$13 Billion Murray-Darling Basin Plan is patently absurd.

Putting aside the veracity of the specific claims made primarily against irrigators on the Barwon-Darling, it is hard to see how activities on one stretch of the river system, where 95% of the water is preserved for the environment, and total extractions account for just 1.6% of all extraction in the Basin, could put in jeopardy the Plan.

Already the Plan has recovered in excess of 2000Gl of the 2750Gl target, the 650Gl Sustainable Diversion Limit Adjustment Mechanism is entering into its final phase, the Ministerial Council is considering ways to best deliver the 450Gl of "Upwater", and the CEWH is actively managing the Commonwealth's environmental water holdings.

Cotton Australia is very aware of the enormous social and economic cost that bringing the Basin Plan to this point has had on rural and regional communities, and it would be untenable for the Plan to be undermined at this late stage.



This Inquiry and the many other inquiries underway will no doubt lead to recommendations that will further improve the management of our water resources, but to allow the controversy to derail the Plan should be unacceptable to all Australians.

Cotton Australia Recommends:

That all Basin jurisdictions publicly recommit to the implementation of the Basin Plan.

The use of Commonwealth-owned environmental water for irrigation purposes, and the impact on Basin communities and the environment.

As clearly outlined above, Cotton Australia has zero tolerance for the illegal take of any water, be it environmental water or water available for extractive use.

Also, as outlined above, there has been no evidence presented and accepted as truth that shows environmental water has been accessed by irrigators.

Cotton Australia re-iterates its recommendation that this Inquiry seeks specific advice from both the NSW Government and MDBA as to whether there is any evidence that environmental flows have triggered pumping events on the Barwon-Darling.

If evidence suggests this is the case, jurisdictions should resume negotiations with willing entitlement holders to negotiate additional protection for specific flows, on a flow-by-flow basis.

This Inquiry should guard against any recommendations that amend access rules and, in doing so, negatively impact on the existing rights of entitlement holders.

While the Terms of Reference seem to be focused on irrigators getting an unintended gain from environmental water, it is worth noting that Cotton Australia strongly supports the CEWH ability under the Water Act to actively trade water under a limited number of circumstances and invest the proceeds in environmental projects.

It is becoming increasingly acknowledged by all sectors of the Murray-Darling Basin debate that the adoption of “complementary measures” such as mitigating cold water pollution, enhancing fish passage and eliminating carp will allow the greatest leverage to be gained from the release of environmental water.

The operation, expenditure and oversight of the Water for the Environment Special Account.

Cotton Australia is unaware of any information that money assigned to the Water for the Environment Special Account has been used for anything but for the advancement of the Constraints Management project and activities associated with either the planning of or implementation of Commonwealth On-Farm Further Irrigation Efficiency (COFFIE) Program.

Any other related matters.

Cotton Australia remains fully committed to the implementation of the Basin Plan including the passage of the Northern Basin Review Plan amendments, the delivery of the full component of the SDL Adjustment Mechanism and the completion of the 450GI “Up Water” and Constraints project within the current budget and without additional third party impacts.



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Conclusion

Cotton Australia considers that this Inquiry has an important role, along with the other inquiries, to objectively determine the truth, and provide recommendations that will help deliver a robust, cost effective water take measuring and compliance framework.

It is Cotton Australia's expectation that the responsibility for the framework will continue to rest primarily with the states as the responsible jurisdictions.

It is also Cotton Australia's expectation that all parties will continue to work towards the finalisation of the Basin Plan, and that it will be implemented in a way that demonstrates real environmental outcomes, while ever mindful of the social and economic impacts felt by the communities of the Basin.

Yours sincerely,

Michael Murray
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Cotton Australia