

2<sup>nd</sup> December 2019

To whom it may concern,

**Re: Drought Resilience Funding Plan 2020 to 2024 Submission**

The Mulloon Institute welcomes the opportunity to comment on the above-mentioned report. We have considered the report in some detail and offer the following feedback. In general, we acknowledge and applaud the intent and aim of the Drought Resilience Funding Plan to:

***“Enhance public good by building drought resilience in Australia’s Agricultural sector”***

We acknowledge the funding principles and are encouraged by the 3 strategic priorities to achieve the aim:

- ***economic resilience for an innovative and profitable agricultural sector;***
- ***environmental resilience for sustainable farming landscapes;***
- ***social resilience for resourceful and adaptable communities.***

We are particularly encouraged by:

- the future focused intent of the plan;
- the increased attention on drought preparedness; and
- importantly on innovation to meet the challenges facing the agricultural sector from a changing climate.

The work of the Mulloon Institute and the potential for our methods to significantly contribute to building resilience to drought has enabled us to clarify the outcomes we would like to see from the Drought Resilience Funding Plan 2020 to 2024.

**Background**

Colonial landuse removed vegetation and led to the incision of Mulloon Creek through the alluvial sediments, which lowered the water table, drained wetlands, eroded gullies and dramatically reduced the water holding capacity of soils. This process has occurred Australia-wide, reducing agricultural productivity, reducing biodiversity, and increasing the landscape's vulnerability to climatic extremes such as droughts and floods. The short animation [Regenerating the Australian Landscape](#) illustrates these processes.

Re-establishing the functional connection between Mulloon Creek and the floodplain is rebuilding the soil profile, increasing soil organic matter and water holding capacity and improving soil microbial activity and nutrient cycling. This in turn increases farm productivity and reduces costs. The creation of instream wetlands and increased native vegetation cover has also led to increases in biodiversity and the reinstatement of habitat for threatened species.



Mulloon Creek now presents a catchment-wide case study that reverses landscape scale decline. The community is working together to rebuild landscape function and rehydrate the landscape. Practical actions are re-establishing the functional hydro-ecological connectivity between the deeply eroded Mulloon Creek, its tributaries and the surrounding landscape. The project offers an example of how the decline in landscape function can be addressed at both the property and catchment scale with a combination of broad community engagement, capacity building, onground works and scientific monitoring. We believe this project can be used as a model to facilitate other catchment scale projects across Australia.

### Preferred Outcomes of the Funding Plan

As indicated the Mulloon Creek project and its potential for building drought resilience at the catchment scale, has focused our attention on our preferred outcomes of the funding plan. These are summarised below.

1. **A focus on restoring landscape function**, that is hydro-geomorphic functionality or the functional connection between streams (and Rivers) and the floodplain which has been lost by the erosion of stream beds and the subsequent lowering of the water table.
2. **Restoration of landscape function at the catchment scale** restoring the connection between the stream and the floodplain at the catchment scale so that the benefits of the restored and repaired landscape can be shared across communities.
3. **Commitment to supporting regenerative land management practices** that contribute to landscape restoration at the catchment scale, a major practice being managed grazing.
4. **Development of education and capacity building strategies** that build a shared understanding of the need for landscape scale restoration through landscape rehydration and deliver practical on ground skills to landholders and communities.
5. **Cooperative research and development** that can be delivered alongside projects so that lessons learned can be captured and shared across the Australian agriculture sector and internationally.

### Specific Comments on the Funding Plan

We have made a small number of specific comments on the plan

***“The Fund will build on existing government drought policies.....”*** Our concern here is that by only building on existing policies, innovation and futures thinking espoused by the funding plan may be inadvertently limited.

**Drought Resilience Indicators** will inform the monitoring, evaluation and learning framework, however no detail or link to information on these indicators are provided. More detail on the indicators and how they have been developed and how they will be applied is required to determine their merit.

**Public versus private benefit**, we recognise the risk that this may initially stifle ***“the need to encourage and support a culture of entrepreneurship appetite for risk and transformational innovation”***



as identified as required by Ernst & Young in their 2019 Agricultural Innovation report. The journey from innovation to commercialisation and uptake of a new approach can be a long one. The strict application of the public versus private benefit although appreciated and appropriate may restrict the funding of projects that may otherwise, given initial support, go onto provide public benefit through their broader application.

**Productivity Commission review** of the Drought Resilience Funding Plan every three years. More detail on the terms of reference for this review would be of value. For example, have indicators of success been developed for the three nominated strategic priorities?

**The Whole of government approach to drought resilience** and that the fund will not operate in isolation from State Government Agencies, is applauded. However, the notion that programs under the fund will **align with and take account of existing government strategies** to drought resilience may in fact function to limit the innovation that is required for future drought resilience.

**Funding Principles “10) avoid creating barriers to change or adaptation”** Given the focus on innovation in subsequent sections on strategic priorities, particularly the strategic priority of economic resilience, it would be appropriate to have a criterion in the list that encourages innovation, change and adaptation leading to increased drought resilience.

**Strategic priority: Environmental resilience for sustainable farming landscapes** We note and are encouraged by a focus on sustainable landscapes in this section of the plan. We would encourage inclusion of “improved landscape function” under this section (see previous section on preferred outcomes).

Thank you again for the opportunity to provide comment on the draft Drought Resilience Funding Plan. We would be happy to discuss any of our concerns with you at your convenience.

Yours sincerely

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