

Request for Proposal (RFP) – Catchment Remediation Code

25 May 2022

The Task

The Mulloon Institute seeks an appropriate environmental, engineering and planning organisation to draft a plain English “Catchment Remediation Code” that can be used by (i) landowners and government departments to construct “Code Compliant” best practice “Landscape Rehydration Works” and (ii) regulators to ascertain whether a structure is “Code Compliant” (and exempt from the need for pre-construction government approvals).

The Catchment Remediation Code will need to fit within the current NSW environment and development regime. It should also provide a model for use in other jurisdictions in Australia (such as Queensland and Victoria).

The Mulloon Institute

The Mulloon Institute (TMI) is an independent not-for-profit research, education and advocacy organisation (see the TMI 2021 Annual Report for more information:

<https://static1.squarespace.com/static/5600deebe4b07aeb017c6d2/t/61aebdcc5ac60d4372890d7a/1638841868329/TMI+Annual+Report+-+2021+-+EMAIL-sml.pdf>).

The Mulloon Institute is dedicated to building the capacity of rural communities to improve the health and resilience of their landscapes and waterways. They implement a range of strategies that optimise the cycling and retention of water for the benefit of both agricultural enterprises and the natural environment, to help provide Australia with long-term water and food security, and to create a model adaptable to other countries.

TMI's methods are recognised by the United Nations Sustainable Development Solutions Network and are grounded in strategic collaborations with University researchers, Landcare groups, Natural Resource Management organisations and government and industry partners. TMI take a multi-dimensional research approach to catchment remediation which considers the environmental, economic and social impacts of landscape rehydration.

The Mulloon Rehydration Initiative is TMI's flagship project, with many others underway elsewhere in NSW as well as in Western Australia, Queensland and the Northern Territory

(see <https://static1.squarespace.com/static/5600deebe4b07aeb017c6d2/t/61ef923fb62e0a0c746a5d5d/1643090566154/2021+Case+study+-+MRI.pdf>).

Landscape Rehydration Works

Landscape Rehydration Works are a form of physical infrastructure built from natural materials that restore the natural flow of water through Australian landscapes.

For more information, see <https://www.youtube.com/watch?v=TFk1cFWnV0M>

Landscape Rehydration Works includes “Leaky Weirs” and Related Works such as (Rock Ramps, Contour Banks and Watercourse Plantings) – all of which are defined in the 2020 Ministerial Submission listed below.

Leaky Weirs are in-stream or in-gully structures designed to contribute to the re-naturalisation of surface and near surface flow patterns. This includes the re-establishment of geomorphic features such as wetlands, chains of ponds and/or swampy meadows. Intended outcomes/benefits include; slowing and

spreading of flow pulses; raising the alluvial watertable; improved water quality; extended flow duration; restored instream, riparian and terrestrial habitat complexity; improved soil condition; and moderated micro-climate.

Leaky weirs are not “one size fits all” – they are engineered to a specific catchment context to ensure their immediate structural integrity. Their long-term integrity relies ultimately on vegetation establishment on and surrounding the structures. (Other terms used for similar structures include: “bed control structure”, “porous check dam” and “beaver dam”.)

TMI is in advanced stages of developing a Landscape Rehydration curriculum for natural resource managers, river ecologists, engineers, developers and certifiers.

The Problem

For a landowner or organisation to implement Landscape Rehydration Works in NSW, they must first overcome numerous regulatory hurdles. The process of gaining government approval typically requires:

- individual approvals for each structure;
- individual submissions for each separate landowner in a catchment;
- separate approvals from multiple government departments (water, planning, environment, fisheries, etc.) - each requiring their own submission; and
- expensive expert reports.

To receive these approvals landholders are required to submit some, if not all, of the following documents:

- Environmental Impact Assessments;
- Development Applications;
- site descriptions;
- engineered designs;
- hydraulic modelling reports;
- Vegetation Management Plans;
- sediment and erosion control plans;
- Biodiversity Assessment Reports;
- Water Access Licence (WAL) applications; and
- Cultural Heritage Assessment reports.

These approval steps were designed originally to prevent or lessen environmentally harmful impacts of development but now add enormous economic, administrative and time burdens to projects that are designed to be environmentally beneficial. TMI has spent over \$350,000 and waited more than 30 months to receive approvals to rehabilitate the Mulloon Creek catchment in NSW. TMI’s experience with landscape repair projects in Queensland and Victoria show there are similar costly and time-consuming regulatory hurdles across Australia. These disincentives are hampering the progress of multiple projects that can achieve significant benefits for soil health, carbon sequestration, erosion control, habitat, biodiversity, agricultural productivity and climate change resilience.

The Proposed Solution

Our solution is a ‘Code Compliant’ approach where all NSW government departments agree on a Code for building Landscape Rehydration Works. This would create a streamlined pathway for landholders to install Code Compliant Landscape Rehydration Works in gullies and waterways.

We have been advocating for the NSW Government to draft this Code for two years. While the DPIE has dedicated significant resources to improving the planning pathway for Landscape Rehydration Works, they are yet to commit resources to the development of a Code. It is complicated to get all the different Government Departments on board.

We propose to create a Catchment Remediation Code and use it to accelerate and guide the political process.

Your Specific Task – Draft the Code

Your task is to draft an outcomes-based, flexible set of technical provisions for the design, construction and performance of Landscape Rehydration Works in NSW (and secondarily, Australia). TMI will provide the successful applicant with confidential materials which contain scientific and technical information and instructions in relation to the construction of Landscape Rehydration Works.

The Catchment Remediation Code (“Code”) should be suitable for publication and be able to be understood and followed by (i) landowners, farmers and farm managers; (ii) professional engineers and builders; and (iii) council staff, regulators and Natural Resource Management professionals. It must be both a plain English construction guide and a set of technical standards. It should incorporate definitions, legislative requirements, risk minimisation strategies and technical specifications. It will need to identify the skills required to undertake Landscape Rehydration Works from the paddock to the catchment scale.

A significant proportion of the technical provisions are already contained within teaching materials being developed for TMI's advanced Landscape Rehydration curriculum. Your task will be to repackage and restate this material in such a way to enable it to become a “Code”.

You should consider whether the Code should be in the same format as the Building Code of Australia or the National Construction Code (albeit significantly simplified).

In future, the Code should enable “Construction Certificates” or “Complying Development Certificates” to be created and lodged with certifying authorities once construction of compliant Landscape Rehydration Works is complete.

When drafting the Code, you will need to be cognisant of the following NSW Acts:

- Water Management Act 2000;
- Water Supply (Critical Needs) Act 2019;
- Water Management (General) Regulations 2018;
- State Environmental Planning Policy (Infrastructure) 2007;
- Environmental Planning and Assessment Act 1979;
- Protection of the Environment Operations Act 1997;
- Local Land Services Act 2013;
- Biodiversity Conservation Act 2016;
- Crown Land Management Act 2016;
- Fisheries Management Act 1994; and
- National Parks and Wildlife Act 1974.

Once the Code is drafted, TMI will lobby for regulations and legislation to be introduced to allow Code Compliant Landscape Rehydration Works to be exempt from the need for approval under these acts and regulations.

Submission Requirements

If you are interested in assisting, please provide us with a submission by 30 June 2022. The submission should indicate:

- Company capability and capacity (experience and resources);
- Project methodology/proposed process;
- Demonstrated key personnel experience;
- Demonstrated knowledge of the relevant NSW Government Departments (especially DPIE);
- Proposed timeframe; and
- Proposed pricing (if you are seeking fees for service).

Please include all normal mandatory requirement information including:

- insurance;
- workers compensation; and
- professional indemnity.

Please indicate whether you are interested in pursuing the project Pro Bono or whether you propose a fee for service. If you seek a fee for service, TMI will need to apply for grant funding and you will need to assist in this process (funds from the Future Drought Fund or the NRRRA may be made available).

If there are several service providers seeking to assist (we are seeking RFPs from multiple organisations), we will choose the provider most suited to the task.

We expect to sign a standard service provider contract with the service provider.

Copyright and all intellectual property in relation to the Code will be held by, or transferred to, The Mulloon Institute and appropriate ownership provisions will be agreed in final contracts between TMI and the successful applicant.

Further Details

1. The Customer

- The Mulloon Institute, PO Box 126, Bungendore, NSW, 2621 Australia
- The Mulloon Institute is registered with the Australian Charities and Not-for-profits Commission.
- ABN (DGR) 53 153 605 531

2. Contact Officer

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- CEO Managing Director
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Further Background Materials

- Crown Land Commissioner, Department of Planning, Industry and Environment (2021) Evaluation of the Crown Land Management Act 2016 Implementation (Findings and Recommendations). See Recommendation 26.

- Peel, L., Hazell, P. et al (2022), The Mulloon Rehydration Initiative: The project's establishment and monitoring framework. *Ecological Management and Restoration*, 23: 25-42.
<https://doi.org/10.1111/emr.12549>
- NSW DPIE (2021a) Landscape Rehydration Infrastructure Guide, NSW Department of Planning, Industry and Environment. Published online December 2021
<https://pp.planningportal.nsw.gov.au/isepp-landscape>
- NSW DPIE (2021b) Proposed amendment – landscape rehydration infrastructure NSW Department of Planning, Industry and Environment Published online December 2021.
<https://pp.planningportal.nsw.gov.au/isepp-landscape>
- Publications, Papers and Submissions by the Mulloon Law Committee
<https://themullooninstitute.org/mulloon-law-committee>