

CALL FOR EXPRESSION OF INTEREST

FRM17 – ECOLOGICAL BURNING: DEVELOPMENT OF CONCEPTUAL MODEL, MANAGEMENT FRAMEWORK AND PRIORITISATION APPROACH

PROPOSALS DUE 5:00PM AEST, 27 AUGUST 2025 TO research@naturalhazards.com.au

SUMMARY

INTRODUCTION

Natural Hazards Research Centre (hereafter the Centre), in conjunction with our client, the Department of Energy, Environment and Climate Action (Victoria) (DEECA) is seeking Expressions of Interest for the following project:

FRM17 - Ecological Burning: development of conceptual model, management framework and prioritisation approach

PROJECT AIMS AND OBJECTIVES

This project aims to develop a conceptual model, management framework and prioritisation approach for ecological burning to support fire management planning and operational delivery. The project has the following specific objectives:

1. To develop a conceptual model and management framework for ecological burning to support planning and delivery of ecological burns, including components, levers and responses. This framework would include approaches for identifying and defining the objectives, mechanisms required to achieve them and measures to evaluate success.
2. To develop a prioritisation approach for the delivery of ecological burns based on the conceptual approach developed. Prioritisation could be based on the relative risks of ecological change or loss in the absence of treatment or ranked according to species or system conservation listings or other measures.

BUDGET

The total maximum budget for this project is \$129,085 (excl. GST) and all work must be completed by January 2027.

RESPONSE

Any research proposal once submitted will be treated as commercial in confidence. Applications must be submitted to: research@naturalhazards.com.au by 5:00pm AEST, 27 August 2025.

Research teams responding to this Call for Expression of Interest are required to submit a project proposal (4-6 pages) clearly addressing the requirements of the specifications set out in this document and a project budget including details of any in-kind contribution from the research organisation.

INTRODUCTION

The Natural Hazards Research Centre (hereafter the Centre), in conjunction with our client, the Department of Energy, Environment and Climate Action (Victoria) (DEECA) is seeking expressions of interest for the following project.

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BACKGROUND AND CONTEXT

Fire management interventions that promote ecosystem resilience and support ecological functions and processes are required to address the impacts of altered fire regimes on species and ecosystems. These targeted actions are often referred to as 'ecological burns' and can be critical in fire-dependent ecosystems where the specific timing, frequency, intensity and scale of fire is required to facilitate key functional processes including seed dispersal, plant germination and recruitment, support ecosystem restoration objectives and increase species diversity.

Ecological burning is differentiated from fuel reduction burning activities which aim to reduce risk to human life and property through augmenting fuel availability and altering future bushfire behaviour. Ecological burning can be loosely defined as the deliberate application of fire for clear and pre-defined ecological objectives including specific, process, species and ecosystem outcomes within the treated area.

The Victorian Government delivers a program of ecological burning across the state as a component of the broader delivery of fire management activities across on public land. In the 2023 fire season, Forest Fire Management Victoria (FFMVic) delivered 28 ecological burns

across 11,802 hectares for the primary purpose of improving ecological outcomes. Examples of these included the treatment of grasslands in Western Victoria to facilitate the regeneration of vegetation and promote plant diversity or the application of fire to reduce woody tea-tree encroachment and restore open grassy woodlands at Wilson's Promontory. In these cases, the following elements were defined:

1. an issue or process to be addressed
2. an ecological mechanism responsive to fire
3. a defined outcome or objective.

However, the practices that constitute ecological burning are yet to be authoritatively outlined. Additionally, a clear conceptual and operational framework that captures these components based on existing knowledge is required to inform, define and support a broader program of ecological burning.

Policy drivers

Public land management

- Sustaining healthy and productive public land in Victoria in accordance with the objectives of sustainable forest management (*Sustainability Charter 2007*).
- To maintain or improve the resilience of natural ecosystems and their ability to deliver services such as biodiversity, water, carbon storage and forest products (*Code of Practice for Bushfire Management on Public Land 2012*).

Biodiversity management

- Victoria has functioning plant and animal populations, improved habitats and resilient ecosystems, even under climate change (*Biodiversity 2037*).
- Identify priority areas relating to the interaction of fire regimes and threatening processes (such as invasive species, drought) to target management (*Biodiversity 2037*).
- Improve management effectiveness through new knowledge and ability to measure direct change at the appropriate scale (Monitoring, Evaluation and Reporting Framework; *Biodiversity 2037*).
- Guarantee that all taxa of Victoria's flora and fauna can survive, flourish and retain their potential for evolutionary development in the wild (*Flora and Fauna Guarantee Act 1988*).

Fire management

- To minimise the impact of major bushfires on human life, communities, essential and community infrastructure, industries, the economy and the environment. Human life will be afforded priority over all other considerations (*Code of Practice for Bushfire Management on Public Land, 2012*).
- To maintain or improve the resilience of natural ecosystems and their ability to deliver services such as biodiversity, water, carbon storage and forest products (*Code of Practice for Bushfire Management on Public Land, 2012*).
- Use the learnings from science and monitoring and evaluation to test and refine scientific and other models that support decision making (*Code of Practice for Bushfire Management on Public Land, 2012*).
- Improved bushfire management strategies and actions (*Code of Practice for Bushfire Management on Public Land, 2012*).
- Science, data and technology - We use the latest science data and technology to make sure our actions are targeted at reducing bushfire risk and protecting those things we care about (*Safer Together, 2015*).
- Continue to invest in new science to address knowledge gaps and reduce uncertainties in our bushfire modelling (*Safer Together, 2015*).

SCOPE

INCLUSIONS

The appointed service provider will be required to complete the following tasks:

1. Using a multi-methods approach, develop a conceptual model and management framework to inform and support the application of ecological burning programs.
2. Using the models and framework, outline an approach to prioritising the delivery of ecological burns.
3. The project is to be co-designed, co-delivered and co-authored with the DEECA project lead/s.

EXCLUSIONS

The following tasks are excluded from the project:

- undertaking fieldwork or ground-truthing data
- implementing or participating in prescribed burning
- implementing the outcomes or recommendations of the project
- developing or drafting management plans
- developing or drafting government policy.

PROJECT SPECIFICATIONS

KEY STEPS

In developing the project proposal to be submitted in response to this Call for Expression of interest, researchers should be mindful of the following project requirements:

Key steps	Lead	Due date
1. Project inception meeting to determine scope and approach	DEECA/Research partner	1 September 2025
2. Completion of data collection (potentially including literature review, expert elicitation workshops and other mixed methods approaches) to inform development of conceptual model and management framework	DEECA/Research partner	31 February 2026
3. Completion of additional analytical methods required to develop prioritisation approach	DEECA/Research partner	31 July 2026
4. Final report to DEECA	DEECA/Research partner	30 October 2026
5. Research publication submitted	DEECA/Research partner	31 January 2027
6. Project Closure	DEECA/the Centre	31 January 2027

EXPECTED OUTPUTS

- A written report detailing the conceptual model, management framework and prioritisation approach written for a land management audience.
- A summary guide including a worked example of a process for the application of the management framework and prioritisation approach using available data and DEECA systems and where needed, outlines for future systems and data improvements to support implementation of the frameworks.
- Collaborative scientific publication/s with key DEECA project staff based on the concepts discussed and content developed during the project.
- Provision of all datasets captured during the project or used to inform project outputs.
- Regular meetings with the DEECA project team to co-design and co-deliver the project and ensure the project approach aligns with operational requirements.
- Final presentation to DEECA on results and recommendations co-delivered with DEECA project leads

QUALITY CONTROL

Final report and other project outputs

It is the expectation of the Centre and our client DEECA that the material delivered as part of this project will meet the highest scientific standards and will be suitable for internal and external distribution.

It is a requirement of this project that the final report (and any supporting material) be submitted to the Project Control Board's satisfaction. To ensure the final report meets this expectation, it will be subject to up to two rounds of review (with a minimum of two weeks for each review) by DEECA. Research organisations are required to ensure an internal peer review process is undertaken prior to the draft final report being submitted for DEECA consideration.

Before the final report is submitted to the Project Control Board for approval, it must also have been:

- through an independent peer reviewer approved by the Centre's Project Manager
- professionally proof read and copy edited.

These steps must be arranged by the research organisation, costed as part of project budget and completed within the project timeframe.

Reports that have not been independently peer reviewed by peers agreed with DEECA, and professionally proofread and copy edited will not be considered final. A copy of the independent peer review and the researcher response to any comments must be provided to the Centre.

Communication

To further assist with the quality assurance it is expected that:

- The project team will utilise a consultative approach when developing the overall framework and data management processes/criteria, and will demonstrate this by documenting engagement activities within the relevant reports. This will involve seeking input from DEECA subject matter experts to ensure development of a framework and processes that are fit for purpose.
- The research team leader will give periodic presentations (e.g. annually) to key stakeholder groups to gain critical feedback on project milestones.

Any further quality control processes that are required for this piece of work, as well as key success measures, will be agreed with the DEECA Research Lead as part of the planning process.

PROJECT MANAGEMENT AND PROCESSES

CONTRACTUAL ARRANGEMENTS

This project is being delivered under an Agreement in place between Natural Hazards and Disaster Resilience Research Centre Ltd, t/as Natural Hazards Research Australia (the Centre), and the Department of Energy, Environment and Climate Action (DEECA) in the State of Victoria. Under this Agreement the Centre is responsible for the delivery of a number of bushfire, ecological and compliance related research projects. The contract put in place between the Centre and the research organisation selected to undertake this work will reflect the terms of the Agreement between DEECA and the Centre.

[A draft copy of the contract between the Centre and the successful research organisation can be found here.](#) **This contract should be reviewed as part of the EOI process.** This is a standard agreement, and any changes will be at the sole discretion of the Centre. If you would like to request amendments to any of the terms and conditions set out in the proposed contract, details of the proposed changes and the reason the changes are requested must be included with the submitted response. In considering this contract and proposing changes, please note the Centre has been advised by DEECA that (i) changes to provisions relating to the ownership of Intellectual Property will only be varied to take account of substantial in-kind contribution from the successful research organisation/s, and (ii) no changes can be made to the publications approvals processes.

PROJECT GOVERNANCE

Each project is carried out under the supervision of a Project Control Board (PCB) and in accordance with the governance arrangements agreed between the Centre and DEECA.

While the contractual relationship for the delivery of this project will be between the research organisation and the Centre, there will also be a strong relationship between the research team and DEECA staff. Communication is an important element of the success of this project and Researchers will be required to maintain strong links with both the DEECA Research Lead and the Centre Project Manager throughout the project.

A governance plan has been prepared which shows the roles and responsibilities of each of the participants. The successful research team will be required to comply with the processes and expectations as set out in that document.

PROJECT PLANNING

The project overview included in this document describes the way the DEECA subject matter experts believe the project can most successfully be undertaken. Alternative approaches can be considered. Any alternative approaches must ensure the delivery of the required outputs including any intermediate outputs identified in this document.

Following acceptance of a project proposal the successful research organisation must prepare a detailed project plan and risk treatment plan using the DEECA template. This plan must be approved by the DEECA Research Lead and will become an attachment to the contract. The project plan must be approved within three months of the notification of the acceptance of the project proposal.

REPORTING

The successful research organisation will be required to make at least one presentation (and possibly two) annually to the Project Control Board or other nominated DEECA group during the life of the project.

Research organisations will also be required to:

- provide a fact sheet within three months of signing the contract between the research organisation and the Centre (DEECA/Safer Together template)
- provide detailed progress reports on a quarterly basis
- contribute to the Project Evaluation Report.

Dates for submitting Quarterly Progress Reports:

Period covered	Report required
1 January to 31 March	Second week of April
1 April to 30 June	Second week of July
1 July to 30 September	Second week of October
1 October to 31 December	Second week of January

SUBMISSION OF EXPRESSION OF INTEREST

SUBMISSION REQUIREMENTS

Research teams responding to this Call for Expression of Interest are required to submit their response, including:

- A draft project proposal (4-6 pages) clearly addressing the requirements of the specifications set out in this document. Proposals must include achievable timelines, which will be used to monitor progress. You should also include an outline of your approach to ensuring effective collaboration with the DEECA project lead/s.
- A statement of capability demonstrating the ability of the proposed project team to undertake the work. This statement of capability should include the names and experience of key team members and their proposed contribution to the project (The capability statement should not exceed 4 pages).
- Project budget including details of any in kind contribution from the research organisation. A statement of acceptance of the terms and conditions of the proposed contractual arrangements. If such arrangements are not acceptable details of any changes must be included with the submitted response.

ADDITIONAL INFORMATION

- Research bids from a consortium of research organisations with expertise in the relevant fields are specifically encouraged.
- Attached is a draft contract which we ask your organisation to review. In your response to the EOI you should identify any items in this contract that will require attention /amendment should your organisation be selected to undertake this piece of work. This contract is based on the Head Agreement between DEECA and the Centre, and as such there is very limited scope to make changes to the draft contract.

The total maximum budget for this project is \$129,085 (excl. GST) and all work must be completed by January 2027.

Any research proposal once submitted will be treated as commercial in confidence.

Applications, must be submitted to: research@naturalhazards.com.au by **5:00pm AEST, 27 August 2025.**

EVALUATION CRITERIA

After the closing date, the Centre along with the DEECA Research Lead will review proposals against the evaluation criteria below and make a recommendation to the state’s representative on the most appropriate organisation to undertake this work. The evaluation criteria provide an indication of those matters that should be included in the project proposal and associated documentation – details are provided in the table below.

You will be advised by mid-September if your application has been accepted and it is expected work on the project will commence upon signing of the contract.

The decision of the Centre and our client DEECA will be final. The Centre reserves the right not to offer the work, or only allocate a proportion of the available funding, if a proposal does not meet the client’s needs. The Project Control Board reserves the right to invite any other specific researchers as it sees fit to submit proposals before or after the closing date.

Evaluation criterion	% weighting
Research capability The capacity and capability to deliver an excellent applied research project in a Victorian environment.	15
<p>Project proposal A clear demonstration that the research team has an understanding of the project scope through the proposed research approach</p> <p>The proposal must also include an indicative timetable of work and interim milestones/project outputs as described in this document.</p> <p>Please include an outline of a collaborative approach to assist in the translation and transfer of knowledge to end-users which will ensure the project meets their needs.</p> <p>Quality control Clear documentation of quality control processes, including proposed internal and external reviewers. Identification of copy editors and proof readers.</p>	50
<p>Industry engagement Strong track record of industry engagement with the ability to support and influence bushfire management in Victoria through interaction with land and fire agency personnel.</p> <p>Victorian focus Ability to undertake research in Victorian environments individually and/or in cooperation with land and fire managers.</p>	15
<p>Value for money Delivery of required outcome within available budget along with the ability to leverage the funds provided with in-kind contributions or supplementary opportunities.</p> <p>The evaluation team will consider the membership of the project team and the proposed roles and time commitment.</p>	20

ATTACHMENTS

- [Draft contract can be found here.](#)