

CALL FOR EXPRESSION OF INTEREST

ERP 40 – REVIEW OF ECOSYSTEM RESILIENCE MONITORING TARGETS

PROPOSALS DUE **11:59 PM 10 JUNE 2021** TO office@bnhrc.com.au

SUMMARY

INTRODUCTION

The Bushfire and Natural Hazards CRC (hereafter the CRC), in conjunction with our client, the Department of Environment, Land, Water and Planning (Victoria) (DELWP) is seeking expressions of interest for the following project.

ERP 40 - REVIEW OF ECOSYSTEM RESILIENCE MONITORING TARGETS

PROJECT AIMS AND OBJECTIVES

1. To acquit the Department of Environment, Land Water and Planning's (DELWP) obligations to recommendation 12 in the Victorian Auditor-General Office (VAGO) 2020, Reducing Bushfire Risk report that "DELWP conducts more effective ecosystem resilience monitoring by¹:
 - a. setting a target for regions on the quantity of ecosystem resilience monitoring assessments that they should complete annually.
 - b. setting an outcomes-level target that defines desirable values for key ecosystem resilience metrics.
 - c. report publicly against all of the metrics in its Measuring Ecosystem Resilience in Strategic Bushfire Management Planning policy in its fuel management reports (see Section 3.5)".

Specifically, DELWP's commitments are that:

- 12.1 DELWP will expand its Monitoring, Evaluation and Reporting Framework to better address ecosystem resilience. This work will form part of the expansion of DELWP's Monitoring, Evaluation and Reporting framework committed to in

¹ Note: The response to IGEM cited above is 8.3 "DELWP will expand the fuel management Monitoring, Evaluation and Reporting Framework and the annual Fuel Management Report, to incorporate private land, roadsides and public land managed by other agencies. This will commence with available activity data included in the 2021-22 report, building to a suite of relevant measures to provide transparency on activities and effectiveness in reducing bushfire risk." This connects to but does not directly address the commitment on 12.1.

response to Recommendation 8 of IGEM's Inquiry into the 2019-20 Victorian Fire Season.

12.2 DELWP will develop an outcomes-level target or targets for ecosystem resilience as part of the review of fuel management targets, as committed to in response to Recommendation 9 of the IGEM's Inquiry into the 2019-20 Victorian Fire Season.

2. Recommend expansions to DELWP's Monitoring, Evaluation and Reporting Framework that better address ecosystem resilience, providing:
 - a. approaches that allow outcomes level targets for ecosystem resilience metrics to be defined as part of the review of fuel management targets (as committed to in response to IGEM 9.3).
 - b. guidance on design (including proxy measures, sampling), tools (standard operating procedures, methods) to deliver, and evaluation of regional target for region's pre and post-fuel hazard reduction ecosystem monitoring.

BUDGET

The total maximum budget for this project is **\$180,000 (excl. GST)** and all work must be completed by **30 November 2021**.

KEY STEPS

Key Steps	Lead	Due Date
1. Submit project plan	Research Organisation	30 Jul 2021
2. Consultation	Research Organisation	30 Sep 2021
3. Draft Report	Research Organisation	15 Oct 2021
4. Final Report	Research Organisation	30 Nov 2021

RESPONSE

Any research proposal once submitted will be treated as commercial in confidence. Applications must be submitted to: office@bnhrc.com.au by **11:59 pm 10 June 2021**.

Research teams responding to this Call for Expression of Interest are required to submit a project proposal of no more than 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. The proposal should include an introduction, project plan for delivery, a detailed project budget and a summary of staff and skills.

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BACKGROUND AND CONTEXT

1. DELWP has accepted recommendation 12 of the Victorian Auditor-General Office (VAGO) 2020 Reducing Bushfire Risk report and committed to expanding its Monitoring, Evaluation and Reporting Framework to better address ecosystem resilience and to develop outcomes level targets for ecosystem resilience.
2. The Code of Practice for Bushfire Management on Public Land (the code) specifies that DELWP must report on the effectiveness of bushfire management for achieving the two primary objectives of the code. The two primary objectives for bushfire management on public land in Victoria are:
 - a. 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.
 - b. To maintain or improve the resilience of natural ecosystems and their ability to deliver services such as biodiversity, water, carbon storage, and forest products.
3. Under Safer Together priorities three and four; measuring success, and better knowledge equals better decisions, respectively; DELWP has committed to improve how we measure the health of the environment, and to report annually on the impacts of the fuel management program on plants and animals, and the effect on the local environment's resilience.
4. The Monitoring, Evaluation and Reporting (MER) Framework for Bushfire Management on Public Land (The MER Framework) guides the department and its partner agencies to monitor, evaluate and report on the effectiveness of bushfire management on public land. The MER Framework is delivered through the Victorian Bushfire Monitoring Program (VBMP). MER supports continuous improvement through value based and evidence informed decision-making and ensures transparent reporting to the government and the community on the outcomes of bushfire management.
5. In 2017-18 the Victorian Bushfire Monitoring Program (VBMP) transitioned to the next phase of delivery - ecosystem resilience monitoring (ERM) to measure the effectiveness against Objective two of the Code.
6. Ecosystem resilience is the capacity of an ecosystem to absorb natural and management-imposed disturbances but still retain its basic structure, function and identity. DELWP has three metrics of ecosystem resilience - Tolerable Fire Interval (TFI), Growth Stage Structure (GSS) and Geometric Mean Abundance of species (GMA) - which tell us about how plants, habitat structure and animals respond to fire.

7. DELWP has recently begun work to review and update ecosystem resilience and biodiversity metrics using the Fire Analysis Module for Ecological values (FAME), A key metric under review is modelled changes in individual species abundance. Review information can be provided when it becomes available.
8. Regional Bushfire Management Strategies, have employed a range of additional measures of Ecosystem Resilience, including modelled estimates of changes in individual species' abundance.
9. Responding to advice in the 'Scientifically based monitoring' research project in partnership with La Trobe University (LTU), an ERM program has been developed to collect, analyse, and interpret high-quality data on how fire management affects ecological values. The ERM program is a two-tiered program of biodiversity monitoring, a state-based tier to assess fire regimes, and a regionally based tier assessing fire events.

Available information

10. Available documents for the EOI include:
 - “Scientifically-based monitoring project – final report: Guidelines for ecosystem resilience monitoring, evaluation and reporting within the Victorian Bushfire Monitoring Program”, LaTrobe University.
 - [“Flora monitoring protocols for planned burning: a user’s guide”](#), DELWP.
 - [Monitoring, Evaluation and Reporting Framework for Bushfire Management on Public Land](#) (2015)
 - [Inquiry into the 2019–20 Victorian Fire Season: Phase 1 – Community and sector preparedness for and response to the 2019-20 fire season](#) (2020)
 - [Reducing Bushfire Risks](#) (2020)
11. Supporting documents to be provided to the successful research organisation once contracted:
 - FAME manual
 - Fuel Management Manual SOP 3.3.3
 - Bushfire Management Strategies

SCOPE

INCLUSIONS

1. Building upon the current Monitoring, Evaluation and Reporting Framework, and its implementation actions.
2. Providing recommendations that expand and enhance the current ecosystem resilience monitoring, evaluation and reporting program, to support the development of approaches to defining an outcomes-level target that specifies scalable (e.g. defined at regional or statewide level) desirable values for key ecosystem resilience metrics, including TFI, GMA and modelled individual species abundance.
3. Recommend a target number of ecosystem resilience monitoring assessments to be completed by each region annually - considering recommendations from the

'Scientifically-based monitoring' research project (undertaken in partnership with LaTrobe University), and in consultation with key regional stakeholders.

EXCLUSIONS

4. Development of a new Monitoring, Evaluation and Reporting Framework.

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. Submit project plan	Research Organisation	30 Jul 2021
2. Consultation	Research Organisation	30 Sep 2021
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EXPECTED OUTPUTS

1. A report outlining recommended options:
 - a. Evidenced approaches for determining scalable outcomes level targets for ecosystem resilience metrics (Tolerable Fire Intervals (TFI's), Geometric Mean Abundance (GMA) and modelled individual species abundance
 - b. Options for a scalable target for the number or extent of ecosystem resilience monitoring assessments to be completed pre-and post-fuel hazard treatments by each region annually
 - c. Guidance and tools to deliver the proposed regionally based target, and
 - d. Recommendations for short- and longer-term future improvements to the Framework and its delivery.

QUALITY CONTROL

Final report and other project outputs

It is the expectation of the CRC and our client DELWP 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 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 DELWP. Research organisations are required to ensure an internal peer review process is undertaken before the draft final report being submitted for DELWP 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 Bushfire and Natural Hazards CRC Project Manager
- Professionally proofread and copy-edited.

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

Reports that have not been independently peer-reviewed, and professionally proofread and copy edited will not be considered final. A copy of the independent peer review and the researcher's response to any comments must be provided to the CRC.

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 DELWP subject matter experts to ensure the 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 upon with the DELWP 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 the Bushfire and Natural Hazards Cooperative Research Centre and the Department of Environment, Land Water and Planning (DELWP) in the State of Victoria. Under this Agreement the CRC is responsible for the delivery of several bushfire, ecological and compliance related research projects. The contract put in place between the CRC and the research organisation selected to undertake this work will reflect the terms of the Agreement between DELWP and the CRC.

A draft copy of the contract between the CRC and the successful research organisation is provided with this document. 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 CRC. 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 CRC has been advised by DELWP 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 CRC and DELWP.

While the contractual relationship for the delivery of this project will be between the research organisation and the Bushfire and Natural Hazards CRC, there will also be a strong relationship between the research team and DELWP staff. Communication is an important element of the success of this project and Researchers will be required to maintain strong links with both the DELWP Research Lead and the CRC 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 DELWP 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 DELWP template. This plan must be approved by the DELWP 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 DELWP group during the life of the project.

Research organisations will also be required to:

- provide a poster for the annual AFAC/BNHCRC conferences
- provide a fact sheet within three months of signing the contract between the research organisation and CRC (DELWP/Safer Together template)
- provide detailed progress reports quarterly
- contribute to the Project Evaluation Report.

Dates for submitting Quarterly Progress Reports:

Period covered	Report required
1 July to 30 September	October
1 October to 31 December	January following calendar year
1 January to 31 March	April
1 April to 30 June	July

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 project proposal of no more than 6 pages, clearly addressing the requirements of the specifications set out in this document. The proposal should include an introduction, project plan for delivery, a detailed project budget and a summary of staff and skills. Proposals must include achievable timelines, which will be used to monitor progress.
- 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 DELWP and the Bushfire and Natural Hazards CRC and as such there is very limited scope to make changes to the draft contract.

The total maximum budget for this project is \$180,000 (Excl. GST) and all work must be completed by 30 November 2021.

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

Applications, must be submitted to: office@bnhccr.com.au by **11:59 pm 10 June 2021**.

EVALUATION CRITERIA

After the closing date, the Bushfire and Natural Hazards CRC along with the DELWP 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 indicate 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 **30 June 2021** 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 BNHCRC and our client DELWP will be final. The BNHCRC 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
Project Proposal A clear demonstration that the research team has an understanding of the project scope through the proposed research approach The proposal must also include an indicative timetable of work and interim milestones/project outputs as described in this document Quality Control Clear documentation of quality control processes including proposed internal and external reviewers. Identification of copy editors and proof readers	50
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 Victorian Focus Ability to undertake research in Victorian environments individually and/or in cooperation with land and fire managers	15
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 The evaluation team will consider the membership of the project team and the proposed roles and time commitment	20

ATTACHMENTS

1. Draft Contract
2. Bushfire and Natural Hazards CRC / DELWP Governance Arrangements
3. DELWP Project Plan Template
4. Project Evaluation Report Template
5. Quarterly Reporting Template
6. Guidelines for ecosystem resilience monitoring, evaluation and reporting within the Victorian Bushfire Monitoring Program