

# RESEARCH DEVELOPMENT AND ADOPTION FULL PROPOSAL

#### 2022-24 MLA PRODUCER INVESTMENT CALL

Carefully read and adhere to the GUIDELINES for preparing MLA full proposals for levy funded projects Complete within field boundaries in this template according to the length indicated in the GUIDELINES

<u>**Project Title**</u> (please delete italicised instructions) Maximum of 10 words. It should match the title of your preliminary proposal.

Lead Organisation (please delete italicised instructions)

Name	Full name of each Organisation and Department
ABN	
Street Address	
Postal Address	

**Principal Investigator** (please delete italicised instructions)

<u> </u>	
Name	The Principal Investigator is crucial to the delivery of the Project and must be an
Mailing Address	employee of the Lead Organisation
Phone Number	
Email Address	

#### **Administration Contact Details**

Name Mailing Address Phone Number Email Address

#### <u>Agent(s)/Subcontractor(s)</u> (please delete italicised instructions)

Name of Company	An agent/subcontractor is a company/person that provides a service or performs work
ABN	for a business but is not an employee of that business. Subject to approval by MLA, an
Contact Person	agent/subcontractor may be contracted by the Lead Organisation to carry out any
Mailing Address	part of the Project activities outlined in the agreement between MLA and the Lead
Phone Number	Organisation, using the same terms and conditions as between MLA and the Lead
Email Address	Organisation. MLA may request to approve the terms and conditions of the
	agent/subcontractor prior to commencement of the Project.

Proposed Start Date: (1 April 2023) Proposed End Date: (3-5 year duration will be considered).

**<u>Confidential external review</u>** (please delete italicised instructions)

Refer to guidelinesWill you allow confidential external review of this proposal by the MLA Expert Panel?YESNOIf not, why?

#### Feedback on Preliminary Proposal (please delete italicised instructions)

MLA and Review Panel feedback on your preliminary proposal is tabled below. Clearly convey how the tabled feedback has been addressed in this full proposal. Your response must be readily understood by an educated, lay audience. Provide complete responses i.e. do not refer the audience to sections in the full proposal.

Feedback on Preliminary Proposal	Response to feedback
The inclusion of early career researchers and student training opportunities were also favourably noted. However, it was unclear what level of input senior researchers—included with low FTE input—would have in the project, this needs to be clarified in the full proposal.	
Regarding the tiering of options for the project, bronze, silver, and gold, the reviewers were clear that they did not feel that the bronze option would deliver sufficiently against project outcomes given the absence of disease investigation visits. However, the silver and gold options mean that the project application had a significantly higher budget than other applications and consideration should be given as to how the total cost can be contained; it was also noted that the in-kind contribution is low.	
The project review panel were split on the merit of developing an App as an outcome of the project with the consensus being that if an App is developed that it must also be possible to integrate this with other data collection and management packages already adopted by some.	
The reviewers were also unclear as the whether any mitigation strategies to reduce ewe mortality were to be implemented as part of the project. Furthermore, there was no justification provided on why the number of producer engagements/demo farms and autopsies had been selected, with no reflection on statistical considerations or presentation of direct impact or economic impact targets.	
Finally, the reviewers were also concerned that the project seemed to be overly state specific, and consideration should be given as to how wider engagement (especially extension) can be achieved during the life of the project.	

# **2022-24 Terms of Reference priority addressed by this preliminary proposal** (please delete italicised instructions)

Tick ONE box to identify the 2022-24 'Terms of Reference' that this proposal will address. 'Terms of Reference' that you are not addressing may be deleted.

□ Merino Ewe Mortaility – prevalence and causes of

□ Precision Sheep management

#### Location/s of Research Work

#### What species is the research relevant to:

🗆 Northern Beef	Southern Beef	🗆 Sheep
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#### Summary of project (please delete italicised instructions)

Simply summarise the problem or opportunity being addressed, aims of the project, methods, outputs and outcomes of the project. It will be the basis of the MLA board summary and be used in MLA publications and on the MLA website. It should match the summary in your preliminary proposal. [200 words maximum]

**Background of Proposed Work and Significance** (please delete italicised instructions) Refer to guidelines and do not exceed 2-3 pages, including any cited references.

#### Project Investment Category

Identify and tick the most relevant investment category from the following, noting that MLA preferences funding adoption and impact related investments. Refer to the guidelines and the <u>Evaluation</u> sections on MLA's web site for more information.

Tick þ	Project Investment category
	<b>Category 1</b> - The project creates or contributes to an existing or new output (product) with attributable adoption outcomes and adoption related productivity and/or cost saving impacts. <u>Projects in this category must include output (product) adoption and impact information, including how they will measure evaluation.</u>
	<b>Category 2</b> - The project delivers tools and enabler-type outputs that do not directly deliver impacts, but are necessary to support other MLA products, e.g. extension programs, that do deliver adoption related productivity and/or cost saving impacts. <u>Projects in this category may include output (product) adoption information.</u>
	Category 3 - The project does not deliver an output (product) with attributable adoption or impacts, but should be funded for other reasons (these must be specified). <u>Projects in this category must provide other justifications for potential funding, given that no attributable adoption or impact is expected from this project.</u>

#### Project Outputs, Outcomes and Impacts (Objectives)

(Do not exceed 1 page. please cover the following areas and also delete any italicised instructions. Refer to guidelines.)

*Tip: have your response read by someone who regularly works with producers and may be unfamiliar with the work you are proposing.* 

#### **Project Outputs, Outcomes and Impacts**

Where relevant to the above investment classifications, describe the outputs (products) and their attributable adoption related outcomes and productivity and/or cost saving impacts in the sections below.

#### Outputs (products)

Nominate the outputs (products) that this project will deliver or will contribute to. These outputs (products such as extension programs, value propositions, new technologies or or new management techniques) must have attributable and measurable adoption related outcomes.

You should consider what existing MLA outputs (products such as existing MLA adoption programs) could be used to for adopting the research deliverables as well as whether a new adoption pathway product is required. Note that you should not rely on existing MLA adoption programs as your pathway unless appropriate extension funding is included in your project.

#### Adoption related outcomes

The above outputs may lead to adoption via either (or both) extension or commercialisation pathways. In defining these, consider:

- Who are the end-users of the research outputs? Eg. Producers, consultants, extension specialists or veterinarians, etc
- How will the the research outputs be used by the end-user? Eg. research output is a new recommendation on supplementary feeding for southern beef heifers, whereby a southern cattle producer is required to change their current supplementary feeding program and learns how to do this from a training day held at their neighbours property and is supported by the local mills nutritionist.
- What are the potential barriers/issues that end-users may have in using the research output? Eg. business risks, capital investment required or technical knowledge needed
- What measurement and evaluation processes are planned to assess the adoption rate of the project outputs?
- What year would adoption commence?
- Using an appropriate unit of impact measurement, such as DSE, hectare, head etc, provide an annual estimate of adoption attributable to the output (product) to which this research contributes. Each unit of adoption will be multiplied by the impact per unit (see the impact measurement section below). While annual adoption may be estimated for each year up to 2040, in most cases only a 5-10 year adoption estimate is relevant. This should include a realistic transition to peak annual adoption numbers.
- Any relevant further information, such as which sector(s) of industry will benefit from the R&D e.g. scale and type of enterprise.

#### Adoption (extension) pathways

Will the project deliverables be adopted by industry through an extension pathway? *Refer to the guidelines for more information.* 

#### YES 🗆 NO 🗆

If yes, describe the extension pathways by which the outputs of this project will be extended to industry, and then converted into adoption outcomes and productivity and/or cost saving impacts. Consider and include the following:

- What practical, on-farm issue/problem does this proposal address? What is the value proposition to producers?
- What proportion of sheepmeat and/or grassfed beef producers are affected by the issue/problem(s)? How large is this issue/problem i.e. what is the opportunity? This should be thought of as the 'target market' for the project outputs.
- Who are the end-users of the research outputs? Eg. Producers, consultants, extension specialists, veterinarians
- What activities need to be undertaken to ensure end-users and those supporting them are aware of the project outputs? Eg. Webinars, field days, paddock walks, videos
- During the project, how will end-users be engaged and their feedback sought on how easy the research outputs are to use in their business and where they see benefit.
- What activities need to be undertaken to build the knowledge, confidence and skills of the end-user and those supporting them to use the research output? Eg. Workshops, training days, demonstration sites, coaching, peer to peer learning, electronic learning modules.
- How will use of the research outputs continue beyond the life of the research project and continue to grow the number of end-users utilising the research outputs and delivering the expected outcomes and impact of the research?

#### Commercial pathway

Is it anticipated that the project outputs will be licensed, sold or otherwise commercially exploited?

## YES 🗆 NO 🗆

If the project outputs are to be licensed, sold or otherwise commercially exploited, please provide details on any initial commercial discussions, the sector/type of commercial partner required and any current obligations over the background or project IP by any commercial interests.

#### Intellectual Property (IP) (please delete italicised instructions)

Interest is usually defined as the parties' respective ownership of the Project IP generated by this project. IP ownership is negotiated on a case by case basis. Consideration and agreement on the interests of the parties should occur as soon as possible. Irrespective of MLA's interest, MLA requires that it has appropriate rights to enable it to report to industry and Government and to otherwise commercialise or use the project's IP for the benefit of its members. Freedom to operate may need to be stated or established.

Note all IP matters that may require attention in a full proposal, including the following:

- an outline of anticipated IP (or type of IP) which will be created as a result of this project
- proposed ownership of IP created as a result of this project an outline of how the background IP will be used by industry
- any background or existing IP being brought into the project and ownership of that background IP. List any patents, confidential know-how (i.e. information not already in the public domain), datasets and documents (i.e. copyright protected material), noting any encumbrances (such as a licence), any issues around ownership or restrictions on use, and any obligations that could influence adoption of project IP. In addition, include detail on how the background IP will be incorporated in project IP.

No.	Title/ description	e/ description Detail Date		Comments (including if encumbered)

#### Benefit (impact) to a sheepmeat and/or beef producer (Do not exceed 2 pages)

If your proposal will deliver or contribute to an output (product) with attributable impact, please describe the expected quantifiable 'triple bottom line' (social, environmental and economic) impacts from the adoption of the outputs from this project for sheepmeat and/or grassfed beef producers.

#### Impact Measurement

Measurement of impacts, such as productivity changes, may require a benefit cost analysis (BCA) or other evaluation process. This may be ex-ante or ex-post (or both). Describe how the impacts will be measured and please address all points and questions listed in the guidelines.

#### Methodology (please delete italicised instructions)

*Describe the materials and methods, research plan, experimental protocols or design. Refer to guidelines and do not exceed 2-3 pages.* 

#### **Personnel** (please delete italicised instructions)

Summarise the role, responsibility, contribution of each participant and the proportion of their time contributed to the project. Are there benefits in capacity building through training of post-graduate students, post-doctoral fellows or early career researchers?

Name or job title	Role/responsibility	% full time equivalent

Number of PhD students and post-doctoral fellows or early career researchers funded by the application:

Number of PhD students	
Number of post-doctoral fellows	
Number of early career researchers	

#### **<u>Budget and Justification</u>** (please delete italicised instructions)

Refer to guidelines.

#### Budget (add a table per financial year for the duration of the project)

#### Year #

	MLA Direct project costs	LO** cash	LO salary	LO overhead	TOTAL Year 1
<b>Personnel</b> , name or role and proportion.*					
Expenses Travel					
Materials					
Consumables					
Other					
Expenses total					
Capital					
Revenue credit (sale of stock, wool etc.)					
TOTAL BUDGET (excl. GST)					

\* Include on costs. One line per person.

\*\*LO: Lead Organisation

#### **Budget Summary**

	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
MLA						
Lead Organisation contributions						

#### <u>Contributor(s)/other funds</u> (please delete italicised instructions)

Refer to guidelines.

#### <u>Milestones</u> (please delete italicised instructions) Refer to guidelines.

#### Milestone table template

Milestone Number	Achievement criteria	Due date

#### Cash flow table template

Payment Date	Milestone	Fees	Expenses	Capital	Total
	1 *	0.00	0.00	0.00	0.00
	2 **	0.00	0.00	0.00	0.00
3 **		0.00	0.00	0.00	0.00
	4 **		0.00	0.00	0.00
	5 ***	0.00	0.00	0.00	0.00
TOTAL					AUD \$0.00

\*or on signing of this agreement

\*\*on acceptance and approval of corresponding milestone report, with tax invoice and copy of receipts attached \*\*\*on receipt and acceptance of final report by MLA, with tax invoice for payment attached NB: any money uncommitted at the end of the Project must be returned to MLA.

#### **<u>Risks</u>** (please delete italicised instructions)

Identify any significant risks to the project; technical, resources/facility availability, freedom to operate (IP issues), legislative, movement restrictions, adoption, personnel, broader industry, community concerns, reputational etc., and outline them in Appendix 3 below. Please refer to the guidelines (Risk section and Appendices 3 and 4) for instructions and considerations in completing this section.

<u>*Tip:*</u> Considerations for risks should not be limited to those listed in the guidelines. They should be based on your expertise on the subject matter.

#### **Other Agencies**

Have you submitted, or do you intend to submit a similar proposal to another agency?

YES 🗆 NO 🗆

#### **Applicable Terms and Conditions** (please delete italicised instructions)

The MLA 2022-24 Request for Tender specified MLA's requirements regarding the terms and conditions for the successful tenderer. A copy of MLA's standard umbrella research agreement was also included in Section 4 of that document. Please be reminded that:

- (1) where the successful tenderer has a negotiated standard agreement in place with MLA, the terms of that agreement will apply;
- (2) where, as part of the tender response, the successful tenderer requested any variations to the terms of MLA's standard agreement, the updated version of that agreement as provided by MLA will apply; and
- (3) where the successful tenderer does not have a negotiated standard agreement with MLA and has not requested any variations to the terms of MLA's standard agreement in its tender response, the terms of MLA's standard agreement will apply.

It is your responsibility to ensure the appropriate officer/s in your organisation understand the above requirements and have reviewed the relevant agreement and understand the above requirements. Record your organisation's acceptance of the terms of one of the agreements specified in items (1) to (3) above.

#### **Certification**

Principal Investigator In submitting this form, I certify:

- (a) That the information in this application is accurate; the project will be performed in accordance with all statutory, professional and ethical standards and practices. All intellectual property interests have been declared; and
- (b) In relation to any personal information that the applicant provides to MLA in this application, the applicant warrants that it has;
  - notified all individuals to whom the personal information relates that it will be disclosing their personal information to MLA for the purposes of this application/ the project and obtained any required consent to such disclosure, before providing the personal information to MLA; and
  - (ii) provided the individuals with the location of MLA's privacy policy.

Name	Title
Signature	Date

Head of Organisation or legally delegated officer or Project supervisor I certify that this application has my approval and the support of this organisation:

Name	Title
Signature	Date

#### **APPENDICES**

# Appendix 1: Project Team (please delete italicised instructions)

Refer to guidelines.

Project Title	Investigator names% FTE <sup>*</sup>	\$ Years	Reports delivered on time or late

<sup>#</sup>Same research area as proposal

\*Full time equivalent - proportion of each investigator's time contributed to each project

# Appendix: 2 Budget Planning (please delete italicised instructions)

Refer to guidelines.

#### Appendix 3: Risk Assessment (please delete italicised instructions)

Refer to guidelines (Risk section and Appendices 3 and 4) and use the following consequence and likelihood tables and risk rating matrix to assess and evaluate the identified risks above.

Risk	Risk Type	Risk Impacts	Risk Mitigation Plan	Consequence	Likelihood	Residual Risk Rating
e.g. Live export industry suspension	Industry risk	Industry suspended, impacted businesses.				
e.g. Border restrictions / movement restrictions	Operational risk	Face to face meetings or training sessions cannot be delivered.				
e.g. Compromised integrity systems data	Industry / Operational risk	Data cannot be relied upon, compromising the integrity systems program and damaging the industry's reputation.				
e.g. Animal or human ethics approval not obtained	Project risk	Reputation may be compromised; non-adherence to standards.				

#### Note: Risk type refers to:

- Industry risk, where the risk may affect the industry (e.g. trade access suspended, changed barriers, climate change, restrictions to antibiotics usage, animal welfare concerns in the industry etc.). The controllability for these types of risks may be low; however, as they impact the industry, there is opportunity for investment to address these risks.
- **Operational risk**, where the risk may affect the delivery of the project (e.g. financial loss, breach to privacy, system failure or hacks, ethical concerns, reputational legislative breach etc.). The controllability for these types of risks may be moderate to high. As such, mitigation actions should be planned accordingly.
- **Project risk**, where the risk may affect the specific project (e.g. weather constraints, unclear methodology or approach, lack of participation, biased results, food safety issues, technical difficulties, WHS concerns etc.). These risk are also operational in nature and controllability may be moderate to high. As such, mitigation actions should be planned accordingly. Note that project risks and operational risks may sometimes overlap.

#### **Risk rating matrix**

Refer to the consequence and likelihood tables below as a guide to assess and rate risks. Consequence categories are not limited to those in the table below and should take into account relevant consequences to your project.

## Consequence table

			Consequence			
	1	2	3	4	5	
Safety, Health and Welfare	Ailments not requiring medical treatment	Minor injury requiring first aid treatment	1 serious injury causing hospitalisation or multiple minor injuries	1 life threatening injury or multiple serious injuries causing hospitalisation due to MLA's negligence	1 death or multiple life threatening injuries due to MLA's negligence	
Reputation	Adverse national / regional media coverage with negligible impact, resolves through routine management processes		Adverse national / regional media coverage and / or regulator inquiry and / or loss of members or funding less than 1%	Adverse national / regional media coverage and / or regulator investigation, parliamentary inquiry and / or loss of members or funding between 1 – 10%	Adverse international media coverage and / or government investigation and / or loss greater than 10% or members of funding	
Financial	< \$50,000*	\$50,001 - \$250,000*	\$250,001 - \$2M*	\$2M - \$10M*	>\$10M*	
Organisational Objectives	Minor disruptions to the achievement of objectives; very strong impact made to the industry; majority KPIsWould require some adjustments to achieve objectives; strong positive impact made to the industry; most KPIs met		Would require significant adjustments to achieve objectives; average positive impact made to the industry; at least half of the KPIs met	Would threaten the achievement of objectives; small positive impact made to the industry; some KPIs met	Would stop the achievement of objectives; very minimal to no positive impact made to the industry; little or no KPIs met	

\*per occurrence

Likelihood scale

po	5	Almost Certain	Expected in most circumstances. Has occurred on an annual basis in the past or circumstances are in train that will cause it to happen.
	4	Likely	Has occurred in the last few years or has occurred recently in other similar organisations or circumstances have occurred that will cause it to happen in the short term.
ikelihood	3	Possible	Has occurred at least once in our history or is considered to have a 5% chance of occurring in the current planning cycle.
Lik	2	Unlikely	Has never occurred in our past but has occurred infrequently in other similar organisations or is considered to have around a 1% chance of occurring in the current planning cycle.
	1	Rare	Exceptional circumstances only. Is possible but has very much less than a 1% chance of occurring in the current planning cycle.

Based on the results of the assessment, inherent risks but also residual risks (once controls assessment and efficiency have been performed) can be reported using a classic representation under the form of a risk consequence and likelihood matrix (see below).

			Consequence									
			1		2	2		3		4		5
			Insigni	ficant	Miı	nor	Moo	derate	ſ	Major	Cat	astrophic
	5	Almost Certain										
Likelihood	4	Likely										
	3	Possible										
	2	Unlikely										
	1	Rare										
				Lo	w	Med	ium	High		Extrem	е	