# Exploring partnership opportunities

for dairy-NRM projects in South West Victoria

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# Acknowledgements

The authors wish to acknowledge that the case studies included in this report have been used in other reports. We have summarised the case studies for the purpose of applying them to the context of South West Victoria.

## Scope and Limitations

This report has been prepared for The Corangamite CMA in good faith. The information contained in the document has been formulated with due care. Users of this report must obtain their own advice and conduct their own investigation and assessments of any proposals they are considering in light of their own individual circumstances.

The conclusions and recommendations in this report are based on assumptions made by the authors and the authors disclaim any liabilities arising from any incorrect assumptions.

Some of the information within the report is provided by third parties, the authors take no responsibility for the accuracy, currency, reliability, and correctness of the information in the document provided by third parties.

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### 1. Summary

The aim of this project was to explore partnership approaches where natural resource management (NRM) agencies and the dairy industry have worked together to achieve shared goals. This information was applied to the South West region of Victoria to identify priority areas for potential partnership approaches within the region. A key focus was the understanding of 'partnership enablers' outlining the critical success factors required to achieve solid results with a partnership project approach.

This work was funded by NRM Regions Australia and coordinated by the Corangamite Catchment Management Authority.

South West Victoria is a major milk production region, and the dairy industry is committed to sustainable milk production. WestVic Dairy represents Dairy Australia in the region, delivering research, development, education and extension programs to improve the profitability and sustainability of the region's dairy farms.

The Australian Dairy Sustainability Framework sets out goals and targets for reducing the industry's environmental impact by improving land management, increasing water use efficiency, reducing greenhouse gas emissions intensity and reducing waste (Dairy Australia, 2021). The Corangamite and Glenelg Hopkins Catchment Management Authorities (CMAs) are responsible for the integrated planning and coordination of land, water and biodiversity management in each catchment and land protection region.

Partnership projects offer an opportunity for the CMA's and the dairy industry to achieve common goals and could continue to result in strong outcomes for the region. The case studies included in this report highlight successful dairy-NRM partnership projects across Australia and one from New Zealand.

Enablers to successful partnerships are highlighted in the report, and a deliberate process of building and sustaining partnerships is recommended. Further conversations with identified stakeholders will be necessary to consolidate the dairy-NRM priorities for the region.

## 2. Introduction

This report describes the results of an investigation into partnership approaches between NRM agencies and the dairy industry. The investigation was commissioned by the Corangamite Catchment Management Authority as a part of a broader project led by NRM Regions Australia that aims to increase the number of partnerships between regional NRM organisations and agricultural industries. The work was funded by the Australian Government with the stated purpose of facilitating agricultural industries to increase their market access.

The investigation focussed on the following questions through an exploratory approach.

- What are the drivers to catalyse partnerships to enhance dairy-NRM projects in South West Victoria?
- 2. What are the dairy-NRM priorities for the region?
- **3.** How can partnership projects help achieve dairy-NRM outcomes in South West Victoria?

The outcomes of the investigation, including the identification of case studies will be used to support the development of NRM-industry partnerships across Australia.

#### Context

The western Victorian dairy region (WestVic Dairy) extends west from Geelong to the South Australian border. There are approximately 1,170 dairy farms in the WestVic Dairy region, concentrated around the coastal areas between Simpson and Koroit. Dairy producers in the region account for 23% of Australia's milk production (Dairy Australia, 2021).

The WestVic Dairy region incorporates two regional Natural Resource Management (NRM) agencies in South West Victoria, the Corangamite Catchment Management Authority (CCMA) and Glenelg Hopkins Catchment Management Authority (GHCMA). The sustainable management of natural resources on land used for Dairy is of interest to CMAs and the dairy industry.

For the dairy industry, there is an increased focus on market access and understanding and showing evidence of how products are produced, including the environmental and social impacts of production. This includes but is not limited to whether a product is produced in a sustainable manner and has considered climate risk and biodiversity impacts.

"Interest in sustainability of agricultural and food systems is increasing at what feels like an exponential rate in market, social and regulatory environments. This increasing interest is being driven by the realisation that sustainability is not a nice-to-have, not a concept reserved for virtue-signalling. Rather, it is fundamental to the continuation of economic systems which depend on natural and social capital; capital that until relatively recently has been undervalued – or in many cases, not valued at all" (Heath, 2022).

The Australian Dairy industry was among the first in the country to develop a Sustainability Framework. The framework outlines key targets for reporting against and annually provides evidence to demonstrate acceptable practice. The goals and targets identified in the framework can be used by industry and NRM agencies to support partnership approaches to promote environmental stewardship in the Dairy industry.

At a regional level, opportunities exist for partnership approaches between industry groups and NRM agencies to address common goals for improved sustainability and help build natural capital. Such partnerships have been in place in some regions with great success, whilst in other regions they are still emerging. This project has aimed to highlight partnership enablers as well as consider which aspects of NRM activity lend themselves to a successful partnership project approach in the dairying area of South West Victoria.

# 2. Introduction

#### Approach

The overall project approach was developed by the CCMA and NRM Regions Australia to understand dairy-NRM partnership approaches and explore possibilities for such partnerships in South West Victoria. The investigation was undertaken through five main tasks as described below.

#### 1. Identification and description of case studies

An initial set of case studies was identified by CCMA and the project team. A description of each case study was developed through a review of publicly available documents and semi-structured interviews with key informants. A snowballing approach was used to identify additional case studies and key informants from the initial set of case studies.

#### 2. Presentation of case studies using partnership enablers

The key features of each case study were documented against a set of themes that were developed in recent work by Phelps and Hayman (2020). This work (Appendix A) investigated 20 case studies across Australia and identified common themes or 'partnership enablers' that were present in these partnership projects. These 'partnership enablers' guided the analysis and informed the development of the presentation of the case studies in Section 3 of this report.

### 3. Review and summary of Dairy NRM issues and funding considerations for South West Victoria

A document review was conducted to identify an initial list of dairy-NRM issues (themes) as a starting point for refining priorities for dairy-NRM partnerships. The document review collated the priority directions from the Glenelg Hopkins and Corangamite Regional Catchment Strategies (RCSs) and the actions from the WestVic Dairy NRM Plan (2009). We grouped the priority directions and activities by theme and summarised the details for each theme. The search of the RCS's focused on NRM priority directions that identified industry groups as a partner or where the dairy industry appeared to be within the scope of the priority direction.

#### 4. Workshop with NRM and industry stakeholders

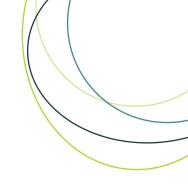
An online workshop was held with dairy NRM stakeholders in May 2022. The notes from this workshop can be found in Appendix C.

The case studies and partnership enablers were presented and current dairy-NRM partnership projects that are underway in South West Victoria were shared. Workshop participants discussed ideas for future projects and the steps that they felt would be helpful to build successful partnerships.

Participants demonstrated a desire to be involved in partnership projects and were receptive to the partnership enablers. A common thread was the idea of building a partnership project around the Curdies River catchment following a recent blue green algae outbreak in the Curdies Estuary.

#### 5. Reporting and recommendations

This report has been compiled to document the project approach and make recommendations to further progress the potential for dairy-NRM partnership projects in the South West region of Victoria.



### 3. What are the drivers to catalyse partnerships to enhance dairy-NRM projects in South West Victoria?

This section provides an overview of the case studies that were explored through this project and presents the analysis of drivers to catalyse dairy-NRM partnerships.

#### Dairy-NRM Case Studies

A set of six dairy-NRM partnership case studies from within Australia (5) and New Zealand (1) are presented in this section:

- 1. Better Farms, Bega
- 2. Cows out of Creeks, Tasmania
- 3. Corner Inlet Connections, Gippsland
- 4. Dairy Cares, Western Australia
- 5. Climate Futures for Dairy in North East Victoria
- 6. Wai Kokopu, New Zealand

Five of the six case studies have a focus largely on water quality as the primary NRM issue, with the remaining example focused on climate change. In some cases, partnerships have expanded to include other NRM and productivity issues. This is the case with the Bega project, where the project has adapted over time to include other on-farm environmental risks. Increasingly, climate change is becoming a focus for partnership projects and is likely to remain so with the recent appointment by Dairy Australia of three Climate Regional Extension Officers across Victoria. The New Zealand situation differs to Australia due to the legislative environment. A Climate Change Response Act and a suite of national freshwater guidelines are in place outlining clear rules for on-farm actions to protect waterways and support climate change mitigation. Partnership approaches in New Zealand focus strongly on the areas of water quality and reducing greenhouse gas emissions.

The case studies in Section 3 of this report are broken down against 'partnership enablers' a concept that was described in the report 'NRM and industry partnerships desktop study' (Phelps and Hayman, 2020) which is included as an Appendix to this report.

<sup>1</sup>This study involved the analysis of 20 case studies from a range of NRM regions and agricultural industries across Australia.

### Bega, Better Farms

#### **Project Summary**

- The BEMS project began in NSW around 2006 and has expanded to include other areas of NSW & Victoria. Now known as Better Farms, it began to help farmers identify environmental risks on farm using the industry self assessment tool DairySAT.
- Partners: Bega Cheese & South East Local Land Services (LLS).

#### https://betterfarms.com.au/

https://nrmregionsaustralia.com.au/wp-content/ uploads/2021/06/NRM-BEMS-Better-Farms\_LR.pdf

# Co-benefits – environmental and productivity outcomes

 Farmers were identifying and reducing environmental risks on farm, therefore reducing impacts on the local environment including protection of waterways and the coastal environment. This aligned with the goals of South East LLS.

#### Commitment to co-design principles at the initiation and/or implementation phase

• Both organisations were involved in the project from the start. Initially Bega sought funds from the federal and state governments. Both organisations sought funds where possible as the project matured.

# Shared understanding and a common purpose

- The purpose was clear from the start reducing environmental risk on farm and protecting the broader environment.
- Partner roles were clear Bega had farmer contact and LLS had technical expertise to advise farmers.

#### Adaptive project management

- The project has built and changed in response to needs and funding streams.
- Initial drivers were for farmers to continue to gain access to irrigation water through the Bega River Health agreement. This broadened to include all environmental risks.
- At times the project has provided leadership training to farmers and indigenous work crews have assisted with works.

#### Market access

- The BEMS program was aimed at building environmental awareness of risks and complementing milk production.
- The project builds confidence in on-farm environmental management and has contributed to outcomes in the Dairy Sustainability Framework

#### History of working together

• Some of the staff from LLS and Bega have worked together for the duration of the project.

- Bega is trusted by farmers and provided the introduction to LLS staff.
- There are ongoing and trusted relationships between LLS and Bega staff.

## Cows out of Creeks Tasmania

#### **Project Summary**

- Incentive funding provided to dairy farmers to fence out creeks, install off stream stock water and stock crossings.
- Operating since 2013 initially for dairy farmers and expanded to include beef producers.
- Partners: DairyTAS, Tasmanian Government, NRM Regions (Cradle Coast, NRM North & NRM South).

https://nrmregionsaustralia.com.au/wp-content/ uploads/2021/06/NRMStories-Cows-Out-Of-Creeks\_ LR.pdf

# Co-benefits – environmental and productivity outcomes

• Water quality is the key goal both on farm and in the catchments, a goal shared by the government and NRM regions.

#### Commitment to co-design principles at the initiation and/or implementation phase

- The project was co-designed with DairyTAS leading and involvement from the State Government and 3 Tasmanian NRM regions.
- An incentive grant of \$5000 is available to get farmers on board.

# Shared understanding and a common purpose

- . Every cow out of every creek in Tasmania by 2030.
- The project links to goals in the Australian Dairy Sustainability Framework.

#### Adaptive project management

 A clear goal, shared by all partners allows for varying funding streams to be accessed over time. The concept is applied to fit in with different initiatives across the state at different times and has been broadened to include the beef industry.

#### Market access

• This work results in cleaner waterways and improves the 'social license' to farm in Tasmania.

#### History of working together

• DairyTAS has a track record of delivery as well as strong systems and processes.

- Projects and funding is coordinated through DairyTAS.
- DairyTAS has worked with the Tasmanian Government and the NRM Regions to coordinate the activity and report on outcomes.



#### **Project Summary**

- Part of a larger Water Quality Improvement project, the Dairy Connections approach involved 90% of dairy farmers within the catchment in the development of Fert\$mart plans. Some of those farmers accessed the 'CORE 4' program which provided an on farm visit, identification of risk areas and works on high risk run off points
- Partners: West Gippsland CMA (WGCMA) and GippsDairy. Private consulting groups delivered the Fert\$mart plans

https://www.wgcma.vic.gov.au/our-region/projects/ corner-inlet-connections

https://nrmregionsaustralia.com.au/wp-content/ uploads/2021/06/NRMStories-Corner-Inlet-Connections\_ LR.pdf

# Co-benefits – environmental and productivity outcomes

• Corner Inlet is a RAMSAR wetland and highly valued locally. The Inlet is in good condition and the desire is to ensure it remains that way.

#### Commitment to co-design principles at the initiation and/or implementation phase

• Projects are designed, delivered and managed jointly.

# Shared understanding and a common purpose

- The goal is to maintain and improve water quality in the catchment.
- . A Water Quality Improvement Plan is in place.
- The project links to goals in the Australian Dairy Sustainability Framework.

#### Adaptive project management

• Opportunities to continually fund the activities are sought through partners with activities underway since 2014.

#### Market access

 It is hoped that this work results in water quality outcomes and improves the 'social license' to farm in Corner Inlet.

#### History of working together

• Some of the staff from WGCMA and GippsDairy have worked on this project for its duration.

- . Time and effort are invested into the partnership.
- Momentum was built amongst dairy farmers with such a high level of participation in the project



#### **Project Summary**

- Nutrient run-off from farmland is a significant source of nutrients entering Geographe Bay. Dairy sheds can be a point source for nutrients. DairyCare has been in place since 2003 with a focus on reducing nutrient runoff from dairy farms
- Partners: GeoCatch, Western Dairy, South West
  Catchments Council, WA Government

https://estuaries.dwer.wa.gov.au/project/dairycare/

https://nrmregionsaustralia.com.au/wp-content/ uploads/2021/06/NRMStories-DairyCare-WA\_LR.pdf

# Co-benefits – environmental and productivity outcomes

• Commitment to supporting farmers every step of the way - effluent planning, design, applications, management and provision of incentives.

#### Commitment to co-design principles at the initiation and/or implementation phase

• The project was co-designed from the beginning and continues today with input from all partners.

# Shared understanding and a common purpose

- The aim of DairyCare was to improve effluent management through technical support and incentives to upgrade effluent systems and ensure ongoing management.
- The project links to goals in the Australian Dairy Sustainability Framework.

#### Adaptive project management

• The project has been able to attract funding from various sources over the life of the project given the clear purpose and strong partnerships.

#### Market access

• This has been an ongoing project to impact on water quality outcomes and improve the 'social license' to farm in Geographe Bay.

#### History of working together

- The project has run for 18 years
- There was agreement that there was a shared problem with agricultural runoff and a commitment to work together on a solution.

#### High levels of trust

• 18 year history of working together and achieving outcomes in partnership

# Climate Futures for Dairy in NE Victoria

#### **Project Summary**

A project to consider:

- What are the priorities for farmers in adapting for climate change?
- What support might our farmers and farming communities be needing?

https://www.necma.vic.gov.au/Solutions-Resources/ Climate-Change/Climate-Futures-Opportunities-and-Challenges

# Co-benefits – environmental and productivity outcomes

• The project clearly identified projects that can be pursued to assist farmers in the region adapt to climate change. It will ensure that responsibility for climate change adaptation actions is shared among relevant stakeholders.

#### Commitment to co-design principles at the initiation and/or implementation phase

 Alpine Valleys Dairy Inc., with the support of AgBiz Assist & the NE CMA secured funding support from the Victorian State Government to ensure dairy farmers in north east Victoria had a say in what was most important to them in being prepared for the likely impacts of the changing climate.

# Shared understanding and a common purpose

 The aim was to combine CSIRO climate predictions with what dairy farmers know about their own businesses, to develop a local and regional response, which ensures the region is best prepared for the challenges and opportunities ahead.

#### Adaptive project management

 This was a short term project aimed to catalyse on ground actions to adapt to climate change. A steering committee made up of Alpine Valleys Dairy Inc., AgBiz Assist & the NE CMA managed the project.

#### Market access

 Some markets are starting to signal a preference for climate smart agriculture products. In time evidence of this may be demanded by markets. Dairy is a key land use and economic contributor in north east Victoria.

#### History of working together

 Alpine Valleys Dairy Inc. supports the dairy industry across the Alpine Valleys of north east Victoria through collaboration, education, advocacy and innovation. The NE CMA has a long history of working with agricultural groups.

#### High levels of trust

 Alpine Valleys Dairy Inc. have strong levels of trust with local farmers. This was valuable in gaining farmer input to the project. They have worked with the CMA on previous projects.

# Wai Kokopu New Zealand

#### **Project Summary**

- Wai Kōkopu Incorporated is a community driven governance group that connects, informs and lobbies agencies, organisations, industry and landowners towards achieving the reductions required to meet catchment water quality targets.
- The project focuses on catchment wide on ground activities and education initiatives including 15 'Lighthouse Farms' to demonstrate leading actions

https://www.wai-kokopu.org.nz/

# Co-benefits – environmental and productivity outcomes

- A focus on environmental initiatives at a farm, subcatchment and catchment level with an objective of improving water quality in the Waihī Catchment waterways.
- Reductions of contaminants (between 30% and 60% for nutrients) and E.coli (50%) are needed.

#### Commitment to co-design principles at the initiation and/or implementation phase

• The project is managed by a 10 member committee, each member represents a sector of the Waihī Catchment community, including tangata whenua, farmers, growers, foresters, environmental care groups, Māori agribusiness, residents and ratepayers.

# Shared understanding and a common purpose

- The mission is to replenish and revitalise the health of the Waihi Estuary.
- The programme involves catchment-wide innovation, strong leadership, passion and the harnessing the power of collective action.

#### Adaptive project management

 The project includes more than water quality.'Lighthouse Farms' are used to demonstrate whole of farm planning and leading approaches.
 Reducing greenhouse gases is also within the project scope. Ecological trends are being monitored and reported on.

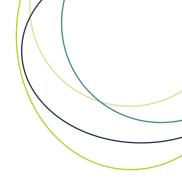
#### Market access

 In 2020 the NZ government introduced a National Policy Statement on Freshwater Management, National Environmental Standards for Freshwater and stock exclusion regulations. Legislation will drive market access.

#### History of working together

• The project began in 2020.

- The community led project states "instead of industry sectors working in silos, this is a call to action for groups to come together and be of service to the communities partnered with hau kāinga."
- Focus on monitoring & reporting outcomes.



#### **Partnership Enablers**

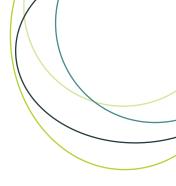
The case studies on the previous pages are aligned to the seven 'partnership enablers'.

The partnership enablers concept was adopted for this investigation as these are crucial to successful industry and NRM partnerships. Each enabler is described in detail in Appendix A with a summary included below in Table 1. Three additional enablers were identified and are not outlined in the table below these include governance, data management & privacy and monitoring & evaluation of partnership health.

Table 1: A summary of partnership enablers for successful NRM Industry partnership projects. Adapted from NRM and industry partnerships desktop study. By C. Phelps and G. Hayman. 2020.

PARTNERSHIP ENABLER	DESCRIPTION
1. Co-benefits – environmental and productivity outcomes	Recognise and promote the link between improved environmental/sustainability outcomes and improved productivity outcomes and focus on both when working with farmers.
2. Commitment to co-design principles at the initiation and/ or implementation phase	Genuine co-design can build mutual understanding between partners and recognise values, skills and knowledge that different partners bring to the project. It can help foster greater ownership, increasing the likelihood of funding and/or delivery support
3. Shared understanding and a common purpose	Understanding of partners needs and goals and clear identification of these for all partners is essential for project initiation and delivery.
4. Adaptive project management	Shared decision making as the project progressed, capturing and acting on farmer and stakeholder input and adapting to funding streams.
5. Market access drivers	Measures or evidence of market access can increase industry 'buy in' to partnerships. Linking to industry sustainability frameworks may be useful here.
6. History of working together	A history of working together is strongly linked to trust, this working history builds knowledge and relationships amongst key players within the partnership.
7. High levels of trust.	Trust is essential component of successful partnerships and is built over time through a commitment to common priorities, a genuine respect for each partner's perspectives, strengths and needs, and a positive track record of delivery (reliability).

EXPLORING PARTNERSHIP OPPORTUNITIES FOR NRM - DAIRY PROJECTS IN SOUTH-WEST VICTORIA



The partnership enablers have been adapted into the following graphic for use by practitioners.



Figure 1: Partnership enablers for building successful NRM and industry projects. Adapted from NRM and industry partnerships desktop study. By C. Phelps and G. Hayman. 2020.

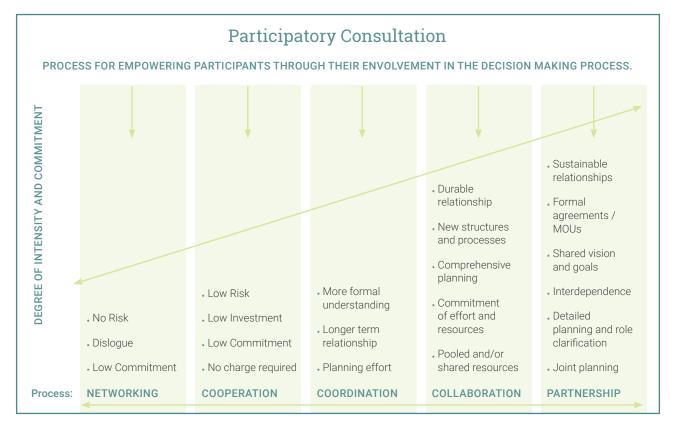
The importance of relationships and trust in the building of successful partnerships cannot be underestimated. This aligns with findings from a study by Toman et al. (2021) and the 'NRM and industry partnerships desktop study' (Phelps and Hayman, 2020). Both studies found that managing the partnership is crucial to success. If relationships, trust and governance arrangements are well looked after, the rest will follow. "When trust is strong, this enables individuals and organizations to operate more effectively, including by reducing the time and effort required to engage stakeholders." (Toman et al., 2021 p5).

Toman et al. acknowledge that dedicating time and resources to building trust could be perceived as pulling staff away from the 'real work'. However, they argue that by allocating time and resources to this task it can ultimately build a foundation for future success.

EXPLORING PARTNERSHIP OPPORTUNITIES FOR NRM - DAIRY PROJECTS IN SOUTH-WEST VICTORIA

Partnerships can start in an informal way and grow into formal arrangements over time as shared goals, and projects emerge. A time may come where it is important to make formal arrangements and put governance arrangements in place. Active consideration of partnership enablers (Figure 1) can be used at this time to work through the planning of projects within the partnership. Open communication about what type of partnership organisations wish to pursue and the role of individual stakeholders in any given project is also an important enabler in successful projects. Figure 2 shows the Continuum of Joint Effort, which offers another useful approach to assist in partnership discussions. The continuum can help identify the level of commitment different parties wish to take in various projects from a low level of commitment involving dialogue and networking through to partnerships with greater interdependence and joint effort involving the adoption of formal agreements.

#### **Continuum of Joint Effort**



@ Success Works 2002

Figure 2: Continuum of Joint Effort. From Putting Partnerships into Practice Final Report by Success Works, 2004 Report prepared for the Department of Human Services. Copyright 2002, Success Works.

# 4. What are the dairy-NRM priorities for the region?

#### Dairy-NRM issues in South West Victoria

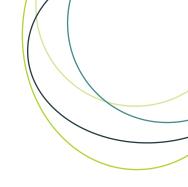
The primary focus of this project has been to understand how partnerships can help achieve dairy-NRM outcomes in the CCMA and GHCMA regions in Victoria (incorporating the WestVic Dairy region). A secondary focus was developing an initial list of dairy-NRM priorities that could form the basis of future partnership activities.

The regional NRM priorities for each CMA are identified in its Regional Catchment Strategy with priority directions and regional outcomes described for land, water, biodiversity, marine and coast and the community (CCMA, 2022; GHCMA, 2022). Further details on the CCMA dairy-NRM priorities are detailed in its Sustainable Agriculture Future Directions Paper (RMCG, 2019).

The Australian Dairy Industry Sustainability Framework supports the industry's commitment to addressing emerging sustainability issues over the long term and improving the industry's resilience to meet challenges as they come, including climate change. The Framework sets out goals and targets for reducing the industry's environmental impact by improving land management, increasing water use efficiency, reducing greenhouse gas emissions intensity and reducing waste (Dairy Australia, 2021). At a regional scale, the WestVic Dairy NRM Action Plan, whilst somewhat dated, identifies the priority natural resource management actions for the Dairy Industry in the western Victorian dairy region (WestVic Dairy, 2009). The analysis of the three regional plans identified eight dairy-NRM issues in common (Appendix B), these were:

- Biodiversity
- Climate Change
- Market access and diversification
- Nutrient and effluent management
- Pest plants and animals
- Soil carbon
- Soil health
- Water use and energy efficiency

A review of Dairy Australia's Land, Water and Climate Survey Report (2020) was also completed to understand the views and perspectives of dairy farmers in western Victoria on land management issues. The survey included responses from 500 dairy farmers, including 102 from western Victoria. The major land management issues identified by farmers in the WestVic Dairy region were soil health (61%), insect pests (53%), pest animals such as birds or kangaroos (52%), noxious weeds or invasive species (43%). A lower percentage of respondents identified native vegetation/biodiversity (24%), waterways management (21%) and planning requirements (8%) as land management issues of concern (Watson & Watson, 2020). While this question did not cover all the dairy-NRM issues (such as climate change, water, energy, biodiversity), the results indicate an overlap between farmers' issues of concern with the priorities of CMAs and WestVic Dairy, particularly for the themes of soil health and pest plants and animals.



#### Stakeholder views on dairy-NRM Priorities

The workshop held in May 2022 was a starting point to consider the current dairy-NRM issues of interest for future partnership projects. These short discussions identified the areas of water quality, climate change adaptation, native vegetation management including biolinks, effluent and nutrient management and multi-species cropping for soil management. In addition, there are a number of regional and network Landcare plans, that may assist in aligning NRM priority action areas for South West Victoria.

Further discussions with a broader group of stakeholders are recommended. In order to identify relevant stakeholders for involvement in dairy-NRM partnerships and projects in South West Victoria, a stakeholder mapping exercise such as the one outlined in The Partnering Toolbook (Tennyson, 2011) would be of benefit.

# Flexibility with dairy-NRM Priorities

It may be necessary to adopt a flexible approach to focus projects across the region. It is recommended that a list of project ideas could be developed with stakeholders to ensure that funding opportunities can be capitalised upon as they arise.



### 5. How can partnership projects help achieve dairy-NRM outcomes in South West Victoria?

This investigation has found that successful dairy-NRM partnership projects share a set of common partnership enablers starting with a common purpose and a commitment to co-development through to implementation. Both the Corangamite and Glenelg Hopkins CMAs have current partnership projects in place with WestVic Dairy, and there is scope to build on the strengths of these projects for other NRM priorities.

This section outlines the strengths and opportunities for partnership projects considering current projects and emerging priorities. It describes the funding considerations for partnership activities and considers how partnership projects can help achieve dairy-NRM outcomes.

# Current dairy-NRM partnership projects in the region

The Corangamite CMA currently has a successful partnership project underway. The 'Sustainable Dairies' project began in 2016 and will continue until June 2023, focusing on nutrient and effluent management leading to improved water quality.

The 'Sustainable Dairies' program is an initiative between The Corangamite CMA, WestVic Dairy and Agriculture Victoria. Farmer groups take part in workshops covering soil, fertiliser and effluent management. Tools developed by the dairy industry are utilised in the workshops and the program culminates with a field day focused on topics including soils and on farm biodiversity. Participants receive nutrient management and effluent plans for their farm business. These plans are informed by current soil and effluent testing. Six groups of fifteen farms will have benefitted from this project at its completion. Funding has come from the state government's Our Catchments Our Communities program and the Australian Government's National Landcare Program. Written agreements are in place between Corangamite CMA, West Vic Dairy and Agriculture Victoria to coordinate the delivery of this program.

A similar partnership project is underway within the Glenelg Hopkins CMA also utilising Dairy Australia's Fert\$mart program which results in the development of nutrient management plans for dairy farm businesses.

#### Funding of partnership activities

The development of partnership programs also needs to consider the funding environment for NRM bodies and the agricultural industry. Funding of NRM programs by governments is typically based on the premise of maximising public benefits with the available resources. For Industry bodies funding is typically via a service levy and must be used to deliver benefits to farmers, that is the emphasis is largely on private benefits.

For NRM bodies it is important to select the most appropriate policy tools that could support the adoption of desired practices based on an understanding of both the private net benefits and public net benefits associated with these practices.



The Public:Private Benefits Framework (PPBF) is a simple framework to guide the choice between policy mechanisms. The policy mechanisms are in five categories:

- 1. positive incentives (financial or regulatory instruments to encourage change)
- 2. negative incentives (financial or regulatory instruments to inhibit change)
- 3. extension (technology transfer, education, communication, demonstrations, support for community network)
- 4. technology change (development of improved land management options, such as through strategic R&D, participatory R&D with landholders, provision of infrastructure to support a new management option), and
- 5. no action

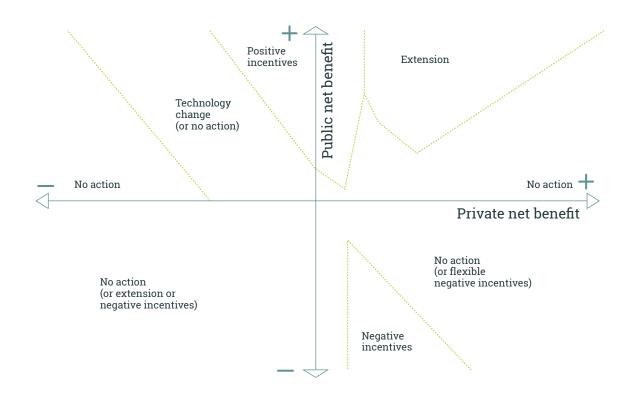


Figure 3. Public Private Benefits Framework from Public benefits, private benefits, and the choice of policy tool for land-use change: Summary by D. Pannell. 2008. Copyright David. J. Pannell 2008.

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The choice among these mechanisms depends on the levels of public net benefits and private net benefits from the practice changes being proposed. 'Private net benefits' refer to benefits minus costs accruing to the private land manager as a result of the proposed changes in land management. 'Public net benefits' means benefits minus costs accruing to everyone other than the private land manager (Farm Future Industries CRC, 2022; Pannell, 2008).

Application of the PPBF and a structured assessment of the potential levels of adoption from desired practices can be a useful process to go through to support the development of dairy-NRM partnership projects and we recommend the CCCMA and its partners investigate this as part of their next steps in this work.

#### Role of partnership projects in delivering on dairy-NRM partnerships

Partnership projects offer an opportunity for the CMAs and the dairy industry to achieve common goals. Partnership projects will only succeed if built from committed relationships and a genuine desire to make these work. Partnering is not without challenges and requires a partnering mindset (Brokering Better Partnerships, 2017). "The hypothesis underpinning a partnership approach is that only with comprehensive and widespread cross-sector collaboration can we ensure that sustainable development initiatives are imaginative, coherent and integrated enough to tackle the most intractable problems...Working separately, different sectors have developed activities in isolation - sometimes competing with each other and/or duplicating effort and wasting valuable resources...So partnership provides a new opportunity for doing development better- by recognising the qualities and competencies of each sector and finding new ways of harnessing these for the common good (Tennyson, 2011 p5)."

Partnerships can help achieve dairy-NRM outcomes in South West Victoria. By joining forces, the CMA's, the dairy sector and others with an interest can identify common goals and work together to achieve on ground outcomes to benefit the region. A deliberate approach is recommended to identify stakeholders, build relationships, identify common goals and collaborate. dairy-NRM partnerships and actions can address a multitude of NRM priorities, improve the environment and increase market access for dairy products.



# 6. Recommendations

# 1. Allocate time and resources to dairy-NRM partnerships

- Recognise that allocating resources to building and sustaining relationships is an important part of NRM work and factor this into work planning.
- Use the tools and case studies outlined in this report (and others) to work towards establishing and maintaining dairy-NRM partnerships and projects across the region.

# 2. Build a list of project ideas in readiness for funding opportunities as they arise

- The CMAs and WestVic Dairy develop shared NRM priorities and dairy-NRM project ideas and have a list prepared to take advantage of funding opportunities as they arise. A strong partnership approach may be attractive to an investor looking for such projects to fund in the region.
- Consider the use of the Public:Private Benefits Framework (PPBF) to guide discussions and identification of projects.

# 3. Explore stakeholders for dairy-NRM partnership approaches in the region

 Undertake a stakeholder mapping activity to identify possible partners in future projects and their interest in NRM priorities. As partnership projects are identified, explored and designed, West Vic Dairy & CMAs could extend an invitation to other stakeholders to be involved in dairy-NRM initiatives.

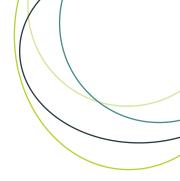
#### 4. Getting started

- Consider the use of 'The Curdies' project as discussed at the stakeholder workshop (Appendix C) as a starting project. Use the partnership enablers and other tools to guide the process. Document the process and replicate the successes in future approaches.
- Take a holistic landscape view, considering all potential partners in any catchment you work in. Ensure that dairy producers are not the only agricultural industries and land uses targeted. Others may contribute to the issue and can benefit from NRM projects.
- Communication is key in any project. Identify clear messages for your target audience and be clear about the common goal and actions required. Identify measures to ensure that communication between partners is strong.

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### Appendix A. NRM & Industry Partnerships Desktop Study, 2020

'NRM and industry partnerships desktop study' (Phelps & Hayman, 2020)

EXPLORING PARTNERSHIP OPPORTUNITIES FOR NRM - DAIRY PROJECTS IN SOUTH-WEST VICTORIA

# NRM and industry partnerships desktop study

**Commissioned by NRM Regions Australia** 

December 2020

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#### Acknowledgements

The authors wish to thank the case study project managers for their input and insights into the development of the case studies. Their understanding was integral to identifying the key attributes for successful partnerships.

#### **Scope and Limitations**

This report has been prepared by the authors for NRM Regions Australia in good faith on the basis of available information. While the information contained in the document has been formulated with all due care, the users of the document must obtain their own advice and conduct their own investigation and assessments of any proposals they are considering, in the light of their own individual circumstances.

The opinions conclusions and any key recommendations in this report are based on assumptions made by the authors described in this report. The authors disclaim any liabilities arising from any of the assumptions being incorrect.

Recognising that some of the information is provided by third parties, the authors take no responsibility for the accuracy, currency, reliability, and correctness of the information in the document provided by third parties.

#### Summary

NRM Regions Australia is leading a project that aims to increase the number of partnerships between NRM regional organisations and agricultural industries. Funded by the Australian Government and led by NRM Regions Australia, the purpose of the *NRM and industry partnerships* project is to "facilitate agricultural industries in increasing their market access".

The *NRM* and industry partnerships desktop study is one component of this larger project. Its purpose is to inform other components of work in the *NRM* and industry partnerships project, such as their communities of practice, as well as providing material that can be used to inform and encourage NRM and industry partnerships.

The desktop study is a collation of 20 case studies of existing or recent sustainable agriculture partnerships between NRM regions and industry stakeholders. The industry stakeholders include peak industry councils, producer groups, Research and Development Corporations, agribusiness, processors, agriculture consultancies and individual producers.

The selected case studies represent a wide range of industries, geographic location and scale. They highlight the breadth, quality and variety of partnerships being implemented by NRM organisations in partnership with industry across Australia.

The case studies were analysed to identify common partnership attributes, drivers, and processes with the aim of identifying mechanisms that could be implemented to increase the number of partnerships between NRM regional organisations and agricultural industries.

#### **Key findings**

An initial analysis of the 20 cases studies identified several attributes important to the success of many of the partnerships:

- Co-benefits environmental and productivity outcomes
- Commitment to co-design principles at the initiation and/or implementation phase
- Shared understanding and a common purpose
- Adaptive project management
- Market access drivers
- History of working together
- High levels of trust.

#### **Recommendations**

Based on the findings from analysis of the 20 case studies, the following actions are recommended for consideration by NRM Regions Australia. These actions will help support and build partnerships between NRM regional organisations and industry stakeholders to facilitate adoption of recognised sustainable farming practices.

1. Encourage and support NRM regional organisations to:

- Identify and communicate linkages between their Regional Plan sustainable agriculture and climate change strategic priorities and industry sustainability framework priorities when initiating projects with industry organisations. Appendix 1, *Australian Agriculture Industry Sustainability Frameworks* is a starting point for NRM regional organisations. The information will need to be updated as industries further develop their frameworks.
- Actively promote the productivity and economic co-benefits of adopting sustainable management practices when initiating partnerships with industry.
- Promote their skills and expertise in management, enhancement and monitoring of biodiversity including threatened species.
- 2. Provide opportunities to build skills and capacity within NRM regional organisations in:
  - implementing co-design principles when initiating and implementing projects with industry stakeholders.
  - establishing and maintaining partnerships with industry organisations, including the private sector.

One way this could be achieved is through training support, workshops and/or mentoring either directly or through Communities of Practice.

3. Build understanding of how market access/social licence drivers are impacting Australian agriculture and how different sustainability reporting frameworks and approaches are being used by corporations, financial organisations and industry. Increased understanding may assist in building partnerships focused on addressing market access requirements and, in particular, partnerships with the private sector. Biodiversity and climate change are the key material risks from an international market access perspective.

Potential activities include producing a series of webinars featuring talks by corporate and industry sustainability managers and/or supporting a Community of Practice that includes corporate and financial sustainability managers. Examples of relevant reporting frameworks and approaches include the UN Sustainable Development Goals, the Taskforce for Climate-related Financial Disclosure, Sustainable Sourcing and Natural Capital.

4. Pilot the concept of being 'project ready' by facilitating workshops and activities to support relevant NRM regional bodies and industry stakeholders to co-develop implementation plans for sustainability framework targets. Depending on the topic, these workshops could be at a regional or national scale.

The workshops would assist in building networks between industry and NRM regional organisations and would help develop an understanding of each party's knowledge, skills, resources and perspectives.

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#### Background

NRM Regions Australia is leading a project that aims to increase the number of partnerships between NRM regional organisations and agricultural industries. Funded by the Australian Government and led by NRM Regions Australia the purpose of the *NRM and industry partnerships* project is to "facilitate agricultural industries in increasing their market access".

The NRM and industry partnerships desktop study is one component of this larger project.

Agriculture markets, including export markets, are increasingly interested in knowing how the product they purchase/import is produced. For example, is it produced using sustainable farming practices including addressing climate risk? In addition, some export markets are signalling potential trade barriers with respect to management of carbon emissions and biodiversity.

Underpinning the *NRM and industry partnerships* project is the assumption that producers and industries that can provide evidence they are using sustainable farming practices will have a market advantage.

Many NRM regional organisations have, or have previously developed, partnerships with industry stakeholders to facilitate the uptake of sustainable farm management practices. While many of these partnerships do not mention industry sustainability framework targets or market access as specific outcomes, these partnerships have the potential to address market access drivers more explicitly.

The purpose of the *NRM and industry partnerships desktop study* is to identify the strengths of existing partnerships between NRM regional organisations and recommend actions that could be implemented to increase the number of NRM and industry partnerships. The outputs will inform other components of work in the larger *NRM and industry partnerships* project, activities of NRM Regions Australia, such as their communities of practice, as well as providing material that can be used to inform and encourage NRM and industry partnerships.

The *NRM and industry partnerships* project aligns with the MOU between NFF and NRM Regions Australia and the goal for regional NRM organisations to help agricultural industries implement their Industry Sustainability frameworks, and the Australian Farm Biodiversity Certification Scheme Trial.

#### Why the focus on partnership approaches?

Partnerships, at their best, offer a model of working that leverages the skills and resources of the different partners in a way that is designed to deliver better outcomes than if the parties were to operate individually.

The Oxford Dictionary definition of a partnership is *an on-going working relationship between people or organisations where risks and benefits are shared.* This dictionary definition is regarded as too narrow for the purposes of this review because the success of partnerships is dependent on 'how' they work, as well as 'what' they do.

Governments in Australia have an increasing emphasis on partnerships. The Australian Government Department of Agriculture, Water and the Environment is taking an active role in facilitating more multi-stakeholder partnering. The aim is to bring together the unique strengths and resources of diverse partners to have more impact and achieve more sustainable outcomes for the environment than each partner could by acting alone.

State governments are also focusing on partnership approaches. In Victoria, the 'Our Catchments, Our Communities' strategy has been developed with the Department of Environment, Land Water & Planning (DELWP) in partnership with Catchment Management Authorities (CMAs).

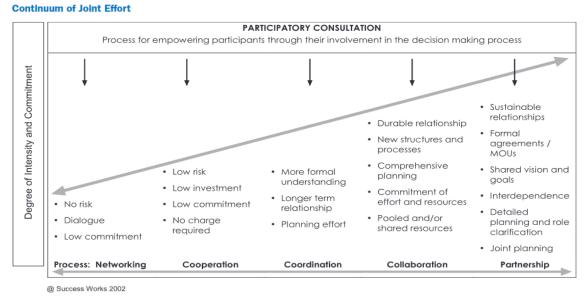
In this review, partnerships between NRM agencies, government departments and the agriculture, aquaculture, and seafood sectors were explored. Many interpretations of the word 'partnership' were uncovered, with the term often being used to refer to a wide range of collaborative mechanisms, including alliances, consortiums and coordinated networks.

The Partnership Brokers Association identifies 10 key attributes for the 'how' of effective partnering. These are:

- 1. A clear understanding between the partners of the word 'partnership'
- 2. Agreement to a shared vision and common purpose
- 3. Account and allowance being made for individual partners' interests.
- 4. The co-creation of design, decisions and solutions
- 5. Commitment to sharing risks as well as benefits
- 6. Every partner contributes resources (whether tangible or intangible)
- 7. Partners share decision-making and leadership responsibilities
- 8. Partners commit to mutual/horizontal accountability
- 9. Partners work together to develop a principled approach to their partnering endeavours
- 10. Attention is paid to the partnering process as well as the partnership's projects.

#### Types of partnerships

The Continuum of Joint Effort developed by Success Works in 2002<sup>1</sup> offers a starting point to understand the level of participatory consultation and degree of commitment displayed in the different partnership approaches of the case study projects.



#### Working towards a sustainable future

#### **Global context**

#### United Nations Sustainable Development Goals (SDGs)

The 17 Sustainable Development Goals (SDGs) are a call for action by all countries and interested parties in a global partnership. They recognise that ending poverty and other deprivations must go together with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests<sup>2</sup>.

The UN SDGs underpin many sustainability reporting frameworks and commercial, government and not-for-profit organisations are increasingly aligning their sustainability commitments to the SDGs. Australian agriculture sustainability frameworks are aligned with the SDGs. Corporate farming and major food and drink companies also reference the SDGs in their sustainability reports including NAB, Danone, McDonalds, Olam, Syngenta and Wesfarmers.

<sup>&</sup>lt;sup>1</sup>Victorian Council of Social Service, *Partnership Practice Guide: Guide 1, Preparing to Partner* <u>https://vcoss.org.au/wp-content/uploads/2018/05/VCOSS-Guide-1-Preparing-to-Partner.pdf</u> <sup>2</sup>United Nations, 2015. *The 17 Sustainable Development Goals* (SDGs). <u>https://sdgs.un.org/goals</u>

Australia's progress toward the SDGs 2030 targets is captured on the Australian Government's Reporting Platform on the Sustainable Development Goals Indicators (SDGs)<sup>3</sup>.

#### Market access drivers for sustainability and climate reporting

Governments and stock exchanges in some countries have mandated the reporting of aspects of sustainability including carbon emissions. Ninety-six percent of the world's largest 250 corporations now report on their sustainability performance<sup>4</sup> and these corporations are increasingly seeking information on the sustainability metrics of their suppliers including producers. A good example of this direction is Unilever's sustainable sourcing commitment<sup>5</sup>. Sustainability measures are required to access some markets, for example the EU Renewable Energy Directive has requirements for Australian growers supplying canola for biodiesel to be audited for their emissions reduction<sup>6</sup>.

The Task Force for Climate-related Financial Disclosures (TCFD)<sup>7</sup> was established in 2015 to provide a framework for investors, lenders and insurers to assess how a company or business will endure or even grow as the climate changes, regulations evolve, new technologies emerge and customer behaviour shifts. TCFD reporting is now supported by more than 1000 public and private sector organisations including major corporations, national governments, central banks, financial firms, asset managers, regulators, stock exchanges and credit rating agencies. With Environmental, Social and Governance (ESG) investment becoming mainstream, it is highly likely the TCFD framework will be more widely adopted.

#### Australian context

#### NRM regional organisations

Australia has 56 regional natural resource management (NRM) organisations. They are a mix of government agencies and non-government organisations (NGOs) that are responsible for delivering national priorities for natural resource management.

Each regional NRM plans and delivers programs that support healthy and productive country, viable communities, and sustainable industries. NRM regional organisations are committed to operating under the Principles of Integrated Natural Resource Management<sup>8</sup>. These include:

- Building environmental, economic and social capital
- Localism

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<sup>4</sup>*The time has come,* KPMG Survey of Sustainability Reporting, December 2020.

<sup>&</sup>lt;sup>3</sup> Australian Government's Reporting Platform on the Sustainable Development Goals Indicators (SDGs). <u>https://www.sdgdata.gov.au/</u>

https://home.kpmg/xx/en/home/insights/2020/11/the-time-has-come-survey-of-sustainability-reporting.html 5 Unilever, Sustainable Sourcing. <u>https://www.unilever.com/sustainable-living/reducing-environmental-impact/sustainable-sourcing/</u>

<sup>&</sup>lt;sup>6</sup> Sustainable Grains Australia, *Certifying canola as sustainable for the European market: A practical guide for growers* <u>http://www.australianoilseeds.com/ data/assets/pdf file/0008/17891/R-</u>003 Sustainable Canola Fact Sheet V3 07Sep20.pdf

<sup>&</sup>lt;sup>7</sup> TCFD Task Force on Climate -related Financial disclosures <u>https://www.fsb-tcfd.org/about/</u>

<sup>&</sup>lt;sup>8</sup> History of Natural Resource Management organisations. <u>https://nrmregionsaustralia.com.au/history-of-nrm/</u>

- Strategic and integrated regional planning
- Knowledge-based and innovative
- Sound governance and performance systems
- Diversity of approaches.

NRM regional organisations have a long history of forming partnerships with agriculture industries to achieve common goals. Often these partnerships are with smaller industry stakeholder groups, reflecting the localised nature of NRM regional organisation priorities.

#### Industry organisations

Agriculture industries in Australia encompass a wide range of advocacy and RD&E organisations. These include peak industry councils, multi-industry advocacy groups that are state or regionally based, Research and Development Corporations (RDCs) some of which include advocacy in their role, producer groups with an interest in RD&E, and single-issue producer groups.

Each of these organisations has its own strategic priorities and plans and its approach to sustainability and climate change issues will differ depending on its operating context.

The RDCs lead the development of sector and cross-sector RD&E strategies that form schedules to the National Primary Industries Research and Development Framework<sup>9</sup>. The intent is that the industry strategies draw on input from their internal and external stakeholders to identify key RD&E gaps and strategies to address them. These strategies include actions to address natural resource management issues and climate change. There is no common pool of funding to implement the strategies identified by the cross-sector and sector RD&E plans.

#### Industry Sustainability Frameworks

Several Australian agriculture industries have developed or are in the process of developing industry sustainability frameworks. These frameworks detail the sustainability topics deemed material risks to the industry, and the goals, indicators and metrics identified by industry stakeholders to address and report against these topics. Some sustainability frameworks track and report performance against indicators annually, others less frequently.

These frameworks have been developed through extensive consultation with internal and external stakeholders and represent industry sustainability goals and indicators at the time of development. The industry stakeholders involved in their development include peak industry councils, processors, RDCs, and producers.

The purpose of the frameworks is twofold. One is to meet the growing expectation of customers, consumers, investors, and communities that agriculture production is sustainable by telling the story of how the industry is addressing sustainability issues. The second purpose is to inform industry and external stakeholder investment in research, development, and extension to ensure the long-term sustainability of the industry.

<sup>&</sup>lt;sup>9</sup> National Primary Industries Research and Development Framework <u>https://www.npirdef.org/</u>

There can be a misunderstanding among both NRM and industry stakeholders about the role of the frameworks. Industry sustainability frameworks do not have dedicated amounts of allocated funding. Rather, they act as a focus for stakeholders to direct investment and/or seek funding support.

The sustainability frameworks act as a reference for non-industry stakeholders interested in forming partnerships to achieve common goals. While the words used by industry frameworks may vary from the language used in NRM regional organisation strategic plans, the intent is often aligned. A target of 100% of producers implementing soil and nutrient management plans (Australian Dairy Industry Sustainability Framework) is also a commitment to improved catchment water quality and soil management.

**Appendix 1** documents the key environmental goals, indicators and targets for Australian beef, dairy, cotton, and wine industries. The grains, rice, horticulture, and wool industry frameworks are under development.

Appendix 2 documents key industry contacts

### Approach

An initial scan of all NRM regional organisation websites and associated reports was undertaken to identify appropriate case studies of NRM regional organisations working in partnership with industry organisations to facilitate adoption of recognised sustainable farming practices. This first scan found few examples, an outcome that may be a reflection of changed funding arrangements. The scan was then widened to include partnerships that focused on adoption of sustainable land management practices and/or climate risk mitigation with the goal of achieving environmental sustainability in the agricultural landscape. This second scan also included partnerships involving individual producers and was not confined to industry organisations.

All NRM regional organisations were contacted via email and invited to suggest potential case studies of NRM and the agriculture/seafood sector working together for common outcomes.

Using this broader approach, 20 examples were identified and developed as case studies with additional examples included as snapshots.

Case studies were selected using the following criteria:

- The project showed alignment with agricultural industry sustainability priorities.
- The project involved industry or relevant private sector partners.
- The project was underway or recently finished.
- A key person was available to provide information and be available as a future contact point for the project.

Case studies supporting industry sustainability framework targets and market access were preferentially selected. Consideration was also given to the location and agricultural sectors involved to ensure project case studies reflected a range of geographical zones as well as agricultural sectors.

Development of the case studies involved conversations with a key contact, usually the project manager. The exception was three cases studies where sufficient information was available through desk top analysis. These conversations with a key contact were critical to understanding the nature of the partnership approach. Typically, projects report on objectives, activities, and outcomes. Very few projects publicly report on 'how' the partnership was established and managed.

To better understand the attributes or enablers of successful partnerships information collated for the project case studies focused on common priorities, key drivers, level of co-design, governance arrangements, roles and responsibilities, data management, perceived success factors and any evaluation of partnership health.

The selected case studies represent a wide range of industries, geographic location, and scale. They highlight the breadth, quality and variety of partnerships being implemented by NRM organisations in partnership with industry organisations and producers across Australia.

A brief description of the case studies is provided in the following tables. The case studies are grouped based on their complexity, extent to which they directly address sustainability framework targets and level of private sector funding. An additional group of case study projects based on alliances to address common issues has also been included.

# Table 1.1 Partnerships between NRM organisations and producers to increase adoption of sustainable land management and climate change adaptation practices.

Building	Partners	Summary	Success factors	Key drivers
Pastoral Sustainability	SA Arid Lands Landscape Board, Pastoralists	Designed in response to ongoing feedback from the SA Arid Lands pastoral community the Building Pastoral Sustainability (BPS) project aims to increase the uptake of technologies and land management practices that can increase productivity, generate economic returns, and improve land condition. A core BPS activity is the four-stage Property Management Planning (PMP) program that addresses the link between primary production, business management and natural resources.	<ul> <li>History of previous successful programs.</li> <li>BPS is based on what land managers said they wanted in a program.</li> <li>Benefits of participating are tangible.</li> <li>High levels of trust.</li> </ul>	<ul> <li>Holistic approach, the region has just come out of a drought and pastoralists are aware of climate change predictions and the need to be strategic in their planning.</li> <li>Success of the previous property mapping program, EMU.</li> <li>Networking opportunities.</li> <li>Opportunity to try new technologies and management practices.</li> </ul>
E-Beef Smart	Partners	Summary	Success factors	Key drivers
Farming in Northern Queensland	Southern Gulf NRM, Northern Gulf NRM, Desert Channels NRM and Pastoralists	E-Beef Smart Farming is supporting cattle producers to implement grazing and herd best management practices by demonstrating technologies which will assist them improve pasture productivity, groundcover, land condition, profitability, and business agility. The project has established six Smart Farm demonstration properties and associated Innovation Hubs (learning groups) across three NRM regional organisations.	<ul> <li>One-on-one support to assist graziers in adopting tools that they would not typically consider.</li> <li>High levels of trust between participants, history of working together.</li> <li>Locally relevant cases studies.</li> <li>Social networking and peer to peer learning opportunities.</li> <li>Training in how to use video conferencing to enable producers participate virtually in response to COVID-19 restrictions.</li> </ul>	<ul> <li>NRM Regions – achieve more through collaboration, provides access to skills and knowledge existing within other organisations.</li> <li>Graziers –         <ul> <li>low levels of technology literacy and keen to learn more about how these technologies perform in their grazing systems</li> <li>support to install and operate the technologies</li> <li>flexibility in the selection of topics and technologies</li> </ul> </li> <li>Commercial technology developers – need feedback from producers to refine the technologies.</li> </ul>

Territory	Partners	Summary	Success factors	Key drivers
Conservation Agreements	Territory NRM and Pastoralists	The Territory Conservation Agreement (TCA) program has been supporting land managers who wish to protect high value natural assets on their lands (such as wetlands, riparian areas, or sites of significant natural habitat) since 2011. The program is designed to help bridge the gap between productivity and sustainability outcomes on working properties. TCAs are voluntary and are based upon management actions proposed by the landholder. Essentially, a TCA entails implementation of an agreed plan of management over a defined area of land for a specific period (usually 10 years). The agreement is a contract, but it is not registered upon the title of the property or binding to future owners.	<ul> <li>Recognition that management and economic outcomes and conservation outcomes are complementary.</li> <li>Simple application process. The lack of 'paperwork' and high levels of assistance from Territory NRM staff is viewed positively.</li> <li>The co-investment of at least 50% of the cost of the TCA by the pastoralists (demonstrates commitment).</li> <li>Flexibility of the TCAs.</li> </ul>	<ul> <li>Producers:</li> <li>Interested in contributing to the preservation of areas of high conservation importance due to the presence of unique or iconic species.</li> <li>Preserving areas of their properties that their family and staff used for recreation and enjoyment.</li> <li>Demonstrating their commitment to conservation and sound land management as well as maintenance of their 'social licence to operate'. Many pastoralists already had areas they were protecting, TCAs provide recognition.</li> <li>Territory NRM:</li> <li>Demonstrate it is possible to implement conservation activities and get a management/productivity outcome.</li> <li>Support producers with High Value Land assets.</li> </ul>

Wildlife for Wine	Partners	Summary	Success factors	Key drivers
	Hills & Fleurieu Landscape Board, Adelaide Hills, Fleurieu, Barossa and Langhorne Creek wine grape growers	Wildlife for Wine supports grape growers in developing Biodiversity Action Plans (BAPs), which help identify activities and opportunities that enhance biodiversity, providing habitat for beneficial native species, and so improving environmental values as well as benefitting viticulture. BAPs support the biodiversity requirements for properties participating in the Sustainable Winegrowing Australia scheme. The project also supports a monitoring and research component.	<ul> <li>The project addresses pre-identified common priorities in a collaborative manner.</li> <li>The BAPs are a planning document that identifies actions to improve biodiversity.</li> <li>The timing and nature of implementation is controlled by the grower.</li> <li>The Hills &amp; Fleurieu Landscape Board provides the underpinning expertise needed for successful implementation</li> </ul>	<ul> <li>Improve sustainable wine certification biodiversity scores.</li> <li>Potential productivity outcomes</li> <li>Reducing the use of pesticides</li> <li>Point of interest to consumers, growers can promote their involvement.</li> <li>Grape growers interested in moving 'beyond best practice'.</li> <li>Impact investors keen to enhance biodiversity.</li> </ul>
Rice	Partners	Summary	Success factors	Key drivers
Sustainability Credentials Project	Murray Local Land Services, SunRice, Ricegrowers' Association of Australia	Murray Local Land Services (MLLS) has partnered with SunRice, the Ricegrowers' Association (RGA) of Australia, 21 rice farming businesses on a project to develop a rice industry sustainability credential framework, aimed at highlighting growers' quality product and environmental stewardship.	<ul> <li>There are direct benefits for all the partner organisations.</li> <li>The time and investment by all parties including funding from SunRice and the National Landcare Program will allow the sharing of information and processes that will benefit other commodity frameworks.</li> <li>The project is allowing collaboration with other commodity groups so there can be an integration of sustainability frameworks.</li> <li>The steering committee brings partners and stakeholders together to monitor progress and share knowledge to effectively guide the development of the framework.</li> </ul>	<ul> <li>Increased productivity and environmental health on farms.</li> <li>Improved worker safety, business integrity and consumer confidence.</li> <li>Benchmarked data that will drive continuous improvement.</li> <li>Access to premium markets and improved investor interest.</li> <li>Accreditation of product to an international standard.</li> <li>Improved land management practices across the region.</li> <li>Stronger networks with the rice industry and its farmers.</li> </ul>

### Table 1.2 Partnerships to support producers achieve industry sustainability framework targets.

Evaluating	Partners	Summary	Success factors	Key drivers
grazing systems biodiversity and designing pathways to carbon neutral 2030	South Coast NRM, Tasmanian Institute of Agriculture (TIA), NSW Department of Primary Industries, CSIRO, The University of Melbourne, Advanced Choice Economics Pty Ltd, Aurora Environmental Albany, Integrity Ag & Environment, The Mullion Group Pty Ltd, and Australian National University	<ul> <li>Evaluating grazing systems biodiversity and designing pathways to carbon neutral 2030 is a transdisciplinary farmer-centric, multistakeholder five-year project which aims to: <ol> <li>Develop practical, cost-effective farmlevel accounts for a range of production systems and drive producer participation in the Australian beef industry Carbon Neutral 2030 Initiative (CN2030),</li> <li>Quantify benefits of biodiversity for enhance grazing land management and profitability.</li> <li>Undertake a literature review of the differences between grazing systems and management in terms of soil carbon sequestration, pasture persistence and profitability.</li> </ol> </li> </ul>	<ul> <li>Important to look beyond normal funding opportunities. Identify the gaps and where your organisation can add value.</li> <li>Critical to get it 'right' and make it a positive experience for funders and participants.</li> <li>Flexibility, important to focus on areas of strength and partner where there are gaps.</li> <li>Access to the Regional Agriculture Landcare Facilitators network, this is valuable for large scale extension activities involving farmers.</li> </ul>	<ul> <li>South Coast NRM:</li> <li>The MLA RD&amp;E investment call aligned with a South Coast NRM priority. The skills and capacity South Coast NRM bring to the project are their focus on the end user, making sure the tools developed are user friendly and their access to the Regional Agriculture Landcare Facilitator network.</li> <li>The scale, there are capacity building and leadership benefits in being involved in a national project.</li> <li>Producers:</li> <li>Better understanding their current carbon emissions and how they can monitor these themselves without paying external consultants.</li> <li>Potential to generate additional income through ACUs.</li> <li>Access to markets.</li> </ul>

Table 1.3 Partnerships between NRM organisations, industry organisations and producers to address social licence issues and increaseadoption of sustainable land management practices.

Boosting the	Partners	Summary	Success factors	Key drivers
Bunyip Bird Yield	Riverina Local Land Services & Ricegrowers' Association of Australia	This project aims to stabilise or improve the Australasian Bittern population and increase habitat across the Coleambally and Murrumbidgee Irrigation Areas by working with rice farmers to grow Bittern Friendly Rice and provide additional habitat on farm. Incentives are available to rice growers to provide additional and improved habitat on farm for this threatened species.	<ul> <li>Everyone sees the benefits for their own organisation.</li> <li>Ricegrowers are proud to host the birds and know they are making a difference.</li> <li>Partners have deliberately kept the arrangements informal, allowing for project flexibility.</li> <li>Steering committee brings partners together regularly.</li> </ul>	<ul> <li>Credibility benefits to the rice industry who are playing a role in protecting a threatened species.</li> </ul>
Clean Coastal Catchments – Macadamias	Partners North Coast Local Land Services & Macadamia Growers Association	Summary The Clean Coastal Catchments (CCC) Project has worked with 50 macadamia farms on the NSW North Coast to improve land management practices that reduce the impact of agricultural production on the marine estate. Incentive funding was rolled out in partnership with the NSW Local Land Services (LLS) agency, providing landholders with grants worth up to \$5000. The aim is to stop erosion on farmland so that less soil flows into coastal rivers to contaminate water quality in estuaries and marine habitat downstream.	<ul> <li>Success factors</li> <li>Common objectives of all partners who understand each other's roles, strengths and weaknesses and needs.</li> <li>Macadamia integrated orchard management practice guide and associated documents clearly define best management practices.</li> <li>LLS rapport with macadamia growers.</li> <li>Grass roots development of innovative ideas supported by trials and extension activities that provide meaningful results available to the</li> </ul>	<ul> <li>Key drivers</li> <li>Funds are made available for landholders, which provides an incentive.</li> <li>The Australian Macadamia Society, Horticulture Innovation Australia and NSW Department of Primary Industries have produced a set of guidelines and associated case studies that outline best management practices in orchards.</li> <li>A strong working relationship is in place locally between the Local Land Services and the NSW DPI's Macadamia Development Officer.</li> </ul>

Corner Inlet	Partners	Summary	Success factors	Key drivers
Connections – Dairy linkages	West Gippsland Catchment Management Authority & GippsDairy	Part of the Corner Inlet Connections project, the Daily linkages project delivered the Fert\$mart program to around 90% of dairy farmers located within the Corner Inlet catchment. Fert\$mart is a Dairy Australia initiative and involves the delivery of best practice soil & nutrient management plans specific to individual farms. The CORE 4 program was also delivered which involved extension services, identification of high-risk nutrient runoff hot spots and works on 18 farms to minimise nutrient runoff.	<ul> <li>Corner Inlet is highly visible from many places within the catchment. It is picturesque and many who live and work in the catchment recreate within the catchment and waterways. The landscape is highly valued, and people are connected to it as they see it daily.</li> <li>Projects are designed, delivered and managed jointly.</li> <li>Multiple needs are met by partners. For example, Fert\$mart Plans are delivered with the goal of improved water quality within Corner Inlet.</li> <li>A Water Quality Improvement Plan is in place with all partners working towards protecting and improving water quality in the Inlet.</li> <li>Time and effort is invested into the industry partnerships.</li> </ul>	<ul> <li>To protect and enhance Corner Inlet.</li> <li>To fulfil goals within the Dairy Industry Sustainability Framework.</li> </ul>
Cows out of	Partners	Summary	Success factors	Key drivers
Creeks Tasmania	DairyTas, Tasmanian Government, NRM North, Cradle Coast NRM & NRM South	The program was designed to encourage intensive graziers to exclude stock from waterways – every cow out of every creek in Tasmania by 2030. Installation of off- stream watering systems including troughs, pump, pipe, water tanks and fencing to ensure cows are not accessing waterways. Funding has also covered stock crossings so that stock are not walking through creeks.	<ul> <li>Strong systems and processes managed by DairyTas.</li> <li>DairyTas has a proven track record of delivery.</li> <li>DairyTas contractor, Rachel Brown is the main driver and contact point for Cows out of Creeks.</li> <li>Strong networks and connections within Tasmania promotion of opportunities with farmers and encouraging farmers to get involved.</li> <li>The overall success of the fluid partnership model has enabled it to have longevity, which is very</li> </ul>	<ul> <li>Shared common goals for the NRM regions, DairyTas and the State Government.</li> <li>Each NRM region has had differing goals under different Federal Government funding programs, but they recognise the well-known benefits of removing stock from waterways for protecting natural ecosystems.</li> <li>The partnership with NRM North, has recently seen a significant increase through investment in the Launceston City Deal and the River Health Action Plan. Removing stock from waterways in the Tamar Catchment is a major project,</li> </ul>

			important to farmers and to achieving real on-ground outcomes.	<ul> <li>managed by NRM North as the Tamar Action Grants.</li> <li>Greenhams supported Round 6 and Round 7 in Circular Head through promotion with their suppliers. This gave DairyTas excellent traction with beef producers, in a way that would have been hard to achieve otherwise.</li> <li>Tas Water supported Round 7 in Circular Head because they have an interest in improving water quality into their Smithton Water Treatment Plan.</li> </ul>
DairyCare	Partners GeoCatch, Western Dairy, South West Catchments Council NRM	Summary Nutrient run-off from agricultural land is a significant source of nutrients entering waterways and estuaries in the Geographe catchment. Dairy sheds have the potential to be a key point source of nutrients. The aim of DairyCare was to improve dairy farmers management of dairy shed effluent through a combination of technical support and incentives to upgrade effluent management systems and maintenance programs.	<ul> <li>Success factors</li> <li>Agreement that there was a shared problem with water quality associated with agricultural runoff and a shared responsibility to work towards a solution.</li> <li>Co-design process.</li> <li>18 year previous history of GeoCatch and Western Dairy working together. It takes time to build trust.</li> <li>Commitment to supporting farmers every step (from dealing with planning applications, approaching neighbours, preparing effluent reviews and effluent management plans, and providing incentives).</li> </ul>	<ul> <li>Key drivers</li> <li>Agreement among all stakeholders there was a common problem based on findings from the Vasse Wonnerup wetland and Geographe Bay water quality improvement plan (2010) and ongoing water quality monitoring across the catchment.</li> <li>Opportunity for farmers to access funding incentives to support system upgrades.</li> <li>History of successful partnerships and working together.</li> </ul>
Measuring On- farm Natural Capital	Partners Perth NRM, Commonland, Western Australian Government, Producers and Agribusiness	Summary The aim of this project is to establish a Natural Capital Accounting (NCA) framework and data platform in partnership with farmers and industry stakeholders. The intent of the NCA framework is that it can be used to inform management decisions as well as communicating environmental credentials. Natural capital refers to the stock of	<ul> <li>Success factors</li> <li>Overarching vision around meeting the challenges to remain food secure. Natural Capital (measure to manage) fits with the vision.</li> <li>Co-designed with farmers. The farmers involved want to learn, share, and measure.</li> </ul>	<ul> <li>Key drivers</li> <li>Understanding and managing constraints for remaining food secure. Measuring our natural capital provides us with a good indication of our land's inherent productive capacity and resilience.</li> <li>Evidence-based NC indicators a farmer can use to show whether they are drawing down or building natural capital stocks.</li> </ul>

		renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.	<ul> <li>Constructive measurement. End users want the evidence and farmers want clear metrics to inform investment and management decisions.</li> <li>Collaboration and sharing of findings to all interested stakeholders.</li> </ul>	<ul> <li>Investors and consumers want evidence- based indicators.</li> <li>To better understand the benefits of NCA in informing productivity outcomes.</li> <li>Access to farmers – for NCA academics.</li> </ul>
uPtake	Partners Western Australian Department of Water and Environmental Regulation & Department of Primary Industries and Regional Development, Peel-Harvey Catchment Council, Leschenault Catchment Council, Lower Blackwood LCDC, Oyster Harbour Catchment Group, Wilson Inlet Catchment Committee, South West Catchments Council, Agribusiness, MLA,	Summary uPtake is a partnership project designed to improve nutrient-use efficiency on grazing farms in south-west Western Australia. It aims to improve farmer and industry knowledge, confidence and uptake of the science supporting fertiliser recommendations. Farmers need to trust the data they are using to make decisions. To help build this trust the project is establishing at least 36 fertiliser trials across the south-west over a range of soil types with contemporary pasture species to develop phosphorus response curves; trialling innovative technology and building	<ul> <li>Success factors</li> <li>Agreement among all stakeholders there is a common problem of nutrient loss to water ways from grazing land and a shared responsibility to work towards a solution.</li> <li>History of successful partnerships and working together.</li> </ul>	<ul> <li>Key drivers</li> <li>Catchment groups have a commitment to implement actions to improve water quality.</li> <li>Social licence – farmers recognise they are contributing to nutrient loss into waterways.</li> <li>Opportunity to be involved in local, independent trials to test national fertiliser recommendations and assess the potential risk to productivity.</li> <li>Build understanding of the economics and risks associated with optimising fertiliser use efficiency.</li> </ul>
Wet Tropics	Western Dairy Partners	partnerships and capacity with industry, catchment groups and farmers.	Success factors	Key drivers
Major Integrated Project (MIP). Johnstone and Tully catchments.	Terrain NRM, Innisfail Canegrowers, Tully Canegrowers, Australian Banana Growers' Council, Queensland Department of Agriculture and Fisheries	Designed by the community, the Wet Tropics MIP is an innovative farmer-centric project piloting a new approach to reef water quality projects. The project utilises local knowledge and science to work with landholders to trial context specific solutions to reduce nutrient, sediment and pesticide loads reaching the reef from the Tully and Johnstone catchments. Based on building relationships and trust between partners, responsibility for implementation of the project at the grass roots level is shared between Terrain NRM and Canegrowers employees.	<ul> <li>Place-based strategy customised to individual farms and local landscapes.</li> <li>Local-scale water quality monitoring data brought back to landholders to bridge the gap between farmers and water quality science.</li> <li>Farmers are an integral part of designing and piloting new solutions to improving water quality.</li> <li>Wide range of treatment options including denitrification bioreactors, in-drain constructed and landscape</li> </ul>	Canegrowers – To ensure the industry is sustainable. It also addresses industry BMPs and social licence. Australian Banana Growers' Council – addresses industry BMPs, collaborative, integrated approach. Farmers – Landholders want to do the right thing but want to see evidence their practices are part of the problem and practice change can make a difference. Rapid, timely, targeted sub-catchment and paddock scale water quality information provides the link between practice and science landholders are seeking.

		wetlands, and high-efficiency sediment basins	
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### Table 1.4 Partnerships with significant private sector involvement

Bega	Partners	Summary	Success factors	Key drivers
Environmental Management Systems (BEMS) & Better Farms	South East Local Land Services & Bega Cheese	Bega Cheese works with farmers who supply milk to the company to reduce the environmental risks on farm. The <i>BEMS</i> project began in the Bega and Bodalla region. Bega Cheese together with South East CMA (as it was at the time) saw an opportunity to work together with farmers to identify all environmental risks not just those related to the river and irrigation on farm and address these practically within the region. In recent years, the program has been extended to the broader dairying region of NSW and into Victoria where Bega Cheese draws milk supply from, the new project is known as <i>Better Farms</i> . BEMS still continues in the Bega Valley.	<ul> <li>Bega is trusted and provided the introduction to LLS and landholders initially.</li> <li>LLS sought funding through the NSW government and the Australian government initially. Bega Cheese then sought funds with LLS support. Both organisations sought funds where possible as the project matured.</li> <li>The project has built and changed throughout and has at times included leadership and training opportunities to local farmers along the way.</li> <li>Strong and trusted local relationship between LLS &amp; Bega Cheese key staff members.</li> <li>LLS brought strong technical expertise to the on ground works and built rapport quickly with farmers.</li> <li>Bega Cheese brokered the relationship with farmers and encouraged them to take the opportunity to address on farm environmental risks.</li> <li>Positive interaction between the farmers and the Indigenous Work Crews.</li> </ul>	<ul> <li>Initial drivers were for farmers to be able to continue to gain access for irrigation water through The Bega River Health Agreement, the project was broadened to include all on farm environmental risk management.</li> <li>Benefits are mutual to South East LLS, Bega Cheese and local farmers who share the goals of improved land management, protection of waterways and the coastal environment.</li> <li>Bega Cheese delivered the project using language used in their quality assurance program which was familiar to their suppliers.</li> <li>All dairy farmers were able to participate – the program was aimed at building awareness of environmental risks and complementing milk production on farm.</li> </ul>
Carbon Farming	Partners	Summary	Success factors	Key drivers
co-funded position	Burnett Mary Regional Group and GreenCollar	BMRG and GreenCollar co-fund a position within BMRG's Bundaberg office to answer land managers queries and undertake property assessments throughout the Burnett Mary region with the aim of establishing	<ul> <li>Previous history of working together on common projects.</li> <li>Mutual trust.</li> </ul>	<ul> <li>BMRG</li> <li>Share resources and ideas, generate new opportunities for regional land holders.</li> </ul>

		potential carbon projects. The intent is each partner will help each other in developing the skills needed to deal with the new and emerging environmental credits industry.	<ul> <li>Aligned interests, both organisations have extensive experience in landscape management.</li> <li>Opens opportunities for both parties to develop new funding streams</li> <li>Understand each other's perspectives.</li> </ul>	<ul> <li>New opportunities for funding, expand their role and profile.</li> <li>GreenCollar</li> <li>Access to networks, landholders, BMRG interface with all landholders, not just one industry.</li> <li>Align with organisations that share the same objectives.</li> </ul>
Project catalyst	Partners Reef Catchments, Terrain, NQ Dry Tropics, Australian Government Reef Trust, Coca-Cola Foundation Great Barrier Reef Foundation, sugarcane farmers, agribusiness, and WWF.	Summary Project Catalyst began in 2009 as a pioneering partnership between WWF, the Coca-Cola Foundation, Reef Catchments, and a dedicated group of sugar cane growers with the aim of reducing agricultural runoff impacting the reef. The project assists growers to develop, trial and evaluate a range of innovative farming practices. The focus is on practice changes that have environmental as well as social and economic benefits. The project is structured so that the participating growers have input into the list of practices evaluated, helping to create a culture of innovation and collaboration.	<ul> <li>Success factors</li> <li>Project longevity, innovation projects need to run for many years to deliver meaningful results.</li> <li>Grower input and peer-to-peer learning. Growers share their innovations and results with each other without any reservations about who owns the intellectual property.</li> <li>Trust-based relationship between growers and service providers.</li> <li>Culture (a positive, safe environment to innovate) supported along the way.</li> <li>Diversity of project partners.</li> <li>Innovative sugarcane farmers willing to experiment and invest in modern farming techniques.</li> </ul>	<ul> <li>Key drivers</li> <li>Identify sugar cane farming practice changes that have environmental as well as social and economic benefits.</li> <li>Meet Great Barrier Reef water quality targets.</li> <li>Demonstrate sugar cane farmers are taking responsibility and doing their part to safeguard and conserve the GBR.</li> </ul>

Mallee Dryland Sustainable	Partners	Summary	Success factors	Key drivers
Sustainable Agriculture Strategy	Mallee CMA, Mallee Sustainable Farming, Birchip Cropping Group, Agriculture Victoria	The Mallee Dryland Sustainable Agriculture Strategy is a partnership plan for the use of groups in the Mallee Catchment area with a common goal to enhance and encourage sustainable dryland agriculture in the region. The group was initiated to tackle concerns around Mallee soils – the importance of soil health and its direct link to maintaining the productive capacity of Mallee farms. Risks to the region's soils include wind erosion and soil structure decline.	<ul> <li>The partnership is built on more than the strategy, it focuses on collaboration and work towards a common vision.</li> <li>The partnership makes the most of each partner organisations strengths and technical expertise and capacity.</li> <li>The ongoing partnership approach has brought funds and on-ground actions into the region, leveraged as a result of the development of the Sustainable Agriculture Strategy.</li> </ul>	<ul> <li>The partnership group developed the strategy to ensure the large area (largest CMA area in Victoria) of the Mallee could be serviced to address changing on-ground circumstances in the region enhanced by recent drought conditions.</li> <li>The partners share the vision of the strategy optimises the productive capacity of Mallee dryland agricultural landscapes, while enhancing natural and cultural landscapes and communities.</li> </ul>
Reef Alliance:	Partners	Summary	Success factors	Key learnings
Growing a Great Barrier Reef Program (GGBR).	AgForce, Australian Banana Growers' Council, Burnett Mary Regional Group, CANEGROWERS, Cape York Natural Resource Management Ltd, Fitzroy Basin Association, Growcom, NQ Dry Tropics Ltd., NRM Regions Queensland, Queensland Dairyfarmers' Organisation, Queensland Farmers' Federation, and Terrain NRM	In 2015 12 of the 14 Reef Alliance partners proposed a collaborative approach to deliver the Reef Trust III initiative by establishing the Reef Alliance: Growing a Great Barrier Reef Program (GGBR). The collaborative approach of the GGBR enabled project management efficiencies through the establishment of one database, one consistent monitoring and evaluation framework, one reporting mechanism and reef-wide communication. These efficiencies meant more funding was available for on the ground delivery. On the ground activities were a combination of extension and incentives.	<ul> <li>A common database which improved efficiency in reporting and quality control.</li> <li>Integrated framework which provided the flexibility to shift funds and targets between regions (same commodity).</li> <li>Central administration and reporting.</li> <li>Shared tools and resources.</li> </ul>	<ul> <li>Multiple partners across regions and sectors provide efficiencies but it requires a significant input of time to establish an effective and collaborative understanding of project processes. Adaptive governance approaches should explicitly be built into collaborations.</li> <li>Success indicators and contract arrangements for 'innovation projects' should be linked to the innovation cycle with less emphasis on immediate practice change outcomes.</li> <li>Demonstrating the value of the project's approach and evaluating its impacts was a challenge. Impact measures should include</li> </ul>

		_		social indicators (e.g. gains in awareness, knowledge, gains in attitude and commitment) rather than only SMART targets (e.g. practice change per hectare in narrowly defined priority areas).
Tri-State Murray NRM Regional Alliance	Partners NSW Murray Local Land Services, NSW Western Local Land Services, South Australia Murraylands and Riverland Landscape Board, Goulburn Broken CMA, Mallee CMA, North Central CMA, North East CMA	Summary The Tri-State Murray NRM Regional Alliance brings together the seven natural resource bodies from New South Wales, Victoria and South Australia along the full length of the River Murray Corridor. The Alliance was formed in 2015 recognising that where there were opportunities to work together, they could deliver better and more cost effective social, economic, and environmental results. This is especially the case for rivers and adjacent landscapes where catchment and community-wide coordinated action across land and water is critical to achieve landscape change. The alliance has four key program areas: 1. Fish Connections – 2. Aboriginal Economic Independence 3. Land Resilience 4. Co-ordination and collaboration	<ul> <li>Success factors</li> <li>The benefits and values of working together are clearly defined and communicated.</li> <li>All partners have a clear desire to make a difference on the ground.</li> <li>Alliance members have a proven track record of working together and have gained credibility.</li> <li>Each partner has bought funds to the table allowing them the freedom to drive their own agenda, timeframes and provide the freedom to make mistakes and learn together.</li> <li>Past and current collaborations between the members is a demonstration of the real benefits of increasing impact, capturing efficiencies, sharing capability and enhancing data collection to evaluate performance.</li> <li>Values of the partnership have been identified and a program logic is in place. Annual workshops are held to identify success factors and how they will be measured across the Alliance.</li> </ul>	<ul> <li>Key drivers</li> <li>Delivery of coordinated infrastructure and habitat projects across three States and the length of the Murray River.</li> <li>Connecting and delivering with regional communities; industry; private, government and not-for- profit service providers; research; and Traditional Owner groups.</li> <li>Operates at the scale relevant to the species needing recovery; to identify sustainable solutions for industry; attracting private sector partners; and connecting to Aboriginal people and the broader community.</li> <li>Works are prioritised, coordinated and communicated so that projects deliver the best 'bang for buck'.</li> <li>The significant capability and best practice approaches are shared quickly allowing for adaptive management and improved natural resource management across dryland and irrigated agriculture; biodiversity issues and climate and natural environments.</li> </ul>

### **Analysis and Insights**

### **Common enablers**

An initial analysis of the success factors of the 20 cases studies identified several partnership attributes<sup>10</sup> or enablers common to many of the case studies. These enablers were:

- 1. Co-benefits environmental and productivity outcomes
- 2. Commitment to co-design principles at the initiation and/or implementation phase
- 3. Shared understanding and a common purpose
- 4. Adaptive project management
- 5. Market access drivers
- 6. History of working together
- 7. High levels of trust.

### Co-benefits – environmental and productivity/profit outcomes

Case study projects recognised and promoted the link between improved environmental/sustainability outcomes and improved productivity outcomes and focused on both when working with farmers. Project managers believed providing evidence that it is possible to manage natural resources for environmental outcomes while also improving farm productivity and resilience was a necessary component for any project aiming to facilitate changes in farming practices.

Several case study projects had allocated funding to conduct independent cost-benefit analysis to provide evidence that farmers can help drive significant improvements for the environment without jeopardising the viability of their farming businesses. Examples include Territory Conservation Agreements, Building Pastoral Sustainability, Project Catalyst and e-Beef.

#### **Insights and observations**

- The concept that it is possible to manage natural resources for environmental outcomes while also improving farm productivity and resilience is not always well understood by industry stakeholders.
- Defining the expected co-benefits at the project initiation phase, including any market access benefits will assist potential industry partners understand the business case for being involved. Some industries have a better understanding of the co-benefits than others but often this knowledge is linked to individuals and can be lost as people change roles.

<sup>&</sup>lt;sup>10</sup> Brokering Better Partnerships Handbook 2nd Edition (Sep 2019), Partnership Brokers Association Brokering-Better-Partnerships-Handbook.pdf (partnershipbrokers.org)

# Commitment to co-design principles at the initiation and/or implementation phase

Eleven of the case study projects identified some level of industry and producer input into the design of the project. Input ranged from being fully engaged in the project design and development process from the start (Wet Tropics IMP) through to farmers having input into 'what is delivered and how it is delivered' once funds have been obtained. Project managers involved in co-designed projects were strongly supportive of industry and farmer involvement considering it an essential requirement for successful partnerships.

A perceived barrier to farmers and agribusiness being involved in the design phase of the project was 'lack of time'. The assumption being they lack sufficient interest to allocate the time required to participate. Project managers acknowledged this assumption had not been tested and there maybe opportunities to seek farmer input at the design phase using video technology or direct consultation.

#### Insights and observations

- Case study project managers who had implemented co-design principles were strong supporters of this approach. They reported it helped build mutual understanding and formally recognises and values the skills and knowledge the different partners bring to the project. They also found partners, including producers wanted the ownership that comes with being involved in project design and delivery. Some commented that producers like to share their knowledge not only through peer to learning but also to improve project delivery.
- Using a co-design approach with industry will help foster greater ownership, increasing the likelihood of funding and/or delivery support. Frequently industry involvement is confined to a 'letter of support' as part of a funding application, a passive tick the box exercise that does not encourage involvement and misses an opportunity to draw on the knowledge and resources industry partners may have.

### Shared understanding and a common purpose

Project managers considered a shared understanding and a commitment to common outcomes essential when initiating and maintaining partnerships. This shared understanding was built by recognising the different priorities and drivers of the partners and drawing on them to identify a common purpose. Improved water quality case studies were the most common example. Industry partners were motivated by social licence, market access and regulatory concerns, land holders were interested in doing the 'right thing' but not at a cost to productivity and NRM organisations had a commitment to improving catchment water quality.

*Project Catalyst,* funded by Coca-Cola, is an example of a project utilising a range of different drivers to achieve a common purpose.

#### Insights and observations

• Few projects referenced linkages between case study project priorities and broader industry and community sustainability priorities. This is a missed opportunity with respect to funding partnerships. NRM regional organisation strategic land management priorities are generally

well aligned with industry sustainability framework priorities and commercial food and beverage company sustainability goals. However, this is not commonly understood by both industry and NRM stakeholders.

 Making the linkages more explicit by documenting how NRM organisational activities are contributing to broader industry goals including market access, sustainability and productivity goals, would help build industry understanding of the potential benefits of collaborative NRM and industry partnerships.

This could be done in a similar manner to the way in which industry sustainability frameworks and company sustainability plans reference the UN SDGs. For example, a statement that "this project is delivering against the beef industry sustainability priority for improved land management practices" on communication material and/or project webpages will build industry understanding that NRM organisations play a key role in assisting agriculture industries achieve and report against their sustainability priorities.

### Adaptive project management

In the case studies, this attribute was linked to a commitment to shared decision making and capturing and acting on farmer and stakeholder input as the project progressed. One outcome of this approach was more effective project delivery.

This was also considered important for good governance. A key learning from the *Reef Alliance: Growing a Great Barrier Reef Program* project was the importance of building adaptive governance approaches into collaborative partnerships involving multiple partners across regions and sectors.

### Insights and observations

• Adopting a flexible and adaptive approach to project management is also important in ensuring ongoing funding support.

### **History**

A previous history of working together was identified as key enabler by nine case study projects, both from a partnership trust perspective and as a means of generating additional funding.

While trust and history are often linked to ongoing staff relationships, the long-term case study projects reported strong project processes and a history of success negated loss of key staff and tacit knowledge.

### Market access/social licence

Metrics and evidence for market access was identified as a partnership enabler for case study projects utilising industry BMP programs and/or accreditation schemes. *Wildlife for Wine* and *Measuring for Natural Capital* are examples of project case studies directly addressing existing and potential market access drivers.

The case study *Carbon Farming co-funded position* project is an example of the potential for NRM organisations to take a leadership role in facilitating carbon farming partnerships and biodiversity credit schemes.

#### Insights and observations

- Market access is a driver that will grow over time as major food and drink companies and retailers increasingly seek evidence-based metrics that the product they sell is sourced sustainably <sup>11</sup>,<sup>12</sup>. There is also growing recognition that some countries may introduce carbon taxes to prevent carbon leakage, taxing imported products with a higher emissions intensity than products produced locally. An example of this is the proposed European Carbon Border tax.
- NRM organisations have skills and expertise in resource condition and biodiversity
  monitoring and management that could be useful to industries and companies wanting to
  meet and/or report against their sustainability goals and /or new market access concepts like
  'Nature positive'. 'Nature positive' is a concept being embraced by countries and companies
  to address declining biodiversity. While still under development, it is being supported by the
  natural capital coalition which is made up of stakeholder groups from business, finance,
  conservation and civil society, government and policy, science, and academia.<sup>13</sup>

### Trust

While eight project case studies identified trust as a standalone enabler it was more frequently described by project managers as an outcome of a co-design approach and a previous history of successful partnerships.

At the implementation level, comment was made that the importance of a long-term, trust-based relationship between producers and their service provider cannot be over-stated. Project evaluation feedback from producers is that this is a critical component in helping producers have sufficient confidence to take the initial steps to change practices. Industry stakeholders are an important source of information in identifying the appropriate service providers.

### Insights and observations

 Trust was considered an essential component of successful partnerships but needed to be built over time through a commitment to common priorities, a genuine respect for each partner's perspectives, strengths and needs, and a positive track record of delivery (reliability).

 <sup>&</sup>lt;sup>11</sup>Euromonitor International, Rethinking Sustainability: No Purpose, No Gain; 2020.
 <u>https://go.euromonitor.com/white-paper-sustainability-201027-rethinking-sustainability.html</u>
 <sup>12</sup> Consumer Goods Forum & Futerra, The Honest Product, 2018

https://www.theconsumergoodsforum.com/wp-content/uploads/2019/01/CGF-Futerra-Transparency-and-the-Honest-Product-teaser.pdf

<sup>&</sup>lt;sup>13</sup> Capitals Coalition, 2020. *Natural Capital for Biodiversity Polices: What, why and how (draft)*. <u>https://naturalcapitalcoalition.org/wp-content/uploads/2020/11/DRAFT-Natural-Capital-for-Biodiversity-Policies-202011.pdf</u>

• Once a strong partnership project is established, understood and respected (e.g. *Bega BEMS and Better Farms, Project Catalyst*) and the model is in place partners will seek funding from different sources adapting the project as needed to obtain ongoing funds.

The following partnership attributes were not mentioned by case study project managers as key partnership success factors or documented in project case study reports/websites as enablers. The exceptions were the project case studies featuring alliances. These were *Reef Alliance: Growing a Great Barrier Reef Program, TriState Alliance,* and *Mallee Dryland Sustainable Agriculture Strategy.* 

### Governance

Governance arrangements across the case study projects were generally appropriate, varying with the size of the project. Small projects had no formal governance structures. Large multi-stakeholder projects had governance frameworks consisting of a steering committee supported by technical working groups or reference groups where appropriate.

#### Insights and observations

- An identified gap with some projects was a lack of industry/farmer representation on steering committees and working groups. This could be an issue for projects which also lack formal mechanisms for grass roots feedback, potentially reducing their capacity to adapt and improve.
- A key learning from the *Reef Alliance: Growing a Great Barrier Reef Program* project was the importance of building adaptive governance approaches into collaborative partnerships involving multiple partners across regions and sectors. They found it took time to establish an effective and collaborative understanding of project processes.

### Data management and privacy

None of the case studies mentioned data management and privacy as an area of concern for industry partners. However, all projects stated they had processes in place to manage data privacy issues in line with government privacy regulations and farmer preferences.

### Insights and observations

- Information about data management processes was not always publicly available and to allay potential industry and producer concerns this information could be made more accessible and transparent.
- Projects focused on market access and assisting industry meet sustainability requirements should consider at the outset how data will be shared and managed.
- Data management companies such as Starling (<u>https://www.starling-verification.com/</u>) that can collate and verify information on deforestation and ground cover using satellites are being commissioned by multinationals such as Nestle to provide data on suppliers' practices. These companies may play a future role in high-risk biodiversity areas such as the Great Barrier Reef and understanding how this data may be used may need to be considered when developing partnerships with business.

### Monitoring and evaluation of partnership health

This was a key gap for most of the case study projects. Three of the case study projects have formally monitored and evaluated the 'health' of the partnership with the others relying on informal feedback. *Wet Tropics Major Integrated Project* conducted an evaluation of partnership health and *Tri-State Alliance* regularly monitors the success factors of the partnership. The *Mallee Dryland Sustainable Agriculture Strategy* has identified several key partnership performance indicators which it monitors including social networking changes.

*Boosting the Bunyip Bird Yield* is planning to review the effectiveness of the partnership. The *Corner Inlet Connections* project was audited as part of a general West Gippsland CMA Partnership Health Audit.

#### Insights and observations

- Partnerships can be assumed and often not formalised. The Partnership continuum can be a
  useful tool to have a deliberate discussion about the level of partnership and share
  expectations from both sides at the project initiation stage. Project formation acts as a
  catalyst for the partnership and the formalities are often missed, with assumptions being
  made that can lead to misunderstandings and potentially distrust as the project progresses.
- There is an opportunity to build NRM organisational skills in establishing, maintaining, and auditing the health of partnerships with respect to partnerships with industry or major corporates.
- Acknowledgement of all partners (including minor contributors) involved in projects is important to build trust and co-ownership. NRM regional organisation and industry websites could include partner logos and contributions.

### **Additional observations**

### Multi-regional delivery partnerships

Several of the case study projects utilised industry environmental assessment tools and associated BMP programs. These included Fert\$mart and DairySAT (dairy), Hort 360 (horticulture) and SmartcaneBMP (sugar).

From a national perspective it can be difficult for an industry organisation to separately support several different NRM regional organisations to deliver the same industry program. Alliances between NRM regional organisations to deliver industry NRM and climate risk programs across multiple regions are more likely to generate industry support.

This co-delivery approach could be particularly useful for smaller NRM regional organisations as it allows for sharing of skills and resources between NRM regional organisations as well as between NRM and industry. An example of this is the *e-beef* case study project.

### Carbon sequestration

Many NRM regional organisations are already exploring different options for supporting Carbon Farming or carbon offset programs, with examples being the Victorian CMAs Change Adaptation and Mitigation initiative, Catchment Carbon Offsets <sup>14</sup>, and the case study *Carbon Farming co-funded position* project. Increasingly there will be growing opportunities for non- ERF carbon sequestration partnerships with businesses and industries wishing to offset their carbon emissions to meet their carbon neutral pledges. An example of this is the Meat and Livestock Australia supported *Evaluating grazing systems biodiversity and designing pathways to carbon neutral 2030* case study project.

### **Project ready**

Not being project ready and reacting to funding as it was announced was a strong frustration among both industry and NRM stakeholders. There would be benefits in encouraging NRM regional bodies and stakeholders to work together to prepare 'hypothetical' projects addressing common targets rather than wait for the funding announcement and then pull something together at the last minute. Alternatively, they could be encouraged to work together on implementation plans for the relevant framework targets.

This would also address a key barrier identified by the GHD report, *Integrating NRM with Industry-Led Sustainability*,<sup>15</sup> "the lack of clear entry points for engagement".

<sup>&</sup>lt;sup>14</sup>Clifton, Moss, Brunt, Pitfield and Rissman. (2018). *Catchment carbon offsets to build climate resilience in catchments and help the water sector achieve net zero emissions*, Proceedings of the 9th Australian Stream Management Conference. Hobart, Tasmania. <u>https://asnevents.s3.amazonaws.com/Abstrakt-FullPaper/51508/clifton+et+al+catchment+carbon+offsets-final.pdf</u>

<sup>&</sup>lt;sup>15</sup>GHD, (2019), Integrating NRM with Industry-Led Sustainability Initiatives, AgriFutures Australia Publication No. 19-027. <u>https://www.agrifutures.com.au/wp-content/uploads/2019/08/19-027-digital.pdf</u>

### Recommendations

Based on the findings from analysis of the 20 case studies the following actions are recommended for consideration by NRM Regions Australia. These actions will help support and build partnerships between NRM regional organisations and industry stakeholders to facilitate adoption of recognised sustainable farming practices.

- 1. Encourage and support NRM regional organisations to:
  - Identify and communicate linkages between their Regional Plan sustainable agriculture and climate change strategic priorities and industry sustainability framework priorities when initiating projects with industry organisations. Appendix 1, *Australian Agriculture Industry Sustainability Frameworks* is a starting point for NRM regional organisations. The information will need to be updated as industries further develop their frameworks.
  - Actively promote the productivity and economic co-benefits of adopting sustainable management practices when initiating partnerships with industry.
  - Promote their skills and expertise in management, enhancement and monitoring of biodiversity including threatened species. This is an area of growing importance where industry stakeholders lack skills and knowledge.
- 2. Provide opportunities to build skills and capacity within NRM regional organisations in:
  - implementing co-design principles when initiating and implementing projects with industry stakeholders
  - establishing and maintaining partnerships with industry organisations including the private sector.

One way this could be achieved is through training support, workshops and /or mentoring either directly or through Communities of Practice.

3. Build understanding of how market access/social licence drivers are impacting Australian agriculture and how different sustainability reporting frameworks and approaches are being used by corporations, finance, and industry. Increased understanding may assist in building partnerships focused on addressing market access requirements, and in particular partnerships with the private sector. Biodiversity and climate change are the key material risks from an international market access perspective.

Potential activities include producing a series of webinars featuring talks by corporate and industry sustainability managers and/or supporting a Community of Practice that includes corporate and financial sustainability managers. Examples of relevant reporting frameworks and approaches include the UN Sustainable Development Goals, the Taskforce for Climate-related Financial Disclosure, Sustainable Sourcing and Natural Capital.

4. Pilot the concept of being 'project ready' by facilitating workshops and activities to support relevant NRM regional bodies and industry stakeholders co-develop implementation plans for sustainability framework targets. Depending on the topic these workshops could be at a regional or national scale.

While this would be a hypothetical exercise, it would help build networks between industry and NRM regional organisations, build understanding of each other's knowledge, skills, and perspectives, and develop co-design and partnership initiation skills. It could also support creative and innovative approaches as projects would not be constrained by funding criteria.

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### **Appendix 1 Australian Agriculture Industry Sustainability Frameworks**

Industry Beef Dairy Grains Horticulture Cotton Wine (under development) (under development) **UN SDGs** 2,6,7,13,14,15 6,12,13,14,15 2,6,12,13,15 6,12,13,15 2,6,7,12,13,15 Based on BMP Certification Goal: Industry engaged in incentivised. environmental and auditing stewardship programs. Priority 5. Improve Land Goal: Proactively improve Soil health Land Goal 8: Improve Land Management Management Practices Management the health of our soils Nitrogen use efficiency Practices Soil Health 5.1b Soil health. Topic: Best practice Improved soil health Standard: management Manage land and soil to minimise degradation and optimise soil organic matter and remediation. Fertiliser 5.1 Minimise nutrient and 8.2 100% of farmers Topic: Nutrient, soils, and Nitrogen use efficiency Standard: Select fertilisers sediment loss complete and land management and soil additives to minimise /nutrient implement a soil and risk to the environment. management nutrient management plan 5.1a Number of days per Groundcover/er osion year soil covered by vegetation. 5.2 b) (v) Percentage of regions achieving healthy ground cover gain

Australian Agriculture Industry Sustainability Frameworks – common goals, priorities, topics, and indicators

Industry	Beef	Dairy	Grains (under development)	Horticulture (under development)	Cotton	Wine
Water quality/riparian management	5.1c Water quality	8.1a 100% of stock excluded from waterways		Topic: Minimising impact on waterways		
		8.1b 100% of riparian zones actively managed and maintained				
Water						
Water use efficiency	6.3 Efficient use of water	9.2 Improve water use and water productivity to utilise 2.0 tonnes of dry matter per ML used	Ongoing improvements to water use efficiency in rainfed grain production.		Priority: Decrease in the amount of water need to grow a bale of cotton	Standard: Manage water use on the property: A Water Management Program is documented
		9.3 100% of farmers recycling water from dairy sheds				Standard: Water is harvested, extracted, stored, used and discharged in accordance with licences and permits
		9.4 100% of farmers monitoring water consumption				Standard: Maintain water sources and infrastructure.
		9.5 100% of farmers have a water security risk management plan by 2020 and are implementing it by 2030				Standard: Manage water to minimise environmental harm.
Biodiversity	5.2 Balance of tree and grass cover			Topic: Biodiversity and pollinators	Priority: Benefitting from biodiversity	

Industry	Beef	Dairy	Grains (under development)	Horticulture (under development)	Cotton	Wine
Increase area under conservation	5.2 a) (i) Percentage of cattle producing land set aside for conservation protection purposes				Area of land managed for conservation	
	5.2 a) (ii) Land managed by beef producers for conservation outcomes through formal arrangements					
	5.2 a) (iii) Percentage cattle producing land managed for environmental outcomes through active management					
Biodiversity Action Plan		8.3 100% of farmers have and implement a documented biodiversity action plan				Standard: Manage Biodiversity on the property. Biodiversity Management Program is established.
Manage and improve biodiversity	5.2 b) (i) Percentage of national forest cover gain 5.2 b) (ii) Percentage of national forest cover loss	8.4 Zero net deforestation by 2020			Reduced Environmental Toxic Load (ETL) for bees	Standard: Develop strategies to protect and improve biodiversity.
	5.2 b) (ii) Percentage of national forest cover loss					
	5.2 b) (iii) Percentage of national woodland gain					
	5.2 b) (iv) Percentage of national woodland loss					

Industry	Beef	Dairy	Grains (under development)	Horticulture (under development)	Cotton	Wine
Climate change	Key Priority 1. Manage Climate Risk				Priority: Acting on climate change	
Reduce greenhouse gas emissions intensity	6.1 e) Percentage total CO2e reduced by beef industry from a 2005 baseline. R&D priorities: Soil carbon sequestration, co-benefits of vegetation planting, pasture species that increase carbon stocks	10.1 Reduce greenhouse gas emissions intensity by 30% across the whole industry (from a baseline of 2015)		Topic: Carbon value and greenhouse gas emissions	Reduced carbon emissions per bale Improved on farm energy use efficiency Increased use of renewable energy	Reduce emissions intensity
Reduce net carbon footprint	6.1d) Carbon sequestration		Goal: Reduce our industry's carbon footprint and greenhouse gas emissions	Topic: Energy use	Carbon positive cotton	Energy use efficiency
Adaptation	6.2 Climate change adaptation and preparedness		Goal: Future-proof the industry from climate related risks through investment and development of adaption tools.	Topic: Climate variability and adaptation		Climate adaptation – separate program
Chemical usage			Goal: Redesign, reduce and/or develop alternative chemical use while ensuring productivity, safety, and environmental outcomes.	Topic: Pest management and agricultural chemicals	Priority: Efficient responsible pesticide use	Standard: Select pest and disease control strategies to minimise risk to the environment. Standard: Store, manage and dispose of chemicals to minimise the risk of environmental harm.

### Appendix 2 Contacts – Australian Agriculture Industry Sustainability Frameworks

#### **Australian Eggs**

<u>contacts@australianeggs.org.au</u> https://www.australianeggs.org.au/what-we-do/sustainable-production/sustainability-framework/

#### **Australian Pork**

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http://australianpork.com.au/industry-focus/environment/environmental-sustainability-an-industrypriority/

#### **Beef Sustainability Framework**

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#### **Cotton Sustainability Framework**

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#### **Dairy Sustainability Framework**

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#### Grains Sustainability Framework – under development

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https://www.graingrowers.com.au/sustainability/grains-sustainability-framework/

#### Horticulture Sustainability Framework- under development

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ingridroth@roth.net.au

https://www.horticulture.com.au/hort-innovation/our-work/horticulture-sustainability-framework/

#### **Rice – under development**

https://investors.sunrice.com.au/investors/?page=sustainability-reports

#### Sheepmeat and Wool Sustainability Framework– under development

https://www.sheepsustainabilityframework.com.au/

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#### Wine Sustainability Framework

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https://www.awri.com.au/industry\_support/sustainable-winegrowing-australia/



# Appendix B. Summary of Dairy-NRM themes from Regional Catchment Strategies and the WestVic Dairy NRM Action Plan

Summary of dairy-NRM themes from Regional Catchment Strategies and the WestVic Dairy NRM Action Plan.

THEME	DETAILS	CCMA RCS	GHCMA RCS	WESTVIC DAIRY NRM PLAN
Biodiversity	• Protecting remnant vegetation (including grasslands), revegetation and promoting species diversity	1	1	1
Soil Carbon	<ul> <li>Developing carbon sequestration opportunities</li> <li>Awareness-raising</li> <li>Practices that increase soil carbon</li> <li>Participation in carbon markets</li> </ul>	~	1	1
Climate change	<ul> <li>Collaboration and partnerships</li> <li>Information and tools</li> <li>Encouraging the adoption of practices that manage climate risks</li> <li>Influencing decision-makers</li> </ul>	~	1	√
Erosion	Practices that address manage the risk of landslip and address erosion	~		
Groundcover	Improved grazing management (land class grazing, stock containment, perennial pastures, diverse pastures)	1	<i>✓</i>	
Groundwater	• Engagement and awareness-raising of impacts on recharge/diversion and extraction	1	1	
Innovation	<ul> <li>Innovative practices and technologies</li> <li>New agricultural industries with less reliance on chemical inputs</li> </ul>		~	
Land capability	<ul> <li>Increasing awareness of land capability (extension, baseline data)</li> </ul>		1	
Land use	Access to land (identifying the dairy industry's land needs and supply and land-use planning)			
Market access and diversification	<ul> <li>Actively facilitating and promoting sustainable land management practices</li> <li>Industry partnerships (research, extension, development) and awareness-raising of market opportunities</li> <li>Ensuring consumer confidence in dairy sustainability</li> </ul>	~	1	✓

THEME	DETAILS	CCMA RCS	GHCMA RCS	WESTVIC DAIRY NRM PLAN
Nutrient and effluent management	<ul> <li>Minimising nutrient, sediment and chemical run-off</li> <li>Effluent compliance, extension, upgrades and management</li> <li>Optimising nutrient management, including nutrient management plans, alternative nutrient use and land management options.</li> </ul>	1	1	1
Pest plants and animals	<ul> <li>Landscape-scale approach to the control of pest plants and animals</li> <li>Cross-industry and agency weed and pest animal control (research, extension, enforcement, incentives and on-ground action)</li> <li>Additional areas of predatory, herbivore and wed control</li> </ul>	1	1	1
Resilience and risk management	<ul> <li>Information and tools to build resilience</li> <li>Planning focussed on risk management and resilience</li> </ul>	~	~	
Riparian and wetland management	<ul> <li>Catchment and riparian works (incentives, direct works and extension).</li> <li>Stock exclusion and associated works</li> </ul>	$\checkmark$	1	
Skills shortages	Accredited training opportunities		1	
Soil acidity	<ul> <li>Practices to manage the impact of acid sulphate soils and the risk of activation</li> </ul>	~		
Soil health	<ul> <li>Incorporate soil knowledge (testing, research, extension) into grazing and fertiliser management practices</li> <li>Soil condition monitoring and development of indicators</li> <li>Practices that protect the condition of soils (awareness, extension, trials)</li> </ul>	1	✓	1
Access to water for agriculture	• Planning for water needs of Dairy			1
Water use and energy efficiency and associated impacts of irrigation	<ul> <li>Irrigation upgrades and practices that improve water use and energy efficiency for irrigated Dairy (IDGs, Irrigation Farm Plans, training)</li> </ul>	$\checkmark$	1	1



## Appendix C. Workshop Notes -Exploring partnership opportunities for dairy-NRM projects in South West Victoria, May 2022

### Workshop Notes

#### Exploring partnership opportunities for dairy-NRM projects in South West Victoria May 31st 11am – 12.30pm online

**PURPOSE:** to hear about the NRM-Dairy Partnerships project and have input into the priority areas for partnership projects into the future

PRESENT: Karen O'Keefe (CCMA), Chelsey Agg (CCMA), Chris Pitfield (CCMA), Richard Murphy (GHCMA), Libby Swayn (WestVic Dairy), Geoff Rolinson (Heytesbury Landcare), Jessica Maxwell (local government), Mary Knight (GHCMA), Karen Renman (GHCMA), Gillian Hayman (Project consultant)

APOLOGIES: Lindsay Ferguson (WestVic Dairy), Lisette Mill (Basalt to Bay Landcare), Linda Whiting, Andrea Montgomery, Rachel Campbell (DJPR)

Introductions, welcome, Acknowledgement of Country	Karen O'Keefe
Project Overview – what's underway and why?	Chris Pitfield
With funding from NRM Regions Australia, this project aims to explore partnership success factors through the use of case studies and investigate possible pathways for south west Victoria to build on dairy-NRM partnerships	
What's happening with dairy-NRM partnership projects in the region currently?	Chelsey Agg & others
A number of dairy-NRM projects were listed by those online from regional to national projects eg. Sustainable Dairies (partnership between WestVic Dairy & CMA's), Smarter Irrigation, Increasing Soil Carbon, local government grants.	
What's going on with dairy-NRM partnership projects in other regions?	Gillian Hayman
Gillian shared the case studies (as circulated with meeting agenda) and highlighted NRM' Partnership Enablers'	
What dairy-NRM project ideas come to mind for south west Victoria?	Group discussions
What are the steps that we need to take to build strong dairy-NRM partnerships in south west Victoria?	
See group discussion notes below	
Summary	Chris Pitfield
Chris noted that there is a project report to come and more conversations to be had	
Meeting close	Karen O'Keefe
Karen thanked participants for their involvement and Chris for seeking the funds for the project.	

# Notes from Group Discussions:

### Group 1

# What dairy-NRM project ideas come to mind for South West Victoria?

- Dairy opportunities with the Curdies, catchy title like Tasmania project, Dairy industry groups, other partners
- Bigger picture project vs specific location based
- The Curdies issue is at the estuary, the impact is higher in the catchment
- Fencing waterways, keeping stock out of waterways, other industries, not just dairy farms in the landscape, sheep, beef, dairy runoff part of problems, water quality, other benefits include biodiversity when waterways are fenced and planted out
- Sustainable dairies program valuable, work as a collective, nutrient management, dairy effluent, priority areas, integrated approach, more access to funding

#### What are the steps that we need to take to build strong dairy-NRM partnerships in South West Victoria?

- Ensure each partner knows what our roles are
- Opportunity to bring others in who we haven't worked with in the past, dairy processors, there is more pressure on processors these days, have minimum enviro standards we can now potentially make the most of
- SW Dairy NRM group a good start, extend invitations to more dairy processors to get more on board

- Do dairy processing companies need us to support NRM activities? Time pressures, competition for milk, not feet on the ground, all barriers. Support for people issues vs NRM. We need to better understand how the companies work, what their priorities are.
- Make the most of strong milk prices, this may provide opportunities for NRM
- Connect farmers to the benefits, 'the sell', collaborative approach we are all coming from the same angle, with the sustainable dairies program people can see that we are on the same page, good example
- Can be confusing where specific funding comes from

### Group 2

# What dairy-NRM project ideas come to mind for South West Victoria?

- Water quality remains a high priority. Currently using FERT\$MART, how can we utilise efficiencies between the 2 CMA regions, online vs face to face. Multi species cropping (DA research currently underway)
- Multi species cropping adjacent to waterways for better water holding capacity in soils and nutrient buffering of waterways. Fencing waterways with generous buffer widths.
- Sustainability Framework- look at the activities (fencing waterways, nutrient management (moving away from synthetic fert and urea), effluent management (potential source of compost material or directly spread onto paddocks)

EXPLORING PARTNERSHIP OPPORTUNITIES FOR NRM - DAIRY PROJECTS IN SOUTH-WEST VICTORIA

- Biolinks projects- involving several partners.
- Dairy Sat (or the new version) across a targeted area.
- Understanding native vegetation legislationimportance of native vegetation. Council to explain zoning, overlays, etc. Infrastructure upgrades and not understanding what they can and can't do under legislation.
- Climate adaptation projects- understanding responses to extreme events and adapt to future weather events.

#### What are the steps that we need to take to build strong dairy-NRM partnerships in South West Victoria?

- Gillian's slide regarding a successful partnership (see below)
- Partners from all levels. Processors, peak industry bodies, farmer group, gov, landholders, NRM agencies, local community groups

- Identify issues and opportunities/common goals
- . Individual/organisation commitment to the goal
- What are activities to undertake and what are the desired outcomes
- . Motivation to be part of the partnership
- St Pat's fires an example of people being forced to come together but what came out of it was several new and exciting partnerships. Crisis can sometimes drive these things.
- What can we learn from a crisis about how to engage with people? Compresses a timeframe and people are more engaged with short term outcomes.
- Develop a short term goal to keep people engaged with a long term strategy/outcome.
- Identifying the underlying drivers to be part of implementing the Sustainability Framework



### Contact.

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