

Foreword

This Strategy has been developed by the Regional Advisory Committee (RAC) associated with the Mildura Hub.

Whilst the production of this Mildura Hub Strategy fulfils a requirement in the contract established between the University of Melbourne and the One Basin CRC (1BCRC), this Strategy also explores what is required to ensure a lasting legacy from the 10 years of investment the 1BCRC is contributing towards the Mildura Hub.

There are many expectations placed on the management of regional hubs, including:



Establishment and maintenance of the facility



Ensuring good governance of research projects



Supporting a growing cohort of researchers



Through RAC, ensuring regional needs are heard and being met, and



Partner engagement

It is our hope that this strategy will help to lift our vision, so we better understand what crucial activities are required to ensure lasting impact from the activities of the Mildura hub.

Each of the four 1BCRC regional hubs has different strengths and opportunities. The Mildura Hub is located within the most agriculturally productive LGA in Australia. With a larger population, Mildura is blessed with regular air passenger services connecting us to Melbourne and Sydney, extensive services (health; retail; education) and an enviable multi-cultural lifestyle focused on the River Murray.

One of the greatest strengths of the 1BCRC Mildura Hub is that it is hosted within the Mallee Regional Innovation Centre (MRIC)

MRIC is a joint venture between the University of Melbourne, La Trobe University and SuniTAFE. The goals of the 1BCRC and MRIC are closely aligned, and the two organisations share similar partners.

A presumption has been made that the long-term legacy of the 1BCRC Mildura Hub will be tied to MRIC. This expectation has been socialised with the board of MRIC.

MRIC has six years experience in building research capability and establishing trust with the region's stakeholders.

The arrival of the 1BCRC has provided the support required to bring researchers to the region. The CRC has also created a large increase in the amount of research taking place in Mildura, and a commensurate increase in the number and diversity of partner organisations working with the centre – partners who have invested their resources into the model

I look forward to a future that sees the strengths of these two organisations combined to ensure a lasting R&D capacity servicing our local industries.

Leonie Burrows OAM

Mildura RAC Chair

Background

The Mildura Hub Strategy aligns with the One Basin CRCs Vision, Purpose, Priorities and importantly holds strong to the Values of the CRC.

Our values

Courageous; Collaborative; Practical; Nurturing; Accountable.

Vision

Australia's irrigation regions are the most productive, resilient and sustainable in the world.

Purpose

We work together to grow value from water in a changing world.



Regional Hubs - Our Legacy

The Mildura Hub Strategy is built around achieving three objectives

Regionally relevant research that has benefitted our irrigation districts, environment and communities to become more productive, sustainable and resilient.

Researchers who have great industry experience, lived a regional life and through it gained understanding of regional stakeholders, their issues and perspectives.

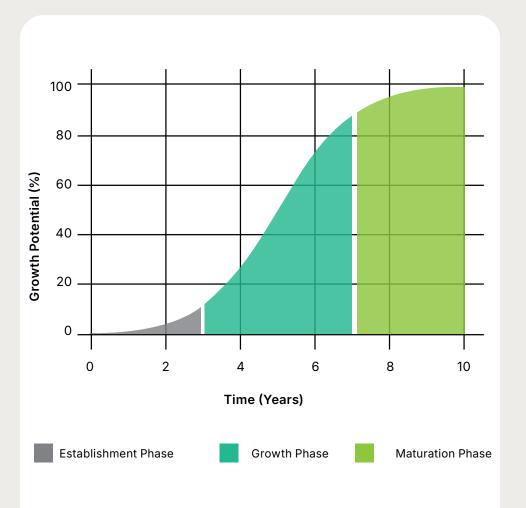
Continued and sustained growth of the research capability within the region. A legacy that outlives the ten-year life of the CRC.

The third objective recognises that the One Basin CRC's investment in regional hubs supports not only research and researchers but also the necessary facilities and management for conducting research locally. This strategy aims to maximise the value of this investment.



Requirements for Growinga Regional Research Hub

Research Hub Growth



Establishment Phase:

- Build on your region's competitive strengths
- 'Right size' your aspirations
- Win trust through consistent, positive performance.
- Avoid competition, instead build alliances.
- Assess how you can achieve critical mass.
- Seek 'benevolent funding' for the establishment phase

Growth Phase:

- Prove to research partners that conducting research regionally is viable
- Build trust and a strong reputation among local partners
- Develop a robust business plan to secure ongoing and sustainable funding

Mature Phase:

- Continue to: Recruit talent / Attract funding / Retain and attract partners
- Adjust strategy to adapt to a changing business environment

Mildura Hub - Established and Growing

| Quality Required | Commentary | Situation for Mildura Hub |
|---|---|--|
| Build on your region's competitive strengths | Focusing research and innovation effort on your region's competitive strengths ensures that scarce funding supports areas with the potential to carve out market niches and foster clusters of economic activity. | Mildura and district is the epicentre of high value irrigation |
| | | Major horticultural industry bodies and natural resource managers are based in the region |
| | | The drive to efficiently use water to produce high value crops and to ensure positive environmental outcomes is a focus of many of the One Basin CRCs partner organisations |
| | | We know how to work across State borders |
| | | We are the home of water trading |
| | | The region is home to industries keen to innovate |
| | | Via daily flights Mildura is accessible to Melbourne and Sydney and Adelaide via road. |
| 'Right size' your aspirations | The scale of research facility will be capped by the scale of the industry that the research is supporting. | • The annual horticultural output for the catchment area around the Mildura Hub is \$1.723B. This is almost equivalent to the total horticultural value of Northern Tasmania, the Goulburn Region and the Griffith-Murrumbidgee Regions combined (REMPLAN 2024) |
| Win trust through consistent, positive performance / Avoid competition, build alliances | Pre-existing local organizations will question whether you are a competitor or a collaborator, a time-waster or a contributor. In smaller communities the market is too small to accommodate direct competition | Through the past 6 years the Mallee Regional Innovation Centre (MRIC) has built trust with crucial local partners, collaborating with many of them on shared priorities. Through this time MRIC has established a reputation as a reputable organisation with high professional standards. |
| Assess whether you can achieve critical mass | Research requires a sufficient number of people to stimulate thinking and test ideas | • In the near-term (2027/28) it is expected that there will be approximately 18 staff operating from the Mildura Hub. This includes 13 One Basin CRC staff and 5 core MRIC staff. |
| | | • This peak will see a vibrant research environment, but questions remain about the sustainability of a critical mass. |
| Seek 'benevolent funding' for the | The establishment of a research facility requires un-tied funding to meet high start-up costs at a time when cash throughput from research projects is low | • The initial establishment of the Mallee Regional Innovation Centre benefitted from a Victorian Government grant. |
| establishment phase | | • The injection of funding from the One Basin CRC is supporting the growth of the Mildura Hub. |

Benefits of Regional Hubs









Industry

- Relevant research that improves productivity and sustainability
- Supply of desirable employees
- Exposure to wider academic world
 -bringing new ideas

Region

- Economic stimulus from each additional researcher
- Region wide economic stimulus
- Regional advocacy
- Improved environmental conditions

Researchers

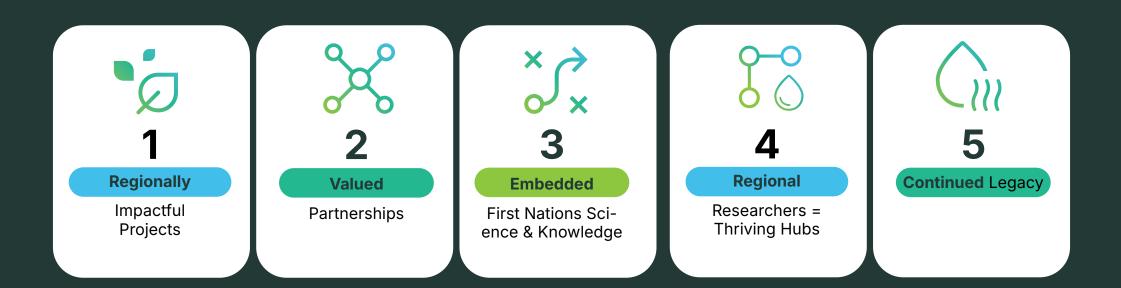
- Unique access to industry and employment opportunities
- Regional lifestyle
- Living costs can be lower

Research Partners

- Continuity of partner engagement
- Improved access to Industry Partners
- Opportunities identified

Structure of the Hub Strategy

The Mildura Hub Strategy is built upon five Priorities......that align to the priorities of the One Basin CRC



1. Regionally Impactful Projects

Managing R&D projects is the primary purpose of the CRC. The focus of our R&D projects is defined by the challenges that all partners have collectively agreed upon and developed through co-design processes. Our region needs to consider how we gain as much as possible out of the research undertaken.

The Four One Basin CRC Research Challenges



Building Capacity to Confront Climate Change Together



Creating Value from Digital Technologies to Support the Irrigated Agriculture Sector



Enhancing the Water Supply System to Deliver for Multiple Uses



Realising Value From and within Rural Industries and Communities

What is it our region needs to see delivered from the research addressing these challenges?

Clear advice on the risks faced in our region and options available to manage these risks. Especially regarding the potential impacts of future drought

Realisation of the productivity and efficiency gains offered by digital technologies. Attraction of the next generation of agricultural workers who have grown up with new technology

Increased value derived out of the available water for irrigation, the environment and community (including First Nations) uses. Improved regional productivity without increases in water use by enhancing the entire horticulture value chain – from inputs through to increased value adding.

1. Regionally Impactful Projects

What is Already Happening



- Partners have made decisions on the research challenges and research priorities
- Co-design principles have been used to develop projects
- The RAC is used to review proposed projects, with final approval of projects sitting with the 1BCRC Board
- As chair of the PAC the Regional Hub Manager (RHM) helps govern assigned projects to ensure that projects deliver impact

Aspiration for Mildura Hub



- We have an excellent understanding of the research priorities of our region and partners and advocated for funding for these research priorities
- We have influenced the selection and design of One Basin research projects to ensure greatest value to our region
- We have made all efforts to leverage the value of each project to meet the needs of our region
- We have witnessed industry adoption of research findings

1. Regionally Impactful Projects

Goal

Activity

We have an excellent understanding of the research priorities of our region and partners and advocate for these research needs

- 1. The Mildura RAC have identified research priorities important to the region including investigations into:
- The impact of future drought on permanent plantings downstream of Barmah (project in development)
- Utilisation of organic orchard waste as an ameliorant that improves soil water holding capacity
- Unlocking the potential for improved management of carp
- 2. The Mildura RAC are keen to see research projects undertaken by the One Basin CRC that reflect the following qualities:
- Practical (implementable) and tangible
- Tending towards having large scale impact (nation building)
- Focused on the core focus of improved water management (don't spread investment thin)
- Projects that are accessible to all (relevant to smaller farms as much as corporate scale farms)
- Improved accountability for impact at regional level
- 3. The Mildura RAC are to periodically review research needs for the region and to assess if current research is delivering on these identified needs.

From initial design through to project completion ensure greatest impact for our region and partners

- 4. Drawing on their local knowledge, influence project outcomes to deliver regional impact whilst performing their respective roles
- The RAC in project approval processes
- The RHM in chairing PAC meetings, and
- Researchers as participants in projects
- 5. Recognise opportunities to improve the regional relevance of projects by:
- Inclusion of key regional partners
- Use of add-in components to projects to unlock impact (managed by variations or an attached PhD project)

2. Valued Partnerships

What is Already Happening



- 89 organisations have partnered with the 1BCRC.
- Contributions from these partners and the Commonwealth Government have amassed approximately \$150 million for the activities of the 1BCRC
- Partners are integral to deciding the research priorities of the 1BCRC
- The Mildura RHM is responsible for contact with a selection of Tier 3
 partners (approximately 14 organisations). These partners are
 generally present within the footprint of the Mildura Hub

Aspiration for Mildura Hub



- We have identified the One Basin CRC partners who are most important to the on-going success of the Mildura Hub and have developed strong trusted relationships with them.
- We identify and develop strong relationships with non-funding partners where they are important to our continued success, organisations including but not limited to Local Government Authorities in close proximity to the Mildura Hub.

2. Valued Partnerships

Goal

Activity

We have identified the One Basin CRC partners who are most important to the on-going success of the Mildura Hub and have developed strong trusted relationships with them

- 1. Working within MRIC, there are some partners with which we have strong, trusted and pre-existing partnerships, these relationships need to be maintained
- 2. New relationships brought to the hub through their connection to the One Basin CRC need to be nurtured, especially those that are key to the future success of the hub

We identify and develop strong relationships with non-One Basin CRC partners where they are important to our continued success

- 3. Identify non-partners critical to the on-going success of the Mildura Hub.
- 4. Develop an MoU with Local Government Councils in close proximity to the hub to formalise the benefits that each can bestow on the other.

3. Embedded First Nations science & knowledge

Engaging and partnering with First Nations peoples throughout the Murray-Darling Basin is complex and requires continuous commitment and refinement

The One Basin CRC is committed to working respectfully with First Nations throughout the life of the CRC, to achieve aspects of the following:

- Greater access to water and land for cultural, social, spiritual connection
- Economic development opportunities
- Employment, education and training opportunities including career development

The Mildura Hub is situated on the lands of the Latje Latje, who are represented by the Registered Aboriginal Party the First People of the Millewa Mallee Aboriginal Corporation (FPMMAC).

The notional area of activity over which the Hub operates includes the lands of many other Victorian Registered Aboriginal Parties (Taungarong, Dja Dja Warrung, Yorta Yorta, Wamba Wemba, Barendji Gadjin, as well as many first nations groups that have not yet had their traditional owner status recognised (Barapa, Barapa, Wadi Wadi etc) as well as first nations groups in the lower darling including the Barkindji.



3. Embedded First Nations science & knowledge

What is Already Happening



- All 1BCRC Staff are being asked to undertake on-line Cultural Awareness Training (not specific to indigenous culture)
- All projects are expected to engage with First Nations groups
- Geoff Reid First Nations Engagement Lead engaged by 1BCRC to increase the focus on successful engagement with First Nations groups
- Prof. Troy Meston First Nations Research Lead employed by 1BCRC to increase the volume and quality of First Nations led research

Aspiration for Mildura Hub



- Hub staff demonstrate culturally aware practices when engaging with First Nations groups
- We have a mature trusted and respectful relationship with our local First Nations group, that enables us to help them achieve their aspirations
- We have explored opportunities to encourage young indigenous people find career paths in research, natural resource management and indigenous foods

3. Embedded First Nations science & knowledge

Goal

Activity

Hub staff demonstrate culturally aware practices when engaging with First Nations groups

- 1. We aspire to trusted and respectful relationship with the Registered Aboriginal Parties (RAPs) that are within the footprint of the Mildura Hub
- 2. Support all Researchers working within the Mildura Hub to undertake cultural awareness training with the local First Nations Groups
- 3. Researchers undertaking research on First Nations lands are to engage in an appropriate and respectful manner with that First Nations group

Develop Pathways to encourage increased First Nations participation in research relating to natural resource management or food production

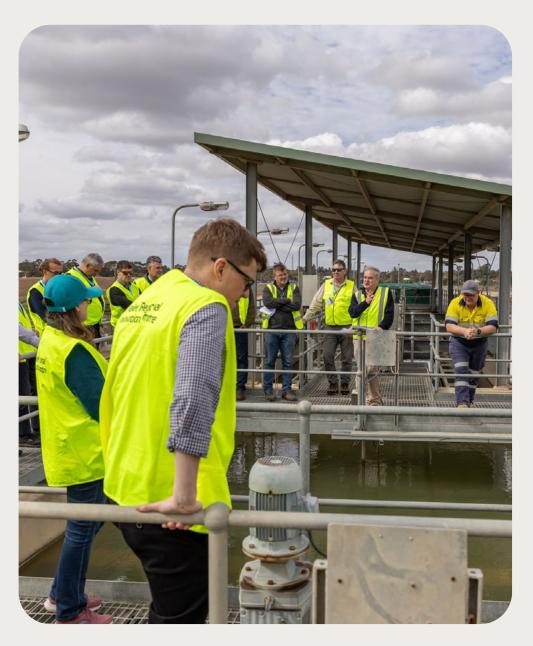
- 4. Engage with local First Nations leadership to seek to understand their aspirations in this space and how/whether they wish to proceed
- 5. Work with Uni of Melbourne to test the idea of developing a special relationship with the First People of the Millewa Mallee (FPMMAC), built around training pathways in natural resource management and food production. This relationship could be modelled on a similar relationship established in Yorta Yorta country and known as the 'Goulburn Valley Partnership'. This partnership has resulted in the establishment of the Munarra Academy*
- *Murmuk Djerring, Uni of Melbourne July 2024
- 6. Request that One Basin CRC offer a package of sponsorships and scholarships to support First Nations people to participate in Natural Resource Management or Indigenous Food Production courses or gain related experience (from Vocational to PhD level)
- 7. Build connections between: FPMMAC ranger program and ursery; University of Melbourne; La Trobe University and SuniTAFE to build training pathways

We know that solutions developed and tested under the conditions where it will ultimately be applied will be more relevant and trusted. That is a primary reason why the One Basin CRC has established four Regional Hubs where most of our cash funded PhD's and researchers will work.

These hubs are a unique and iconic feature of the One Basin CRC and will hopefully be a long-term legacy when the CRC project is completed.

To thrive, these regional hubs will need to have a critical mass of researchers and have strong trusted relationships with in dustry.

To attract researchers to our regional hubs, we have to overcome prejudices about rural living, ensure that our researchers a ren't academically isolated and ensure that we make the most of the fantastic industry experiences that are available.



Mildura Hub Researchers - Projections & Actuals



At its peak, the Mildura Hub is expecting to be home for approximately 13 researchers.

Lags in the recruitment of PhD candidates have been experienced. Delays have been caused by a range of reasons including, slow visa processing and candidates changing their minds late in the recruitment process.

The placement of Post-Doctoral researchers into regions has also lagged as early project contracts didn't insist on researchers being placed at hubs – this has since been rectified.

What is Already Happening



- 75% of PhD's and cash funded project staff are to be located in hubs for the majority of their employment / candidature.
- 45 PhDs will be located in the regional hubs. Approximately 7 of these PhDs are to be offered to indigenous students.
- On average, each year, 21 FTEs, will be employed by either the CRC or the CRC's research partners to work directly in the regional hubs.
- There is an opportunity to offer sponsorships, scholarships of \$500 and industry internships for undergraduates, honours or masters students enrolled at partner Universities*.
- 6 1BCRC staff have already moved to the Mildura Hub.
- *Thriving Hubs, 1BCRC, July 2024

Aspiration for Mildura Hub



- We attract our quota and achieve high retention of early years researchers within the region
- We have developed a funded business model for continued attraction of early years researchers by 2027/28 (last year of CRC funded placements)
- Our industry partners value the research delivered through the hub and the future workforce created by attracting early years researchers to the region
- To the fullest extent possible, we utilise the available; sponsorships, scholarships and internships to:
- Benefit our partners (research meeting their needs)
- Extend the relevance of CRC research to our region

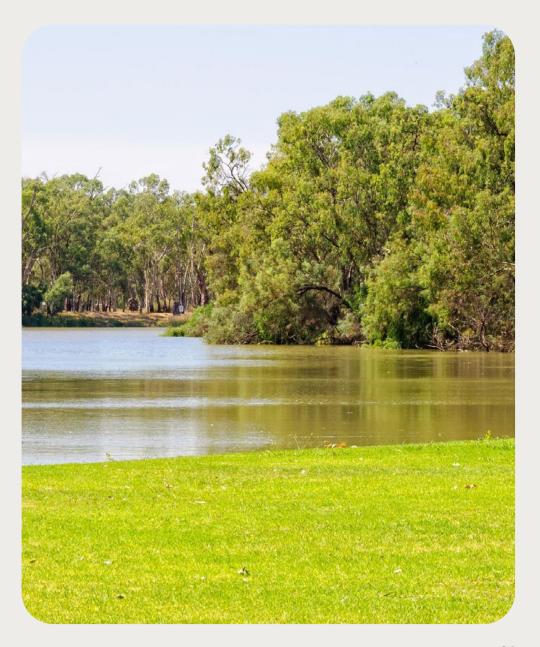
| Goal | Activity |
|--|---|
| Attract Researchers to the Mildura Hub | Promote the benefits and viability of regionally based research to feeder universities |
| | 2. Go the extra mile to solve issues experienced when new researchers arrive (spouse employment; childcare; religious needs, etc) |
| | 3. Maintain FAQs that answer common questions or concerns |
| | 4. Participate in recruitment actions to extent possible |
| | 5. Working with the Mildura Rural City Council prepare a promotional video(s) promoting the City of Mildura and activities of the Mildura Hub |
| | 6. Identify local residents who may be interested in research pathways |
| Retain Researchers at the Mildura Hub | 7. Seek funding to ensure continuity of employment and potential for progression for current researchers (either through One Basin CRC projects or potentially MRIC has ability to bid for project funding) |
| | 8. Take stock of those skills required longer-term to maintain viability of hub – actively seek young researchers with these skills |
| | 9. To offset reduced contact with academics and reduced opportunities to build teaching skills (compared to larger University Campuses) |
| | Create and maintain local researcher networks |
| | • Continue the high visitation of researchers to the hub (>100 academic visitors in 2024) |
| | Provide teaching opportunities for researchers |
| | • Attract a senior researcher (or train up internally) – Support from research partner required |
| Strengthen ties to local industry partners | 10. Promote opportunities for internships and other interactions with local partners |
| | 11. Promote Industry-Led PhD projects |
| Continue to attract researchers beyond the life of the 1BCRC | 12. Develop a funded business model for continued attraction of early years researchers by 2027/28 (last year of CRC funded placements) |

5. A Continued Legacy

From 2027/28 there will be a tailing-off of One Basin CRC investment into new research and PhDs.

This will signal the start of a transition period during which we need to establish the governance arrangements and business processes required to ensure a legacy from the One Basin CRC

As well as the financial and in-kind support provided through the CRC that supports the Regional Hub Manager, the Hub facility, the PhD scholarships and the Research, there are many services which the Mildura hub benefit from



5. A Continued Legacy

What is Already Happening



The Mildura 1BCRC Hub currently has regional governance arrangements that are centred around the RAC.

The Mildura hub benefits from the corporate activities of the broader CRC. Functions that include:

- Management and design of research programs
- Partner engagement
- Financial management
- Commercialisation and impact realisation
- PhD recruitment and
- Communications

Aspiration for Mildura Hub



We have found a way to have the legacy of the Mildura Hub of the One Basin CRC carried forward

We have consciously decided what elements of the One Basin CRC model are preserved beyond the life of the CRC, including consideration of:

- Geographic Reach
- New Industry partners
- Areas of research
- University partners, and
- Attraction of young researchers, and
- Business services we've benefited from (eg: CRM; Commercialisation; PhD recruitment)

We have adjusted our governance arrangements and business practices accordingly

5. A Continued Legacy

Goal

Activity

Establish the Governance required to carry the legacy of the 1BCRC Mildura Hub forward

1. Encourage dialogue between the MRIC Board and MRIC SAP and with the One Basin CRC RAP to determine if MRIC might carry forward the legacy of the Mildura Hub of the One Basin CRC

Determine those aspects of the 1BCRC effort that should be carried forward

- 2. The future governance body carrying forward the legacy of the Mildura Hub needs to determine which aspects of the One Basin CRC model should be carried forward, this could include:
- The continued relocation of researchers to the Mildura hub (See Priority 4)
- The expanded geography (particularly Lower Darling)
- The relationship with additional research partners
- The focus on first nations inclusion
- The engagement of an expanded range of local partners

Consideration be given to other opportunities to build upon the research capability already present in Mildura

- 3. Consider close collaboration with the Loxton Hub As the combined footprint of the Loxton and Mildura hubs mirrors the 'Tri-State Economic Zone' and there are several shared partners
- 4. Consider a 'confederacy' of regional research centres that could bid to provide research services for other CRCs working with regional industries (or working together outside the CRC system to attract alternative funding opportunities)

6. Implementation Arrangements

Goal Activity

| Meeting Implementation Costs | 1. Of the 36 Actions identified in this strategy, most can be implemented with the current resources allocated to the Mildura Hub (Hub Manager; \$50,000 operating). Exceptions include; |
|------------------------------|---|
| | • Activity 1.1: Invest in projects identified as priorities by the Mildura RAC, at this point the 'The impact of future drought on permanent plantings downstream of Barmah' project is the priority (Cost TBC) |
| | Activity 3.6: Request that One Basin CRC offer a package of sponsorships and scholarships to support First Nations people to participate in Natural Resource Management or Indigenous Food Production courses or gain related experience. (Cost TBC, to be met through budgets held by, First Nations & Training and Education Teams) |
| | Activity 4.12: Develop a funded business model for continued attraction of early years researchers (Cost TBC –could be minimised through use of partner organisations) |
| Annual Work Plan | 2. The Mildura Hub Strategy contains a list of activities designed to achieve the 3 objectives listed in Slide 4. It is not imagined that all activities can be undertaken immediately. An annual work plan is to be prepared each calendar year under the guidance of the Mildura RAP to articulate those activities to be undertaken that year. |
| Monitoring and Evaluation | 3. Within the first twelve months of Strategy implementation, a comprehensive plan to monitor and evaluate progress of strategy implementation is to be developed |
| Strategy Renewal | 4. Whilst this strategy provides advice for the remaining life of the One Basin CRC, it is recommended that the Mildura RAC review and renew the strategy in 2027 |

