

CLLMM Research Centre

Year One Progress Report

2023/2024




RESEARCH CENTRE

 GOYDER
INSTITUTE
FOR WATER RESEARCH



Australian Government

Department of Climate Change, Energy,
the Environment and Water



The Coorong, Lower Lakes and Murray Mouth (CLLMM) Research Centre's primary objective is to develop and deliver locally driven, innovative, and impactful research which reflects the community's priorities in addressing the critical needs of the region's wetlands.

The Research Centre brings together our First Nations, local communities and scientists to create and share knowledge with regard to these needs. The Centre also supports our well-informed and engaged community and will empower our future generations to be part of the solution to climate change impacts in our region.

The Goyder Institute for Water Research CLLMM Research Centre, based in Goolwa SA, was established in 2023 through funding by the Australian Government.



The Goyder Institute for Water Research is a partnership between the South Australian Government through the Department for Environment and Water, CSIRO, Flinders University, the University of Adelaide, and the University of South Australia.

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Executive Summary

The Goyder Institute for Water Research Coorong, Lower Lakes and Murray Mouth (CLLMM) Research Centre, based in Goolwa, South Australia, is working with communities to investigate the significant challenges posed by climate change to the region. The CLLMM Research Centre officially commenced operation as of 1st July 2023 following the Institute receiving \$8 million from the Australian Government over 4 years from 2022–26.



The CLLMM Research Centre purpose is to improve the understanding of the impacts of climate change in the region and to put in place necessary responses to these impacts.

The CLLMM Research Centre is implementing a model of practice that is bringing together our First Nations, local community, management agencies and scientists to create and share knowledge, support our well-informed and engaged communities, and empower our future generations to be part of the solution.

It is anticipated that this will be a platform for long-term and locally relevant knowledge generation and sharing in the CLLMM region, which is also applicable to other regions of the Murray-Darling Basin.

First year of the Research Centre – Establishment Phase

The first year of the Research Centre has involved a six-month Establishment Phase (between 1 July – 31 December 2023). This Establishment Phase included activities focused on creating a sound basis for the operation of the Research Centre such as:

Recruitment of staff

The Science Program Manager, Communications and Engagement Coordinator, First Nations Engagement Officer and Centre Manager. Four staff were recruited by October 2023. These recruitments prioritised employment of local professionals with experience of living and working within the CLLMM region.

Development of supporting plans

Three comprehensive plans were developed to guide the Centre's model of practice. These included a Research Centre Project Plan, First Nations Engagement Plan and a Communications and Engagement Plan. The drafting commenced for the Science Program Research Plan in this timeframe with completion set for July 2024.

Establishment of branding

The launch of a website, Facebook page and development of a suite of branding, including logos and templates for Research Centre documentation to ensure a consistent and strong identity on all communication platforms. The development of our branding was developed to reflect the region and the values of the CLLMM community.





CLLMM Research Centre staff (L – R): Jane French – Centre Manager, Dr Nick Whiterod – Science Program Manager, Nathan Hartman – First Nations Engagement Officer and Dr Tiffany Nay – Communications and Engagement Coordinator

Securing of physical location

Securing of a waterfront office in Goolwa to provide a base for the team and scientists, as well as a central point to facilitate Centre specific community discussions and forums, education, and community events along with hosting events for community, First Nations and management agency partners.

Creation of the Centre's governance

A structure to support the Research Centre was created, consisting of an underpinning Research Centre Advisory Forum (RCAF) and overarching Commonwealth Steering Committee (CSC) which sit alongside the existing governance of the Goyder Institute (Management Board and Research Advisory Committee (RAC)).

Commencing First Nations and community engagement

Building on existing and establishing new relationships and connections to provide an opportunity for knowledge generation and sharing through the Research Centre. This engagement has also raised broad awareness of the Centre's establishment and operations.

Establishing the foundations of Science Program

Implementing an inclusive and collaborative bottom-up participatory approach to capture the values and perspectives of a broad range of community, First Nations and management agencies.



First year of the Research Centre – Delivery Phase

The first six-months of the Delivery Phase (1 January – 30 June 2024) saw the Research Centre establish its presence in the region. This included getting into our Goolwa Office, hosting an official launch event, and continuing First Nations and community engagement. Research Centre governance groups were conveyed, with two meetings of the RCAF and first meeting of the CSC. Comprehensive engagement with community, community groups, First Nations and managers continued to inform priorities of the Science Program.

Science Program

The Science Program of the CLLMM Research Centre is committed to engaging the community, First Nations, management agencies, and scientists, conducting locally driven research reflecting community and First Nations priorities, and collaborating to enhance projects and support ecological management.

It involves extensive engagement activities, including forums and strategic meetings, guided by the Research Centre Advisory Forum (RCAF) which prioritises research themes and projects.



The program focuses on four main themes: Climate Adaptation, Ecosystem Services, Climate Mitigation, and Threatened Species and Biodiversity, structured into four project types: Foundation Scoping Projects, Flagship Projects, Research Projects, and Knowledge Sharing and Capacity Building Projects.

Projects are developed through a collaborative planning process ensuring alignment with community and First Nations priorities, addressing knowledge gaps, and avoiding overlap, thereby addressing critical regional needs, and advancing climate change solutions.

First Nations engagement

The CLLMM Research Centre has prioritised meaningful engagement with First Nations peoples, fostering relationships through various initiatives. The Centre has engaged with over 80 First Nations individuals across 12 organisations and hosted more than 50 at the Centre. Key activities include Ngarrindjeri community workshops and Waterbirds Priorities Project workshops. The Research Centre Advisory Forum (RCAF) includes First Nations participants, with plans to increase representation.

The Centre maintains a comprehensive database of engaged individuals and organisations and has established key agreements, including MoUs and Consultancy Services Agreements with Burrardies (BAC) and Ngarrindjeri Aboriginal Corporations (NAC). Cultural activities such as educational programs, ceremonial events, and cultural awareness training are integral to the Centre's efforts.

Recent developments include enhanced First Nations involvement in forums, community events, and ongoing discussions to ensure diverse representation. The Centre's commitment to First Nations engagement promotes cultural understanding and integration of First Nations knowledge into its research and educational initiatives.

Communications and Engagement Plan

The Communications and Engagement Plan has and continues to guide the work of the CLLMM Research Centre aiming to raise awareness of the Centre, foster collaborations, and create involvement opportunities by incorporating First Nations and community knowledge into research.

The Centre emphasises clear communication, utilising various media platforms and branding to build its identity. Significant events, including the Centre's launch and cultural sessions, have bolstered community engagement.

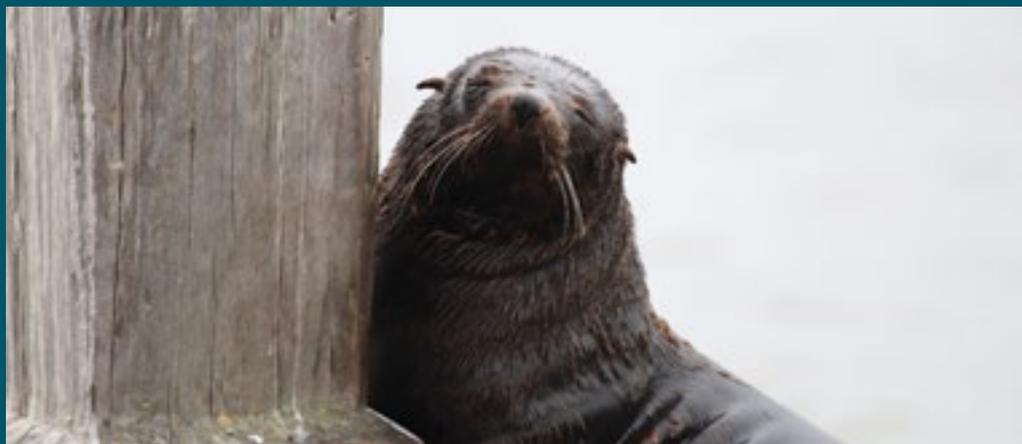
An education program launching in 2025 will mentor students in research, while a volunteer group established in 2024 enhances community involvement. These efforts ensure the Centre remains a pivotal institution, promoting environmental and cultural initiatives within the CLLMM region.

Efforts and outcomes to date have been remarkable. The dedication to setting and working to high standards and embracing the challenges to grow, demonstrates the importance of the CLLMM Research Centre.

Looking ahead

Looking ahead, the second year of the CLLMM Research Centre will continue to build on the foundational work achieved during its first year.

Key activities will include the delivery of the Science Program, ongoing First Nations engagement and involvement in the Centre's activities, including the development of First Nations' priority research projects, a horizon-scanning process to understand the emerging and future research areas and priorities for the region, the continued development of the Centre's education program, and ongoing communications and engagement activities to raise awareness of and facilitate participation in the Centre's work.





Establishment Phase

(1 July – 31 December 2023)

The CLLMM Research Centre reached significant milestones during its establishment phase, successfully laying the foundation for its mission to contribute to the long-term prosperity of the CLLMM region.

The project outcomes achieved reflect a commitment to empowering the community and First Nations, fostering collaboration, addressing crucial environmental challenges, and enhancing the inclusivity and relevance of the research outcomes.

The establishment phase of the Centre focussed on the following key activities:

- Recruitment of staff
- Establishing a brand
- Establishing the Centre's governance
- Initiating First Nations and community engagement and raising broad awareness of the Centre's establishment and operations
- Establishing the foundations of the Centre's Science Program.

A key output was to develop a brand to ensure the CLLMM Research Centre's identity was engaging and reflective of our work.

This was developed with consideration of our broad target audience, ensuring it mirrored our purpose and values to tell the story of the CLLMM Research Centre through colour, text and icons that immediately connected with the reader. Ensuring versatility in both print and digital platforms to recognise our funders and partners.

The Centre made substantial progress in initiating engagement with First Nations and community. The two First Nations Corporations within the CLLMM Region, Ngarrindjeri Aboriginal Corporation (NAC) and Burrendies Aboriginal Corporation (BAC) were the primary focus for First Nations

engagement during the establishment phase. Development of a Memorandum of Understanding with each of NAC and BAC was important to demonstrate a commitment to involving First Nations in research activities and governance, and formal interest from First Nations in engaging with the Centre and its activities and research.

Participation in specific projects and First Nations-led projects are being facilitated through formal contracting processes as the collaborative design of projects progresses.

Community Conversations events were held to introduce the CLLMM Research Centre to the broader community. These provided a platform for knowledge exchange and fostering a collaborative environment by presenting to a growing variety of audiences, such as local small business owners, local government elected members and executive staff.

The development of a community survey provided valuable insights into the community's awareness of climate change impacts and priority areas of interest for further engagement and research activities and topics.

The survey also highlighted the diverse values placed on environmental, cultural, social, and economic aspects of the CLLMM region. This information has been crucial for informed decision-making and planning for the development of the Centre's research projects.

Four Foundation Scoping Research projects commenced including:

- A Waterbirds Scoping Project, led by The University of Adelaide, facilitating collaborative workshops engaging First Nations groups, government departments, NGOs, and the community, highlighting a comprehensive approach to addressing knowledge gaps related to waterbird ecology.
- Iconic Species project, led by Flinders University, is partnering with Ngarrindjeri Aboriginal Corporation and Burrendies Aboriginal Corporation to identify the status and knowledge gaps for culturally significant, threatened and community important Iconic Species across the region.
- First Nations research priorities, initial work is underway through partnership with Ngarrindjeri Aboriginal Corporation and Burrendies Aboriginal Corporation to identify First Nations priorities for research and knowledge priorities.

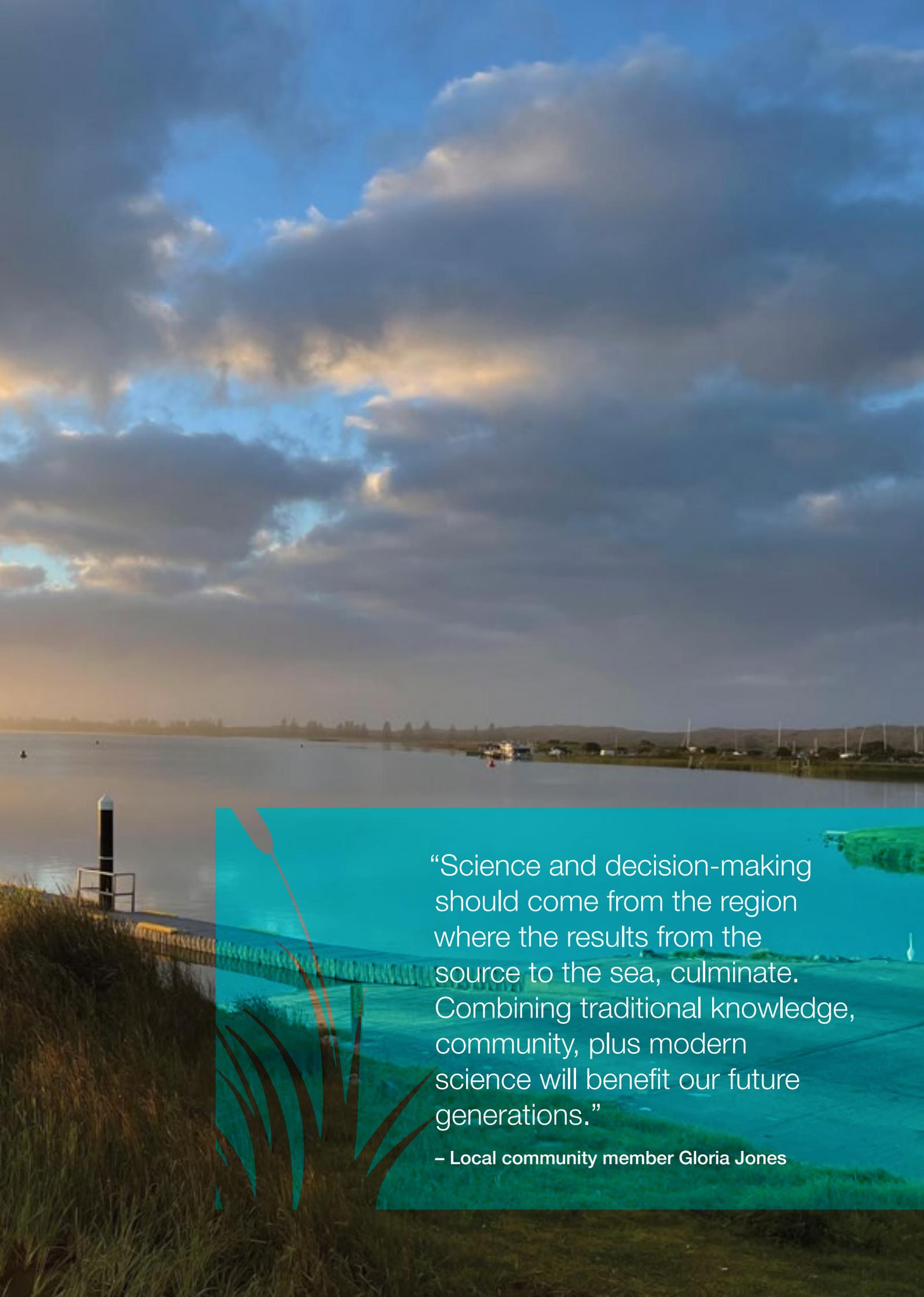


One Capacity Building and Knowledge Sharing Project commenced:

- The Immersive Experience Project, utilising Augmented Reality sandbox technology. The experience will present rich and engaging stories, share new perspectives, and present critical regional data in a new and exciting way, engaging expert and non-expert audiences. This project will also be used as an educational tool with the commencement of school programs over the remainder of the current term of the Research Centre

The CLLMM Research Centre's achievements during the establishment phase highlighted the commitment to sustainable development, community empowerment, and collaborative research. Ongoing monitoring, evaluation, reporting, and improvement processes will further enhance the Centre's impact and contribute to the desired environmental outcomes in the CLLMM region and beyond.





“Science and decision-making should come from the region where the results from the source to the sea, culminate. Combining traditional knowledge, community, plus modern science will benefit our future generations.”

– Local community member Gloria Jones



Governance

The Research Centre’s governance structure was developed during the establishment phase (1 July – 31 December 2023) and initiated at the beginning of the Delivery Phase (from 1 January 2024). The Centre’s governance (Figure 2) consists of an overarching Commonwealth Steering Committee (CSC) and an underpinning Research Centre Advisory Forum (RCAF).

The Centre governance structure sits alongside the governance of the Goyder Institute, which consists of a Management Board and Research Advisory Committee (RAC). These provide governance and strategic oversight of the Goyder Institute, providing support and endorsement of management strategies for the Goyder Institute as a whole, as well as for the CLLMM Research Centre.

The establishment of the Commonwealth Steering Committee (CSC) was developed in partnership with the Department of Climate Change, Energy, the Environment and Water (DCCEEW) who nominated key parties to form the Committee to support the CLLMM Research Centre achieve their objectives.

32

members established the Research Centre Advisory Forum (RCAF)

7

members established the Commonwealth Steering Committee (CSC)

1st

CSC meeting held 21 January 2024



The Committee's scope includes:

- Facilitating promotion and integration of the Science Program outputs to inform Commonwealth decision making and policy.
- Provide awareness of other research programs across the Commonwealth to assist in aligning Research Centre activities, avoid duplication of research and provide advice to effectively value add to current and ongoing research activities.

Membership of the CSC consists of 7 representatives drawn from the Department of Climate Change, Energy, the Environment and Water (DCCEEW) (4 representatives), Commonwealth Environmental Water Holder (CEWO) (1 representative), Murray Darling Basin Authority (MDBA) (1 representative) and the Goyder Institute for Water Research (1 representative).

The first in-person meeting was held in Canberra in January 2024. The second meeting was held on the 14th June 2024 and will be reported on the upcoming Interim Report regarding the discussions around dissemination of the CLLMM Research Centre scientific outputs.

The Research Centre Advisory Forum (RCAF) is a larger collective of 32 members representing community, First Nations and a diverse range of stakeholder organisations who have expertise and connection with the CLLMM region, including a Scientific Leadership Team formed of experts from within each of the Goyder Institute partner organisations (Figure 1).

The Science Program development and delivery is guided by the CLLMM Research Advisory Forum (RCAF). The primary objective of the RCAF is to support the CLLMM Research Centre in achieving its goals and advancing its mission. It underpins the Science Program, providing strategic guidance, prioritisation and support for projects and engagement opportunities.

RCAF membership was sought via invitation to submit an Expression of Interest to garner members with experience not limited to one of more of the following areas:

- First Nations cultural knowledge and connection to the CLLMM region
- Living and working in the CLLMM region
- Community leadership and advocacy relevant to the CLLMM region
- Understanding and knowledge of issues/concerns relating to the CLLMM region
- Interest in environmental and socio-economic knowledge generation and sharing
- Interest in climate adaptation.

The RCAF consists of a strong member base representing areas of experience including, Land Management, Water Management, Scientists, First Nations and Community.

Figure 1 – RCAF Member Organisation Representation

No	Organisation	No	Organisation
1	Alexandrina Council	13	MIPAAC
2	Burrandies Aboriginal Corporation (BAC)	14	Moorundi
3	Community Member	15	Murray Bridge Council
4	Coorong District Council	16	Murray Darling Basin Authority (MDBA)
5	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	17	Murraylands and Riverland Landscape Board (MRLB)
6	Department of Climate Change, Energy, the Environment and Water (DCCEEW)	18	National Parks
7	Department of Environment and Water (DEW)	19	Ngarrindjeri Aboriginal Corporation (NAC)
8	First Nations Community Member	20	Ngarrindjeri Ruwe Empowered Communities (NREC)
9	Flinders University	21	SA Water
10	Goyder Institute for Water Research	22	University of Adelaide (UoA)
11	Hills and Fleurieu Landscape Board	23	University South Australia (UniSA)
12	Hindmarsh Island Landcare		

A strong collective working together to provide guidance on the prioritisation of activities within the CLLMM Research Centre's programs to support the centre in achieving its objectives.

Two RCAF meetings have been held in the first half of 2024. The inaugural meeting in February 2024 laid the foundation of how we take this journey together.

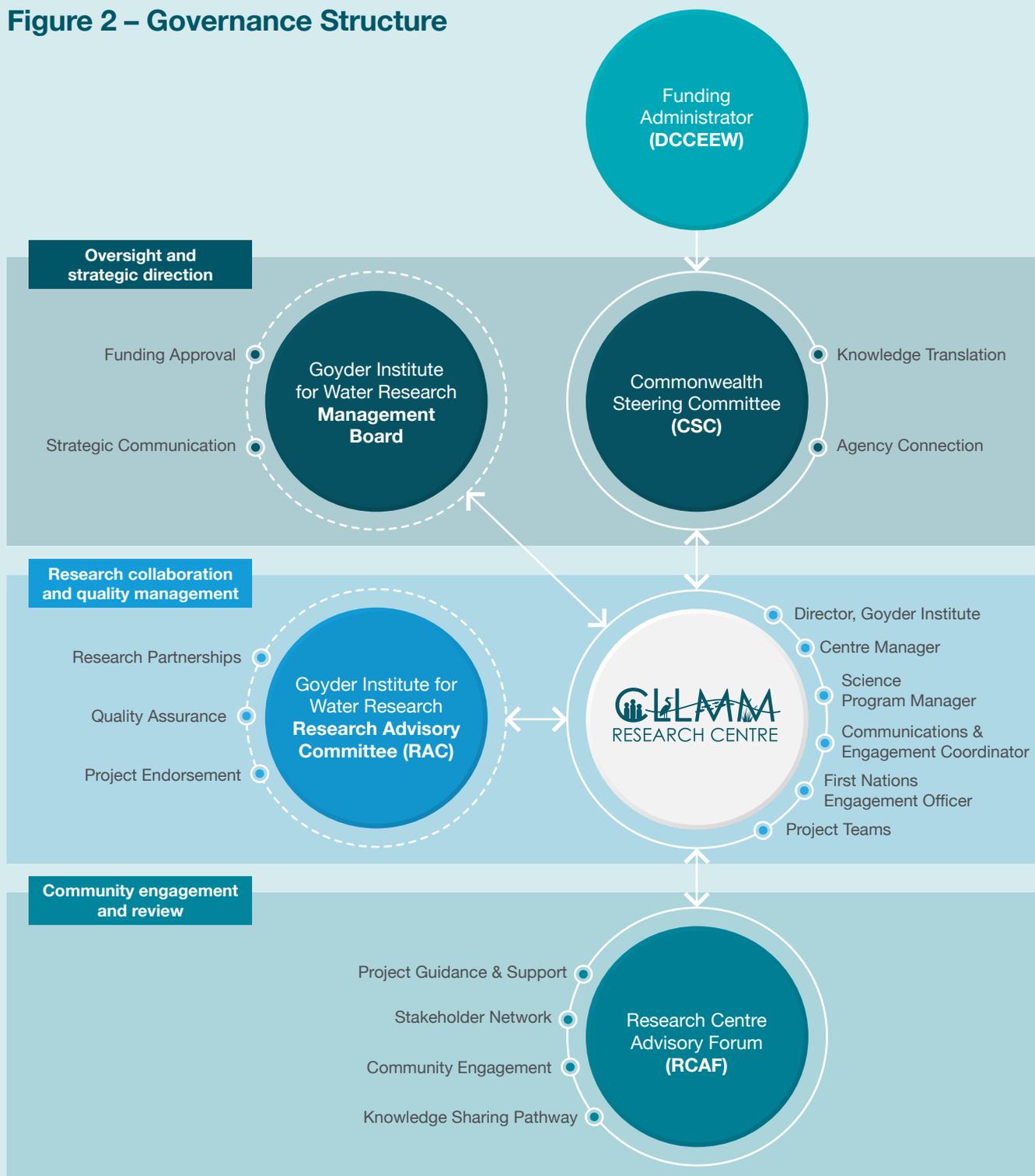
The second meeting in April 2024 saw an extensive interactive process undertaken to identify and prioritise research themes and topics.

An equal spread of the 4 identified research themes, which has guided budgetary application along with the ranked topics through the RCAF has directed the development of research projects to be delivered by the Research Centre.

The next RCAF meeting will be held in late July 2024.

Refer to Appendix 1 and Appendix 2 for a summary of meetings, key guidance and decisions by the governance structure groups.

Figure 2 – Governance Structure





Strategic Actions

Strategic engagements and activities formed a critical part of the establishment phase of the CLLMM Research Centre to ensure that its presence and objectives are recognised on all levels and to ensure longevity for the success of the centre and the outputs of the research conducted. Strategic engagement activities continue to be undertaken by the CLLMM Research Centre to enhance community involvement and stakeholder collaboration.

Through targeted outreach efforts and collaborative partnerships, we continue to foster meaningful connections, gathering valuable insights, and driving positive impact in alignment with our organisational objectives.

Effective engagement with stakeholders and communities is essential for the success and sustainability of the CLLMM Research Centre.

By actively involving stakeholders in decision-making processes and fostering open communication channels, we are building trust, enhancing transparency, and ensuring that our initiatives are responsive to the needs and expectations of our audiences.



Key activities

Community survey

We conducted a comprehensive survey over a 6-month period from November 2023 to March 2024 to support our engagement processes to garner community perspectives and initiate the identification and prioritisation of our research projects.

Community conversations

We delivered four community conversation workshops across three local Government jurisdictions (Alexandrina Council, Coorong District Council, Murray Bridge Council) as well as Raukkan Community Council to solicit input, feedback, and ideas from residents, businesses, and community organisations while raising awareness of the Research Centre's establishment and intended activities.

These sessions provided valuable insights into community priorities, concerns, and aspirations, which informed our strategic planning and decision-making processes.

Key events and presentations

Key strategic engagements and events facilitated the establishment of new relationships and connections, contributing to the growing presence of the CLLMM Research Centre throughout the establishment phase and continuing into our delivery phase.

These included a presentation introducing the CLLMM Research Centre at the 79th Annual Murray Darling Association Conference; presenting to the local community alongside the Inspector General of Water Compliance, by invitation from Rebekha Sharkie MP; presenting at the 'Connect the Disconnected' 2-day international conference held in Goolwa; and meeting with the South Australian Commissioner for the River Murray.

Partner and key party relationships

We have forged strategic partnerships and alliances with like-minded organisations, government agencies, and industry stakeholders to leverage resources, share expertise, and maximize our collective impact.

One of the ways we have achieved this is by offering the CLLMM Research Centre as a location for partners to host industry aligned workshops and conferences.

As a result, 19 events have been held at the Research Centre, facilitating connectivity across topics, encouraging partnership approaches, and raising awareness of the Research Centre's presence and activities to a broad audience.

Media outputs

We implemented targeted communication and outreach campaigns to raise awareness, build support, and engage a wider audience in our mission and activities. These campaigns utilised a variety of channels, including social media, email newsletters, press releases, and community events, to disseminate information and encourage participation in our activities.



Communications and Engagement

The CLLMM Research Centre has placed significant emphasis on communication and community engagement to ensure a strong presence and clear understanding of its functions.

Building a recognisable brand was a top priority at its commencement, with the launch of a website, Facebook page and development of a suite of branding, including logos and templates for Research Centre documentation to ensure a consistent and strong identity on all communication platforms. The development of our branding was developed to reflect the region and the values of the CLLMM community.

83

targeted meetings attended aligned with Engagement and Communications

12

organised CLLMM Research Centre events with 430 people in attendance across the occasions

66

organisations engaged with (Figure 5)

2

different school visits with 36 students and 5 staff members in attendance across the visits

10

volunteers signed up to the newly established CLLMM Research Centre Volunteer Program

8

events hosted with over 220 people in attendance across the events

20

students from 10 schools in the CLLMM region involved in the developing education program

7,151

views and 1,668 unique visitors to the CLLMM website to date (2,880 direct, 3,067 via Google)

167

subscribers to the CLLMM website

137

followers and 63 likes of the CLLMM Facebook page

170+

media outputs on a variety of platforms including radio, Facebook, publications, Twitter, website and email



The Communications and Engagement Plan continues to guide our work and strive towards our key objectives.

<p>1 Raise awareness of the CLLMM Research Centre, its events, and activities. To build on and improve existing collaborations and connections between governmental departments and local First Nations community and organisations.</p>	<p>A strong foundation has been laid to establish a strong presence of the CLLMM Research Centre. This connectivity reaches further afield with developed relationships with governmental department's, community and broader organisations through a holistic approach to engagement of all stakeholders.</p> <p>The CLLMM Research Centre has seen over 1000 people through the which is the result of targeted engagement through workshops, activities, forums, yarning circles and school visits. Casual foot traffic has added another 100 people plus in the Centre – including international visitors. A dedicated social media presence has resulted in close to 10,000 website views, 167 subscribers and 137 followers on Facebook, and increasing consistently. The strength of this presence will continue to develop throughout the life of the project building and growing the network to ensure the sustainability of the CLLMM Research Centre.</p>
<p>2 Create opportunities for involvement in Centre programs. Incorporate First Nations and community knowledge, culture, and people into the research projects delivered by the CLLMM Research Centre.</p>	<p>The prioritisation, planning and development of 23 key Research Projects have included the values, perspectives and input from community and First Nations at every check point, showcasing the model of practice and value of the incorporation to reach the intended outcomes of the project. This collaborative approach has supported a transparent process in the development of research projects.</p>
<p>3 Facilitate the communication and dissemination of knowledge created through research to:</p> <ul style="list-style-type: none"> • Provide broader awareness of the environmental, economic, and cultural importance of the CLLMM region to all audiences across the Murray-Darling Basin • Provide critical knowledge to First Nations, communities, and end users and to ensure that knowledge will inform decision making. • Enhance prosperity and capacity of the community to mitigate the effects of climate change. 	<p>The engagement and dedicated communication with the RCAF (Research Centre Advisory Forum) play a critical role in the prioritisation and development of the Research Projects. The 30 plus members who represent organisations, community and First Nations also act as conduits for the dissemination of knowledge creation to their broader networks. The RCAF has met 3 times in the first year and is committed to ongoing meetings and communication to ensure the dissemination of knowledge is transparent, equitable and tangible for all audiences.</p> <p>The First Nations Engagement Officer and the Communication and Engagement Coordinator work closely ensure that our First Nations peoples are engaged across the CLLMM region to understand their values, perspectives and cultural knowledge and the impacts in a changing climate. There have been over 90 engagements across 13 organisations to ensure equity of perspectives, appointment of 7 First Nations members on the RCAF and the ongoing delivery and hosting of First Nations workshops to continue learning and understanding of cultural application.</p>

Media outputs

The Centre's communication strategy demands a range of media outputs aligned with engagement activities. These platforms have provided consistent updates on the Centre's events, initiatives and research. All platforms have proven to be equally effective in reaching our broad audience and have maintained attention on all platforms.

The community has continued to respond enthusiastically with regular weekly in-person visitors to the Centre, eager to learn about ongoing activities and share their own stories and experiences related to the CLLMM region.

Key media and communication platforms include:

- Print Media
- Website blogs
- Email
- Newsletters
- Social media posts including Facebook, Twitter and CLLMM Research Centre website.





Events

In its inaugural year, the CLLMM Research Centre has significantly advanced its mission through a robust schedule of events, playing a critical role in achieving its positive outcomes.

The Centre delivered 12 events, attracting a cumulative audience of over 430 participants (Figure 3). A highlight of these events was the Centre's public launch on February 3, 2024, which was attended by more than 300 people, including prominent figures such as Rebekha Sharkie MP and Senators McLachlan and Grogan. The launch garnered extensive praise from the community, underscoring the Centre's impact and outreach. As well as delivering events.

The Centre has also hosted 8 events to date with partner and community organisations (Figure 4).

Another key engagement activity was the recent community Cultural Awareness and History session, conducted by local elder Mark Koolmatrrie. Despite inclement weather, 30 dedicated attendees gathered at the Centre to deepen their understanding of the rich cultural heritage of the CLLMM region.

In addition to organising its own events, the Centre has been an active host for partner and community group events, furthering its engagement efforts. The Centre facilitated 8 such events, drawing over 220 participants. Among these, the most notable were The Living Murray 20th Celebration, which saw 100 attendees, and the MDBA Hydrological Modelling Workshop, which attracted 30 participants. These events have not only enhanced collaboration but also extended the Centre's influence within the CLLMM region and beyond.

The Centre's outreach and engagement efforts continue to grow, showcasing the importance and breadth of work being undertaken. By maintaining and expanding these activities, the CLLMM Research Centre is solidifying its role as a pivotal institution in the region, fostering community connections, and promoting significant environmental and cultural initiatives.

The program aims to provide students with a unique opportunity to undertake their projects in alignment with established research topics developed by the Centre. This structured approach ensures that the students' work is both meaningful and relevant to ongoing scientific inquiries within the Centre.

Participants in the program will benefit from the guidance of experienced research mentors who are part of the Centre's science program. These mentors will provide expertise, support, and direction throughout the students' projects, fostering a deep understanding of scientific research methodologies and practices.

This mentorship will not only help students achieve their academic goals but also inspire them to pursue further studies and careers in scientific fields.

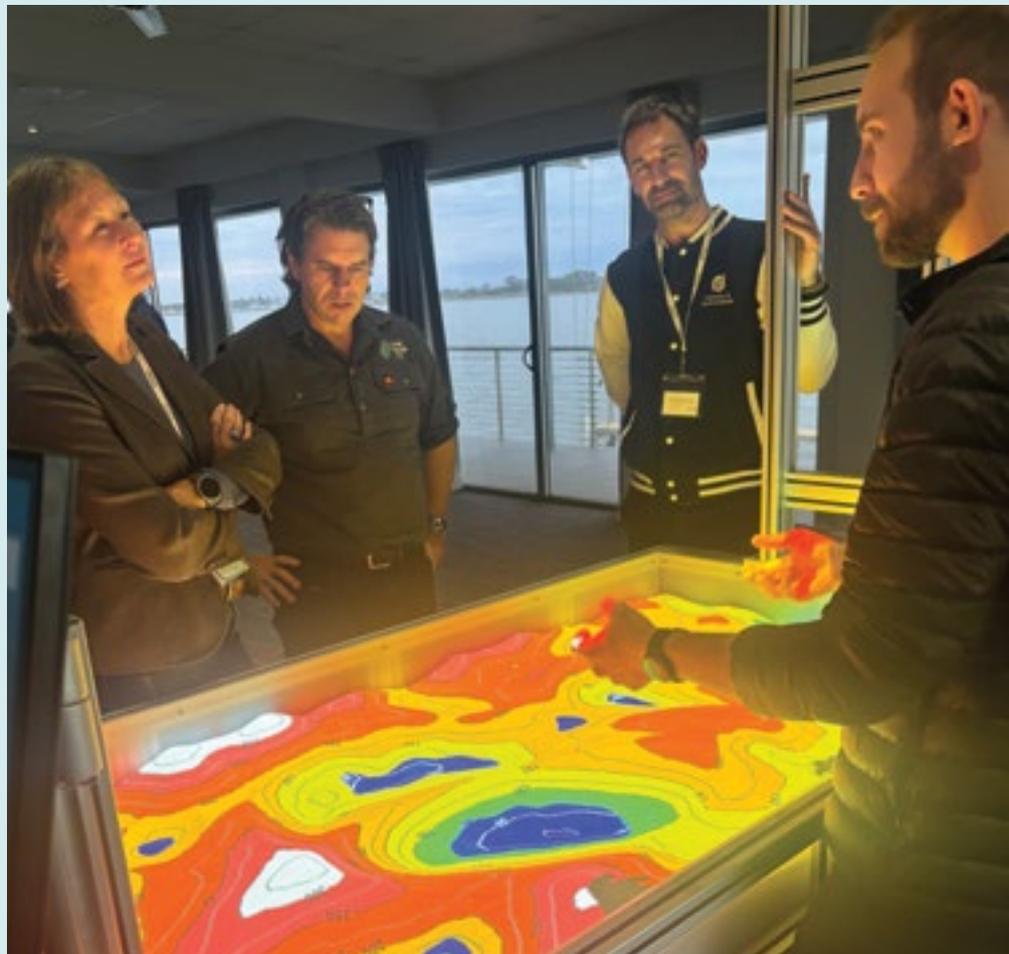
Through this initiative, the CLLMM Research Centre is committed to nurturing the next generation of researchers and strengthening its educational outreach within the region. By integrating students into its research endeavours, the Centre aims to promote a culture of scientific inquiry and innovation, enhancing the educational experience and contributing to the broader community's knowledge and engagement with environmental and scientific issues.

Education program

In 2025, the CLLMM Research Centre will launch a collaborative initiative with 10 schools throughout the CLLMM region, inviting 20 students to engage in a comprehensive research mentoring program.

This initiative is designed to support students in fulfilling their South Australian Certificate of Education (SACE) requirement, which includes the completion of a Research Project during their senior schooling years.

Incorporating First Nations culture into the research projects will be facilitated by including mentorship by First Nations elders or community members.



Volunteer program

In April 2024, the CLLMM Research Centre established its CLLMM Volunteer Group to strengthen community involvement and support the increasing number of events the Centre delivers and hosts. Currently, the group consists of 10 dedicated volunteers who not only assist with engagement activities but also serve as ambassadors within the broader community.

These volunteers actively share information about the Centre's initiatives and disseminate knowledge gained from various events and activities.

A recent highlight for the Volunteer Group was the Centre's facilitation of their participation in the South Australia Volunteering Conference. The conference provided a platform for the wider South Australian volunteering community to learn about the CLLMM Research Centre and explore ways to get involved.

The volunteers attending through the Research Centre valued the opportunity to engage with a wider audience and gain insights into effective volunteering practices.

The establishment of the CLLMM Volunteer Group underscores the Centre's commitment to fostering a strong community connection and developing community capacity and capability.

By enhancing volunteer engagement, the CLLMM Research Centre is not only increasing its outreach and support for events but also building a network of informed advocates who can share the Centre's mission and achievements throughout the community.



Conclusion

The CLLMM Research Centre's communication and community engagement efforts have been intensive and comprehensive, ensuring a robust presence and deep community connections.

From brand creation and media engagement to educational initiatives and cultural awareness events, the Centre has successfully laid a strong foundation for continued community involvement and support.

The upcoming Annual Science Forum in June 2024 represents a key milestone for the Centre, with extensive planning and engagement ensuring it will be a significant event for the Centre and the broader community.



Figure 3 – CLLMM Research Centre delivered events

No	Date	Group	Event	Location	Attendees
1	14.10.2023	Community	Coonalpyn Show	Coonalpyn	25
2	14.11.2024	School	Goolwa Secondary College e-DNA	Amelia Park Playground	15
3	21.11.2023	Small Business	Community Conversation	Alexandrina Business Hub	14
4	15.01.2024	Coorong District Council	Community Conversation	Coorong District Council	9
5	29.01.2024	Alexandrina Council	Community Conversation	Alexandrina Council	14
6	03.02.2024	Goyder Institute for Water Research	CLLMM Research Centre Launch	CLLMM Research Centre	300
7	26.02.2024	School	Mount Barker Waldorf school visit	CLLMM Research Centre	21
8	26.04.2024	Volunteers	CLLMMRC Volunteer Program Workshop	CLLMM Research Centre	10
9	20.05.2024	Murray Bridge Council	Community Conversation	Murray Bridge Council Chambers	6
10	13.05.2024	Raukkan Community Council	Community Conversation	Raukkan Community Council	1
11	21.05.2024	Government	Chinese Delegate visit	CLLMM Research Centre	22
12	30.05.2024	Kool Tours	Cultural Awareness & History session	CLLMM Research Centre	30

Figure 4 – CLLMM Research Centre hosted events

No	Date	Group	Event	Location	Attendees
1	19.01.2023	Ngarrindjeri Aboriginal Corporation (NAC)	Fairy Tern Training Workshop	CLLMM Research Centre	10
2	28.02.2024	Department of Environment and Water (DEW)	The Living Murray 20 th Celebration	CLLMM Research Centre	100
3	04.02.2024	Ngarrindjeri Aboriginal Corporation (NAC)/SA Drought Hub/Bureau of Meteorology (BOM)/ Department of Environment and Water DEW	Seasonal Calendar	CLLMM Research Centre	30
4	17.05.2024	Murray Lands and Riverland Landscape Board (MRBL)	Partner Meeting	CLLMM Research Centre	3
5	21.05.2024	Murray Darling Basin Authority (MDBA)	Hydrological Modelling Workshop	CLLMM Research Centre	30
6	24.05.2024	Ngarrindjeri Aboriginal Corporation (NAC)	Snake Awareness Workshop	CLLMM Research Centre	16
7	29.05.2024	University of Adelaide (UoA)	Presented to exchange students from USA	CLLMM Research Centre	12
8	29.05.2024	Australian River Restoration Leaders Workshop	Presented to Emerging Leaders Workshop	CLLMM Research Centre	22

Figure 5 – Communications and engagement organisations engagement table

No	Organisation	No	Organisation
1	ABC National Rural Affairs	34	Hartman Aboriginal Cultural Education
2	ABC Radio (SA)	35	Hydrobiology
3	Alexandrina Business Hub	36	Kool Tours
4	Alexandrina Council	37	Lakelander Publication
5	Alexandrina Councillors	38	Limestone Coast Landscape Board
6	Armfield Slipway	39	Lloyd Environment Pty Ltd
7	Australian River Restoration Centre	40	Murray Darling Basin Authority (MDBA)
8	Birks Harbour Marina	41	Miwi-inyeri Pelepi-ambi Aboriginal Corporation (MIPAAC)
9	Burrandies Aboriginal Corporation	42	Murray Bridge Council
10	Canoe the Coorong	43	Murray Lands and Riverland Landscape Board (MRBL)
11	Carscratch Designs	44	Murray Valley Standard
12	Commonwealth Environmental Water Holder (CEWO)	45	Nature Glenelg Trust (NGT)
13	Cittaslow Goolwa	46	Ngarrindjeri Aboriginal Corporation (NAC)
14	Coastlines Magazine	47	Ngulkye Consulting Services
15	Community Members	48	Notable Print
16	Coorong District Council	49	Paddlesteamer
17	Coorong Shacks	50	River Basin Management Society (RBMS)
18	Country Arts SA	52	Rebekha Sharkie MP
19	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	52	Research Centre Advisory Forum (RCAF)
20	Curtin University	53	River, Lakes and Coorong Action Group
21	Dalhousie University, Canada	54	Second Nature Conservancy
22	Department of Climate Change, Energy, the Environment and Water (DCCEEW)	55	Shuyu Sun – Taihu Basin
23	Department of Environment and Water (DEW)	56	Spirit Australia Cruises
24	Encounter Lutheran College	57	Steamranger
25	Fleurieu Marine Education	58	The Fleurieu Sun
26	Fleurieu Peninsula Tourism	59	The Living Murray (TLM)
27	Flinders University	60	The Victor Harbor Times
28	Goolwa Marine	61	University of South Australia (UniSA)
29	Goolwa Regatta Yacht Club	62	University of Adelaide (UoA)
30	Goolwa Secondary School	63	Victor Harbor Council
31	Goolwa Slipway	64	Waldorf Secondary School
32	Goolwa Vintage Boat Club	65	Water Tech
33	Greening Goolwa	66	Wooden Boat Festival





First Nations

First Nations people and culture contains a unique connection to the land and waters of their local environment. It is important to recognise and utilise the knowledge of the First Nations people and culture to promote a healthier CLLMM region.

55

targeted meetings aligned with First Nations engagement

90

total engagements across 13 organisations and community

7

First Nations appointed RCAF members

50

individual First Nations through the CLLMM Research Centre door

90

entries to date into the developed First Nations database

4

workshops hosted

3

workshops facilitated

The First Nations Engagement Plan continues to guide our work and strive towards the key objectives to incorporate First Nations knowledge, culture, and people of the CLLMM region into the research projects delivered by it;

<p>1 The CLLMM Research Centre aims incorporate First Nations knowledge, culture, and people of the CLLMM Region into the research projects delivered by it. First Nations people and culture contains a unique connection to the land and waters of their local environment. It is important to recognise and utilise the knowledge of the First Nations people and culture to promote a healthier CLLMM region.</p>	<p>First Nations values, knowledge and perspectives have been included at each step of the 23 research projects planning and development stage.</p> <p>Refer Science Program 10 step summary.</p>
<p>2 Empowering First Nations communities within the CLLMM region to lead the generation and sharing of knowledge from the research projects within their own Sea-Country (e.g. Ngarrindjeri Yarluwar-Ruwe). The CLLMM Research Centre aims to build the capacity of First Nations people to continue to care for the region beyond its operational term and help to inform future decision-making processes made by/impacting on First Nations people of the CLLMM.</p>	<p>To date the CLLMM Research Centre hosted 4 workshops and facilitated 3 workshops. They have been purposeful workshops focusing on Cultural Knowledge sharing and Waterbirds generating and building capacity of First Nations people to continue to nurture the CLLMM region.</p> <p>Two Cultural Awareness Sessions have been run for the community, promoting broader awareness of First Nations and culture in the CLLMM region. These will continue as an offering as our audience grows and become increasingly interested and invested in the CLLMM Research Centre.</p>
<p>3 Supporting the culturally appropriate use of First Nations knowledge and culture within the scope of the CLLMM Research Centre and its research projects.</p> <p>This includes supporting the withholding of culturally sensitive information to the broader public if requested by the First Nations communities, along with providing culturally safe mediums to openly share culturally sensitive information.</p>	<p>The CLLMM Research Centre is progressing with contracting and funding agreements with the Ngarrindjeri Aboriginal Corporation and Burrendies Aboriginal Corporation, enhancing Ngarrindjeri involvement in the Annual Science Forum and Research Centre Advisory Forum. These contracts will allow cultural knowledge to be appropriately shared and in certain case, be withheld. A fully executed MoU with Burrendies Aboriginal Corporation (BAC) and another currently under legal review with Ngarrindjeri Aboriginal Corporation (NAC). Consultancy Services Agreements are currently under review with both Burrendies Aboriginal Corporation (BAC) and Ngarrindjeri Aboriginal Corporation (NAC) to facilitate ongoing engagement, prioritisation of activities, and collaborative action development.</p> <p>Informal and formal discussions are ongoing with First Nations community groups for strengthen relationships for collaboration to ensure diverse representation across all activities and research at the CLLMM Research Centre.</p>
<p>4 Providing broader awareness of the cultural values and history of the region to all audiences across the Murray-Darling Basin.</p> <p>This includes the appropriate sharing of First Nations cultural knowledge to broader audiences in an educational context and to represent a positive model of First Nations engagement practices.</p>	<p>Working closely with the Communications and Engagement Coordinator in the development of the Education Program with seven schools across the region.</p> <p>In 2025, the CLLMM Research Centre will launch a collaborative initiative with 10 schools throughout the CLLMM region, inviting 20 students to engage in a comprehensive research mentoring program. This initiative is designed to support students in fulfilling their South Australian Certificate of Education (SACE) requirement, which includes the completion of a Research Project during their senior schooling years. Incorporating First Nations culture into the research projects will be facilitated by including mentorship by First Nations elders or community members.</p>
<p>5 Build on and improve existing collaborations and connections between First Nations community/organisations and research organisations aiming to engage First Nations people and culture.</p> <p>This includes value adding to current/ongoing engagements outside of the CLLMM Research Centre, and reducing unnecessary engagement fatigue through effective collaboration with other research organisations, institutions, partners etc.</p>	<p>The CLLMM Research Centre has delivered and hosted events within the Centre and out in the region to support the logistics of the First Nations community members and groups. To ease travel time and distance in many cases to visit the communities and peoples in their environments. As well as attending workshops and activities that have been led by the First Nations communities to provide support and develop linkages for the work at the CLLMM Research Centre.</p> <p>The Centre understands the importance of being transient in our delivery and presence to continue collaboration and reduce engagement fatigue. There have been several visits to Raukkan for varying activities as well as planned regular workshops and activities at Murray Bridge, Meningie and Raukkan to capture all the First Nations communities with the CLLMM region.</p>
<p>6 Build positive relationships between governmental departments and local First Nations community and organisations.</p>	<p>First Nations representation on the Commonwealth Steering Committee continues to provide support and guidance on methodologies on sharing and creating knowledge with First Nations peoples. This has also strengthened the relationship and opened opportunities to broader engagement throughout the Murray-Darling Basin.</p>

The established and emerging relationships with the First Nations peoples of the CLLMM region have successfully linked our objectives to our practices. Positive relationships with First Nations people in government departments are developing through linkages within the governance structure, providing guidance around methodologies for First Nations engagement.

The CLLMM Research Centre continues to provide a space for our First Nations partners to facilitate work aligned with the Centre which strengthens local and broader networks within the Basin.

Our key objectives continue to be reflected in all our work, strengthening the foundation to ensure integration of our First Nations culture throughout our Research Projects.

Since its inception, the CLLMM Research Centre has prioritised meaningful engagement with First Nations peoples in the CLLMM region, fostering robust relationships through various initiatives. This report outlines the Centre's efforts, achievements, and ongoing developments in First Nations engagement.



Overview of engagement activities

The CLLMM Research Centre has actively engaged with over 90 individual First Nations people across 13 organisations (Figure 6) since its establishment. More than 50 individuals have been hosted at the Centre itself.

Key engagements include:

- **Ngarrindjeri Community Workshops:** Two workshops facilitated by the Ngarrindjeri Aboriginal Corporation (NAC) saw participation from over 30 community members.
- **Waterbirds Priorities Project Workshops:** Three workshops were conducted with involvement from NAC, Burrendies Aboriginal Corporation (BAC), Murraylands and Riverlands Landscape Board (MRLB), Limestone Coast Landscape Board (LCLB), and South-East Aboriginal Focus Group (SEAFG).



Research Centre Advisory Forum (RCAF)

The Research Centre Advisory Forum has included seven individual First Nations participants across its first two meetings. Plans are underway to increase representation from other organisations in upcoming meetings.

Outreach efforts have secured nominations from First Nations organisations such as Ngarrindjeri Ruwe Empowered Communities (NREC) and Moorundi Aboriginal Community Controlled Health Service Ltd. (ACCHS). Discussions are ongoing with the Raukkan Community Council Inc. (RCC) for further engagement.

Database and communication

The Centre is developing a comprehensive database of First Nations individuals and organisations engaged with the Centre, containing approximately 90 entries to date.

Although not all community members provide contact information, most have reciprocated engagement, reflecting the Centre's commitment to building meaningful connections.

Key agreements and collaborations

- **Memorandum of Understanding (MoU):** A fully executed MoU with Burrendies Aboriginal Corporation (BAC) and another currently under legal review with Ngarrindjeri Aboriginal Corporation (NAC).
- **Consultancy Services Agreement (CSA):** Currently under review with both Burrendies Aboriginal Corporation (BAC) and Ngarrindjeri Aboriginal Corporation (NAC) to facilitate ongoing engagement, prioritisation of activities, and collaborative action development.

The Centre's collaborations and engagements also extend to other First Nations organisations in the CLLMM region such as Miwi-Inyeri Pelepi-Ambi Aboriginal Corporation (MIPAAC), and Raukkan Community Council, enriching the Centre's programs and events.

Cultural and educational activities

The Centre has organised a variety of cultural activities, including:

- **Ngarrindjeri Cultural Education:** Activities for children and community members.
- **Ceremonial Events:** A smoking ceremony and Welcome to Country at the Centre's launch, showcasing local First Nations artwork.
- **Cultural Awareness Training:** Sessions for the Centre team, broader community, and volunteers, focusing on Ngarrindjeri history and culture.

The Centre is actively developing its education program to incorporate First Nations culture, including mentorship by First Nations elders or community members.

Recent and ongoing developments

Recent engagements and developments include:

- **Contracting and Funding Agreements:** Progress with Ngarrindjeri Aboriginal Corporation and Burrendies Aboriginal Corporation, enhancing Ngarrindjeri involvement in the Annual Science Forum and Research Centre Advisory Forum.
- **Community Events and Training:** Hosting Ngarrindjeri Aboriginal Corporation (NAC) and Ngarrindjeri community events at the Centre, including a venomous animals training session and cultural site tours.
- **Cultural Awareness Sessions:** Open-invite sessions for the community, promoting broader awareness of First Nations history and culture in the CLLMM region.
- **Informal and Formal Discussions:** Ongoing interactions with various First Nations organisations and First Nations community groups for relationship building, collaboration to ensuring diverse representation across all activities and research at the CLLMM Research Centre.



A close-up view of a traditional food item, possibly a nargil or a similar ceremonial food, served in a wooden bowl. The food consists of small, round, light-colored items, possibly seeds or small pieces of food, arranged in a circular pattern. There are small wooden labels next to the bowl, one of which reads 'Marrubini'. The bowl is placed on a dark surface.



Conclusion

The CLLMM Research Centre’s commitment to First Nations engagement is evident through its diverse range of activities, collaborations, and ongoing developments.

By fostering meaningful relationships and incorporating First Nations culture into its programs, the Centre aims to promote cultural understanding and relevance within the region’s environmental sciences landscape.

Continued efforts to enhance engagement and build robust partnerships will ensure that First Nations perspectives and knowledge are integral to the Centre’s research projects and educational initiatives.

Figure 6 – First Nations organisation engagement table

No Organisation

1	Murray Darling Basin (First Nations Engagement Officer)
2	Murraylands and Riverland Landscape Board
3	Burrandies Aboriginal Corporation (BAC)
4	South-East Aboriginal Focus Group (SEAFG)
5	Moorundi
6	Ngarrindjeri Ruwe Empower Communities (NREC)
7	Raukkan Community Council
8	Ngarrindjeri Regional Authority (NRA)
9	Kool Tours
10	First Nations South-East Community members
11	Ngarrindjeri community members
12	Ngulkye Consulting Services
13	The Circle – First Nations Entrepreneur Hub





Science Program

The Science Program of the CLLMM Research Centre continues to guide our work and strive towards our key objectives.

300+
people (formal and informal) have inputted into the Science Program

112
targeted meetings and informal catchups providing the input

67
research topics distilled from hundreds of identified research ideas, prioritised through the RCAF

23
projects included in the Science Program aligning with Climate Adaptation, Ecosystem Services, Climate Mitigation and Threatened Species & Biodiversity research themes

82
researchers (with 126 individual project EOIs) forming project teams based on EOIs across Goyder Institute research partnership and local researchers

<p>1 Engage the community and community groups, First Nations, and management agencies, and leading scientists.</p>	<p>Engagement with over 300 people both formally and informally has laid the foundation for a strong Science Program and the development of 23 projects. Project teams have been established based on EOIs from 82 researchers.</p>
<p>2 Develop and implement locally driven, innovative and impactful research that reflects community and First Nations priorities to provide an evidence base to address critical needs of the CLLMM region as well as informing decision making across the broader Murray-Darling Basin scale.</p>	<p>Refer Science Program 10 step summary.</p>
<p>3 Collaboration to enhance existing or forthcoming projects to increase knowledge capacity within the CLLMM region to support the identification of management actions for achieving ecological outcomes that underpin the cultural, social and economic well-being of the region.</p>	<p>A collaborative and inclusive approach has been implemented to capture the values and perspective of a broad range of community, First Nations and management agencies, achieved through multiple platforms, both formal and informal.</p> <p>Including consultation with over 300 people to harvest local knowledge and values, regular input from RCAF members, community survey which attracted over 80 replies, through ongoing planned events and activities within the Centre (over 1000 people through the door) and the broader region, through regular Commonwealth Steering Committee meetings, adhoc presentations to inform community about the Centre and its research, engagement with over 80 First Nations individuals across 12 organisations, the imminent launch of an Education Program all have contributed to existing projects and will remain a part of the CLLMM Research Centre for engagement in forthcoming projects.</p>

First Nations and stakeholder engagement

- Reflecting local concern about the need to understand and respond to climate change impacts in the region.
- Extensive community, First Nations and management agency engagement is continuously undertaken to ensure we are informed by the values and priorities of community, and First Nations and align with the management and policy needs of research and end-users.
- Input from a broad range of stakeholders helps shape the direction and research priorities of the program.
- Engagement undertaken has included review of previous research priorities, informal discussions, community conversation events, community forums and presentations, foundational scoping projects, strategic meetings with key community, First Nations and research-users and through Research Centre Advisory Forum (RCAF) meetings.

Research Centre Advisory Forum (RCAF)

The RCAF plays a fundamental role in identifying and prioritising research topics through extensive consultation and the implementation of a prioritisation process which has been facilitated during the first two Research Centre Advisory Forum (RCAF) meetings.

Leading into each RCAF meeting, members were acquainted with the research themes and topics, allowing them time to pose questions and offer feedback. Throughout the RCAF meetings, participants individually prioritised four **research themes** to provide guidance on the relative allocation of resources across the themes.

Subsequently, the RCAF engaged in an interactive exercise, nominating their top10 research project topics from a pool of 40 research topics. This interactive process fostered additional discourse and collaboration among members, facilitating the sharing of areas of significance.

The scores for research topics were summed to allow ranking of priority research topics. Through this process, priority **research topics** were identified.



Research themes

Four overarching research themes have been established and supported by the RCAF membership to guide the structured approach of the Science Program:

- Climate Adaptation
- Ecosystem Services
- Climate Mitigation
- Threatened Species and Biodiversity.

Science Program structure

The Science Program is organised into four main project types:

1. Foundation Scoping Projects
2. Flagship Projects
3. Research Projects
4. Knowledge Sharing and Capacity Building Projects.

Foundational Scoping Projects

Foundational scoping projects aim to synthesise previous work and current thinking to identify priority research areas within key topics of importance to the region.

- Scoping projects such as the Waterbird and Iconic Species projects are underway to identify further research priorities.
- The First Nations scoping project is currently in development.

Knowledge Sharing and Capacity Building Projects

Knowledge Sharing and Capacity Building projects aim to provide innovative ways to share and generate knowledge whilst fostering expertise in First Nations and community as well as managers and researchers.

The knowledge sharing and capacity building projects will focus on innovative ways to share and generate knowledge by the Research Centre.

This currently includes:

- An 'Immersive Experience' as a platform to convey changes across the region.
- An 'honours grant program'.

Additional knowledge sharing opportunities will be continuously identified.

Flagship Research Projects

Flagship projects aim to address critical aspects of the impact of climate change which will guide transformative change in knowledge and understanding across the region.

- Four flagship research projects have been identified and will be led by dedicated teams with input from key stakeholders.
- These flagship projects will commence in mid-2024 and continue until 2026. These flagship projects will focus on Climate Adaptation, Ecosystem Services, Blue and Teal Carbon Potential and Estuarine Connectivity.

Research Projects

Research projects aim to provide knowledge of the status and implications of climate change on key thematic areas across the region.

Through comprehensive engagement, nine priority research topics were identified in April 2024 by the Research Centre Advisory Forum (RCAF) members:

5. Socio-economic impacts of cumulative droughts and floods
6. Optimizing water management
7. Landscape revegetation – current benefits/risks and future strategy
8. Synthesis of drought ecology and recovery and drought preparedness
9. Coastal dune migration and protection
10. Ocean beach ecology and threats
11. Conserving and managing small-bodied threatened fish (including reestablishing the locally extinct Yarra pygmy perch)
12. Waterbirds
13. Floodplain mussel/Lokeri monitoring and awareness.



Project development and progress

- All projects are currently being scoped out, identifying knowledge gaps, proposed objectives, methods, key stakeholders, linkages within the broader region and Murray-Darling Basin, and connections with other CLLMM Research Centre projects. Through engagement of RCAF, CSC and individual organisational discussions, research outputs will be provided in a timely manner, where possible, for organisations to consider the knowledge created at a regional scale, informing broader basin decision making.
- An Expression of Interest (EOI) process was conducted through the Goyder Institute for Water Research partner organisations and local researchers to establish project teams with expertise and capacity to develop and deliver research projects. This resulted in 82 researchers expressing interest across 126 individual EOIs.
- Progress is being made toward identifying project leads and establishing project teams with specific community, First Nations and end-users. Project scope is establishing, along with objectives, tasks and timeframes, articulation of project team roles, incorporation of stakeholder perspective, and identify opportunities for stakeholders to connect with project delivery. This collaborative planning process will ensure that projects address knowledge gaps and avoid overlap with other projects and the work of stakeholders across the region. It also guaranteed that projects aligned with overarching climate change focus and the research themes of the Science Program. Connection to community and First Nations will take place during each stage of delivery and project management to reflect the CLLMM Research Centre model of practice.



Conclusion

The Science Program's varied approaches to project identification and development ensure alignment with community and First Nations priorities.

By addressing critical management needs of the region and the broader Murray-Darling Basin, the program is well-positioned to advance understanding and develop solutions for the impacts of climate change.



Figure 7 – CLLMM Research Centre delivered Science project specific workshops

No	Date	Group	Event	Location	Attendees
1	23.01.2024	Research	Waterbird Workshop	CLLMM Research Centre	10
2	15.02.2024	Research	Waterbird Workshop	Murray Bridge	10
3	23.02.2024	Research	Waterbird Workshop	FNSE (online)	10

Figure 8 – Science Program 10 Step Summary

(* These steps will be run concurrently)

Step	Activities	Approaches	Outcomes	Involvement
1	Engagement with community, First Nations, and research-users to confirm research themes and identify broad research topics	<p>The Science Program Manager led stakeholder engagement, employing diverse platforms for targeted consultation to confirm support for the research themes of the Research Centre and identify broad research topics.</p> <p>These included summarising engagement and research prior to the establishment of the Research Centre, community surveys, targeted meetings with stakeholders, presentations at community conversations, and engagement in community activities. In addition, information was gathered through ad hoc conversations and meetings.</p>	<ul style="list-style-type: none"> • Broadly engaged stakeholders (community, First Nations, research-users) • Establishment of levels of interest for involvement of stakeholders • Identification of hundreds of potential research ideas and topics 	Community and First Nations involvement
2	Prioritisation of research topics by Research Centre Advisory Forum (RCAF)	<p>The Science Program Manager directed the prioritisation process executed during the two RCAF meetings. Ahead of these meetings, members were acquainted with research themes and topics, affording them time to pose questions and offer feedback.</p> <p>During the RCAF sessions, participants individually prioritised four research themes and engaged in an interactive exercise to nominate and discuss priority research topics. This interactive process fostered additional discourse and collaboration among members, facilitating the sharing of areas of significance.</p>	<ul style="list-style-type: none"> • Stakeholder ideas distilled 40 research topics • Opportunity to identify additional research topics • Robust process to prioritise research topics • Identification of priority research topics • Detailing of RCAF members interests and experience 	Community and First Nations involvement
3	Identification of researchers through Expression of Interest (EOI) process and establishment of project teams with expertise on research topics	<p>The Science Program Manager developed initial project scopes for priority research topics and initiated an EOI process in accordance with the agreed-upon research topics to gauge interest from the Goyder Institute's research partners.</p> <p>The process identified researchers possessing the requisite expertise and capacity to participate in project teams for the development and delivery of projects. Collaborative discussion, led by the Science Program Manager, resulted in the identification of project leads and finalised project teams.</p>	<ul style="list-style-type: none"> • 82 researchers (126 EOIs) identified from the Goyder Institute partners with expertise and capacity to develop and deliver research projects • Establishment of multi-disciplinary, multi-organisation project teams of world-leading experts • Identification of non-partner project team members to assist with development and delivery 	Community and First Nations involvement

Step	Activities	Approaches	Outcomes	Involvement
4	Planning by project teams with input from stakeholders to develop projects	The project teams, in collaboration with the Science Program Manager, CLLMM Research Centre staff, and relevant stakeholders, will define scope, establish objectives, tasks, and methodologies, develop communication strategies and opportunities for community, First Nations and research-user involvement in delivery.	<ul style="list-style-type: none"> • Opportunity for stakeholders to guide project development • Development of projects that reflect community and First Nations priorities and management needs of research-users • Identification of stakeholders with interest in participating in project delivery 	Community and First Nations involvement
5	Endorsement of the projects by Research Centre Advisory Forum (RCAF) and the Goyder Institute for Water Research, Research Advisory Committee (RAC)	<p>Facilitated by the Science Program Manager, Research Centre governance will evaluate the projects.</p> <p>This involves the RCAF providing support for the progression of the projects based on the project summaries aligning with Research Centre objectives and values and importance to community, First Nations, and research-users. Detailed project plans and budgets will then be endorsed by the RAC based on the assessment of associated risks.</p>	<ul style="list-style-type: none"> • Robust endorsement process capturing advisory forum and Goyder Institute partner perspectives • Opportunity for further feedback on projects 	Community and First Nations involvement
6	Contract approval and project commencement	Liaison between the Science Program Manager, project leads and partner Research Offices will occur to initiate contracting, involving approval of sub-contract agreements and creation of work orders, to facilitate commencement of project.	<ul style="list-style-type: none"> • Establishing contractually agreed tasks and milestones • Timely implementation of project 	
7	Project delivery	Implementation of tasks identified in the project plans will be undertaken using agreed project teams and methodologies.	<ul style="list-style-type: none"> • Implementation of tasks of the project • Generation of research knowledge 	Community and First Nations involvement
8	Connection with community and First Nations	<p>Involvement of community and First Nations on scoping, delivery, and completion phases of each research project. Engagement is between the Communications and Engagement Coordinator, First Nations Engagement Officer, project leads and the Science Program Manager.</p> <p>Opportunities for involvement will vary with each project and each stage of the project and will range from targeted workshops/yarning circles, engagement activities, science forums and volunteering opportunities.</p>	<ul style="list-style-type: none"> • Coordination of volunteers and involvement in research projects • Opportunity to emphasise research outcomes and implications to community and First Nations for further dissemination across wider networks 	Community and First Nations involvement

Step	Activities	Approaches	Outcomes	Involvement
9	Project management : reporting, review, and evaluation	Management of separate projects, including discussions with project leads, budgetary and milestone oversights, risk mitigation, progress reporting and RCAF presentations. Collaborative reporting in line with Research Centre interim and annual report milestones. Research project reporting including technical reporting, factsheets, infographics, and First Nations summaries.	<ul style="list-style-type: none"> • Ensure project is delivered on time and on budget • Provide feedback mechanism to facilitate effective project management and delivery • Establish pathway to share project progress, identify challenges and risks, and articulate research outcomes 	Community and First Nations involvement
10	Knowledge dissemination and assimilation	Knowledge dissemination of research outcomes occurs across all research governance of the CLLMM Research Centre and the Goyder Institute for Water Research as well as to management agencies. Knowledge is then disseminated across wider networks. Knowledge transfer occurs through community and First Nations annual science forums, public educational workshops and events, and regular communications.	<ul style="list-style-type: none"> • Establish tailored approaches to distribute project outcomes to community, First Nations and research-users • Provide platform to inform policy and decision-making 	Community and First Nations involvement



Figure 10 – Science Program organisation engagement table

No	Organisation	No	Organisation
1	Alexandrina Council	24	Murray Bridge Council
2	Australian River Restoration Centre	25	Murray Darling Basin Association
3	AU2100	26	Murraylands and Riverland Landscape Board
4	BioR	27	Nature Glenelg Trust
5	Birdlife Australia	28	Ngarrendjeri Aboriginal Corporation (NAC)
6	Burramdies Aboriginal Corporation (BAC)	29	One Million Turtles initiative
7	Canoe the Coorong	30	RAMSAR
8	Charles Sturt University	31	RCAF members
9	Commonwealth Environmental Water Holder (CEWO)	32	RecFish SA
10	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	33	River Lakes and Coorong Action Group
11	Community members	34	River Murray Ops – MDBA
12	Coorong District Council	35	Murray Bridge Council
13	DCCEEW	36	SA Drought Hub
14	DEW	37	SA National Parks and Wildlife Service
15	Healthy Coorong, Healthy Basin (DEW)	38	Shorebirds SA
16	EcoProTeam	39	South-East Aboriginal Focus Group
17	Flinders University	40	South-East First Nations community members
18	Friends of Shorebirds SE (FoSSE)	41	Spirit of the Coorong
19	Friends of the Coorong	42	Steamranger
20	Hills & Fleurieu Landscape Board	43	The Living Murray (TLM)
21	Hindmarsh Island Landcare Group	44	University of Adelaide (UoA)
22	La Trobe University	45	University of South Australian (UniSA)
23	Limestone Coast Landscape Board	46	University of Melbourne





Finance Report

The science program has been co-developed following significant engagement with community, First Nations, decision-makers, and scientists.

Foundational scoping projects to inform larger-scale research projects have been initiated during year 1, the governance endorsement and subsequent contracting phase for initiating the larger scale research is progressing.

It is anticipated that the majority of research projects will be initiated in Q1 of the 2024-2025 financial year, with payment schedules aligned appropriately. Consequently, budget expenditure during year 1, particularly for the science program, has been lower than anticipated.

However, it is forecast that the completion of contracting and initiation of projects during Q1 2024-25 will enable expenditure for these projects. As a result, funds are necessary at this stage to ensure the upcoming financial commitments required to deliver the science program are available.

CLLMM Research Centre Year One Financial Summary – 01/07/2023 – 30/06/2024

Labour (excluding On Costs)	\$337,465.73
Labour on Costs (30%)	\$144,628.17
Contract Costs	\$217,597.10
Marketing and Communications	\$4,978.32
Domestic Travel	\$12,462.77
Training Costs	\$1,000.00
Total (ex GST)	\$718,132.09

CLLMM Research Centre Forecast Summary – 30/06/2024 – 31/12/2024

Labour (excluding On Costs)	\$342,585.00
Labour on Costs (30%)	\$85,931.00
Contract Costs	\$2,227,900.00
Marketing and Communications	\$35,000.00
Domestic Travel	\$12,500.00
Training Costs	\$3,000.00
Total (ex GST)	\$2,706,916.00



“The emerging research project plans look to cover many of the issues in the Region. CLLMM being one year into a 3-year project, one key future aspiration must be a continuation of this project after the current 3-year funding finishes.

I would hope that CLLMM could become a fixture in Goolwa to stay connected to the ongoing developments of these issues and continue to find ways to combat them.

They are not going to go away after the 3 years of funding is finished. The emergence of CLLMM as a central focus point for related environmental and climate groups to gather and connect to the community is also a very positive sign for the region.”

– Local community member Kenn Fisher



CLLMM Research Centre Launch

February marked a significant milestone for the CLLMM Research Centre with its official launch on the 4th of February, in alignment with World Wetland Day (3 February), officially opened by Rebekha Sharkie MP.



Other prominent figures in attendance included Federal Senators McLachlan and Grogan, who underscored the importance of the Centre's mission and its positive impact for the community. The event attracted over 300 attendees.

The launch was met with overwhelmingly positive feedback, reflecting robust support and keen interest in the Centre's initiatives aimed at advancing research and community and First Nations engagement.

The involvement of the Ngarrindjeri community was particularly noteworthy, emphasising the Centre's commitment to inclusivity and collaboration with Indigenous groups. Their participation added a rich cultural dimension to the event, fostering a deeper connection between the Centre and the local communities it aims to serve.

Key happenings attributed to the success of the day offering the audience interactive activities.

The introduction of the immersive augmented reality sandbox was a huge hit across all generations. Along with four stations set up, showcasing some of our research on Waterbirds, Native Fish, Macroinvertebrates and Ngarrindjeri cultural education activities.

The broader community members who attended the launch were eager to learn more about its research programs and express their excitement about participating in future activities.

This enthusiastic response not only highlighted the Centre's successful launch but also set a promising tone for its ongoing efforts to promote research, education, and community involvement.

The Centre's initiatives promise to bring significant benefits to the region, addressing local challenges through innovative research and fostering a collaborative environment where community and First Nations input, and participation are highly valued.

The strong turnout and positive reception at the launch event signal a bright future for the CLLMM Research Centre as it embarks on its journey to make a meaningful impact.



Community Survey

The development and release of the Centre's Community Survey in November 2023 was one of the initial and crucial activities undertaken to gather key information from residents in the Coorong, Lower Lakes, and Murray Mouth (CLLMM) region, as well as from people beyond this area. The primary goals of the survey were to identify the community's values, assess their understanding of climate change, and uncover knowledge gaps that exist within the region regarding environmental issues and water management.

1,187
people viewed the
Community Survey

84
total survey
responses

100%
completion
rate

74%
of people rated
Environmental the most
important value to
the region, followed by
cultural 11%, Social 10%,
and Economical 5%

75%
believed their value
would be impacted
by climate change,
25% said there would
be no impact from
climate change

47%
identified a moderate
amount of First Nations
cultural awareness,
25% a little, 15% a lot,
10% a great deal,
and 3% none at all

73%
said yes to the 'Belief that
climate change will impact the
CLLMM region', 19% said yes
somewhat, 1% said no impact,
and 7% don't believe in human-
induced climate change

#1
Water Management was voted
most important area for research
in order of importance followed
by 2. Biodiversity, 3. Climate
Change, 4. First Nations, 5. Land
Management, 6. Socio-economic

The primary goals of the survey were to identify the community's values, assess their understanding of climate change, and uncover knowledge gaps that exist within the region regarding environmental issues and water management.

To ensure comprehensive outreach and participation, the CLLMM Research Centre implemented a multifaceted approach to distribute the survey.

We reached out to the community through a variety of channels, including digital and print media, social media platforms, and paper forms. This broad dissemination strategy was complimented by engaging with community members during in-person meetings, ensuring that everyone had the opportunity to contribute their perspectives and insights.



The responses collected from the survey have been instrumental in shaping the direction of the CLLMM Research Centre's activities and research. The information gathered provides an understanding of the community's values and concerns, particularly in relation to climate change and its impact on the region. By highlighting specific knowledge gaps, the survey results have also informed the research priorities of the Centre, allowing for the development of targeted projects that address the most pressing issues identified by the community.

Moreover, the survey findings are guiding future engagement activities. By understanding the community's baseline knowledge and areas where further education is needed, the CLLMM Research Centre can develop more effective outreach programs and communication strategies.

This ensures that the community remains well-informed and actively involved in the ongoing efforts to manage and protect the CLLMM region.

Overall, the Community Survey has been a foundational tool in establishing a dialogue between the CLLMM Research Centre and the local population. It has not only provided critical data for research and planning but also fostered a sense of collaboration and mutual understanding, which is essential for the successful management of the region's natural resources.

Science in the Pub

Over 100 attendees came along to Science in the Pub on 2nd February 2024 to delve into the intricate environmental history of “The Coorong, Lower Lakes, and Murray Mouth: A Journey Through Droughts and Floods.”



Following Dr. Whiterod, Associate Professor Luke Mosley took the stage to focus on the period following the millennium drought, particularly the response of the region’s environment to the floodwaters of 2022-23. His presentation delved into the complexities of soil quality changes, emphasising how floodwaters can alter the nutrient dynamics and soil structure in these sensitive wetland areas.

Cassandra Urgl wrapped up the series with a compelling exploration of how aquatic plants have responded to the changing environmental conditions brought about by both drought and flood events. Her research shed light on the resilience and adaptability of these plant species, offering a hopeful perspective on the future of the Coorong and Lower Lakes ecosystems.

The audience was highly engaged throughout the evening, participating actively by posing thoughtful and varied questions that enriched the discussions. Their support and enthusiasm contributed to the vibrant atmosphere of the event, reflecting a strong community interest in local environmental issues.

We extend our gratitude to the ‘Science in the Pub’, Adelaide team for their exceptional effort in organising and hosting such a popular event. Their dedication and hard work, all performed by committed volunteers, were crucial in bringing together experts and the public to foster a deeper understanding of these critical environmental topics.



This engaging event featured three exceptional presentations by experts in the field: Nick Whiterod from the CLLMM Research Centre - Goyder Institute for Water Research, Associate Professor Luke Mosley, and Cassandra Urgl, both of whom are affiliated with the University of Adelaide.

Nick Whiterod kicked off the session with an insightful overview of the Coorong and Lower Lakes, discussing the ecological conditions before the millennium drought and detailing the significant changes that occurred during this prolonged dry period. He highlighted the various challenges faced by the ecosystem, including shifts in salinity levels and the resultant impact on local flora and fauna.



Community Conversations

The CLLMM Research Centre has actively engaged with local councils in the region through a series of four Community Conversations, aiming to diversify their approach to community engagement.

Recognising local councils as vital conduits for information dissemination and connections to broader community groups, the Centre presented to a small business owners group in Goolwa, Alexandrina Council, Coorong Community Council, Murray Bridge Council, and Raukkan Community Council.

These presentations were well-received, sparking robust discussions about regional values and the Centre's strategies for engaging with the community, First Nations, and research users.

A significant outcome of these engagements is the recruitment of two members for the Research Centre Advisory Forum (RCAF), with plans to expand representation to include Raukkan.

This demonstrates a proactive effort to ensure that Indigenous voices are heard and respected in shaping the Centre's initiatives and research.

This inclusive approach not only enriches the research process but also contributes to the Centre's broader goal of fostering sustainable development and innovation within the region.

Mount Barker Waldorf School Visit



Mount Barker Waldorf School, while visiting the local area and showing a keen interest in the ongoing research in the Coorong, Lower Lakes, and Murray Mouth (CLLMM) region, in March 2024 at the CLLMM Research Centre.

This visit was part of their itinerary, aimed at enriching the educational experience of their Year 11 students.

The students were deeply engaged in learning about the broader context of the Murray Darling Basin and understanding how the CLLMM region, positioned at the terminus of the system, is impacted by various environmental and hydrological factors.

During their visit, the students participated in an interactive water-sharing activity developed by the Murray-Darling Basin Authority (MDBA). The activity challenged the students to balance water allocations among multiple stakeholder groups.

The exercise initiated active debate and critical thinking as students grappled with the complexities of water management, especially in the context of climate change and the increasing frequency of droughts. This hands-on experience provided them with a deeper appreciation of the intricacies involved in equitable water distribution and the competing needs of various users.

Following the water-sharing activity, the students were introduced to the Centre's immersive reality sandbox, an engaging and educational tool that simulates geographical and hydrological processes. The sandbox allowed the students to visualise and manipulate different environmental scenarios, further enhancing their understanding

of the region's dynamics. The immersive nature of the sandbox captivated the students' interest, with many expressing a strong desire to continue exploring the various options and features it presented, long after the formal session had ended.

The visit to the CLLMM Research Centre not only broadened the students' knowledge of environmental science and water resource management but also sparked their curiosity and enthusiasm for further learning. The immersive and interactive elements of the visit, made for an unforgettable educational experience that left a lasting impression on the students.



Organic Growth

The CLLMM Research Centre has achieved extraordinary results that have exceeded our projected outcomes, significantly elevating our overall success and impact.

These achievements are a testament to our innovative problem-solving, adaptive strategies, and the unwavering dedication of our team striving for excellence. The benefits that have emerged from these efforts are multifaceted, providing a robust foundation for future growth and development.



Local Business Connectivity and Community Engagement

One of our standout accomplishments is the successful connectivity to and utilisation of several local businesses, suppliers, and service providers. This has resulted in the creation of valuable local partnerships and broader community engagement.

Notably, we have collaborated with a local caterer specialising in Native Foods, enhancing our events with culturally significant and locally sourced cuisine. Additionally, our partnership with a local tourism company has fostered greater community involvement and promoted regional attractions, further integrating the CLLMM Research Centre into the local fabric.

Community Space Utilisation

The CLLMM Research Centre has also provided a versatile space for our research and community partners.

This space is available for various activities, including community engagement initiatives, meetings, and hosting Annual General Meetings.

By offering this facility, we have strengthened our ties with the broader community and supported the operational needs of our partners, thereby enhancing collaborative efforts and community presence.

International Collaboration

Our strong international industry relationships have been pivotal in expanding our reach and influence. In May 2024, the Goyder Institute for Water Research hosted five representatives from the Jiangsu Provincial Department of Ecology and Environment in China.

This event provided a platform to share insights on the governance and management regime of the Murray-Darling Basin and highlighted the Goyder Institute's role in bridging policy-research gaps.

This collaboration not only showcased our expertise but also reinforced our position as a leader in international water research and policy development.

Regional Engagement and Climate Change Communication

We have also received offers to partner with correlating organisations to generate increased interest and engagement in our region. For instance, staff members from the CLLMM Research Centre have been invited to participate as panellists at regional events focusing on climate change.

This involvement underscores our commitment to addressing global environmental challenges and positions us as key contributors to regional and international discourse on climate issues.

Global Recognition and Research Initiatives

Our Centre has been recognised globally through our selection as one of the Global Lakes Sampling eDNA sites. Out of 770 lakes chosen across six continents, three sites across Lake Alexandrina will be sampled.

This involvement, scheduled for a month within the 22nd of May, highlights our commitment to contributing to global environmental monitoring efforts.



Conclusion

These remarkable achievements have led to increased stakeholder satisfaction and have opened numerous opportunities for further growth and development.

They validate our initial vision and planning while highlighting the potential for even greater accomplishments beyond our original projections. The data and insights gained from these successes are invaluable for developing and structuring future research projects, optimising operational efficiencies, deepening community engagement, driving economic growth, and refining business strategies.

The CLLMM Research Centre continues to set new benchmarks for excellence, innovation, and community integration, ensuring a lasting impact on both the local and global stages.



Program Assessment

The CLLMM Research Centre will provide an overview and analysis of how the program is progressing and performing in relation to achieving the objectives and intended outcomes of the Research Centre as outlined in the Granting Agreement. This is undertaken through Milestone Reporting which will be demonstrated by seven Milestone Reports throughout the life of the funding term. This is represented through regular Progress Reporting informing all levels of Governance, Interim Summaries and Yearly Progress Reports. To date Milestones 1 and 2 are complete and signed off and the Year One Progress Report is the key output of Milestone 3 for approval.

The CLLMM Research Centre has achieved significant milestones in its first year by building a solid foundation, engaging with key stakeholders, and launching crucial research projects. Its collaborative approach, which integrates First Nations knowledge and community engagement, positions it well for ongoing success and impact on the region's climate resilience and sustainability.

Extensive and diverse engagement aligned with the Science Program's research projects has been developed to incorporate critical local knowledge from First Nations, governments, and researchers, supporting management actions for the restoration and sustainability of a healthy CLLMM region.

The contribution from the community and First Nations has been remarkable, evident across all areas of the project as we continue to align with our granting agreement.

With a strong focus on knowledge sharing, increasing understanding of climate change implications on the CLLMM region, and strategies for mitigation and adaptation, the project's first year has been highly successful.

This success is validated by the extensive evidence and data gathered to support the growth and sustainability of water research in the CLLMM region.

<p>1 Community and First Nations awareness and understanding of adaptation necessary to address climate change.</p>	<p>The CLLMM region community members and First Nations people are a very engaged and interested audience, who want to participate, learn from, adapt and support research outputs that will nurture their region through climate change scenarios. This is demonstrated through the number of engagements through governing bodies, research project teams, community groups, First Nations individuals, forums, community conversations.</p>
<p>2 A resilient, nature positive CLLMM region delivered through management actions and decision making informed by the knowledge and science generated through the Research Centre.</p>	<p>Research Projects are just about to begin at the CLLMM Research Centre after engaging community, First Nations and management agencies over the past year to gather themes and topics to prioritise research projects. Decision and management actions informed by the generation of science and knowledge will be visible and considered once outputs are produced.</p>
<p>3 Collaboration between First Nations, community, government agencies and researchers to generate and disseminate knowledge.</p>	<p>Engagement and collaboration to date has been very successful with over 80 individuals over 12 organisations to support the research and education program at the CLLMM Research Centre. Refer to the Science Program 10 Step Summary to see the engagement to date and the engagement pathways for the life of the project. Dissemination of knowledge creation is a work in progress to consistently explore the most effective methods of dissemination.</p>
<p>4 A region whose community is engaged in knowledge generation with capacity and capability to address future change.</p>	<p>The engagement with over 1000 people to date, the CLLMM Research will continue to deliver engagement methodologies that the community, First Nations and management agencies respond best to, to continue generate knowledge and build the capacity and capability of the community to address future change.</p>

Benefit Realisation

The CLLMM Research Centre realises significant benefits across cultural, social, environmental, and economic dimensions. Cultural Benefits include active participation of First Nations in designing, leading, and participating in research, appropriate communication of First Nations knowledge to broader audiences, integration of this knowledge into decision-making processes, and capacity development within First Nations communities.

Social Benefits encompass community involvement in research activities, growing appreciation of cultural values

throughout the CLLMM region and beyond, enhanced understanding of the implications of climate change, and the development of partnerships and collaborations that increase local scientific research interactions.

Environmental Benefits feature actions informed by the knowledge generated through the Research Centre that promote a nature-positive CLLMM region, management decisions enhanced by research to improve environmental adaptability, and the use of locally generated knowledge to guide community and First Nations decision-making towards nature-positive actions.

Economic Benefits involve economic returns to the CLLMM community through the engagement of local service providers for the Research Centre, economic benefits for First Nations and the community through participation and leadership in research activities, and increased visitor footfall and duration of visits to the Research Centre's location through the introduction of virtual reality/augmented reality suites.

These benefits will be collated throughout the life of the project and provide strength and advocacy for a sustainable future of the Centre as the project matures.

<p>1 Provide critical knowledge to inform the identification of future management actions such that CLLMM biota and ecosystems adapt to a changing climate, the desired environmental outcomes of the Basin Plan are achieved, and international (Ramsar) obligations are met.</p>	<p>Fundamental to the success of the CLLMM Research Centre is the quality of the science and the critical knowledge gaps it is addressing. High quality science is being delivered by a network of Goyder partner and local scientists who are internationally recognised in their fields. These scientists are committed to delivering innovative and impactful research that advances understanding of the impacts, and necessary responses, to climate change across the region. The model of operation that embeds local, state and national research-users in the development and delivery of research projects is helping to connections to readily inform decision-making and policy at various scales.</p>
<p>2 Support community well-being, including that of First Nations, through knowledge creation and provision to support management actions for the restoration of a healthy CLLMM that supports local values and the integration and incorporation of the scientific knowledge of First Nations, the community, governments and researchers into the management of the region.</p>	<p>The Research Centre brings together our First Nations, local community and scientists to create and share knowledge, support our well-informed and engaged communities, and empower our future generations to be part of the solution. The model of practice of the CLLMM Research Centre where community and First Nations are involved in all steps of the development and delivery is creating a platform to support for meaningful knowledge generation and sharing. In addition to knowledge generation and sharing linked to our Science Program, we are responding to the needs of the community and First Nations to host and support a wide range of opportunities to share knowledge. This has included snake awareness training, cultural training and MDBA modelling sessions. We will continually be endeavoring to build on the platform we have established to maximise the capacity to support community and First Nations.</p>
<p>3 Enhance the long-term prosperity of the CLLMM region through locally based research in which community and First Nations can participate and lead in cultural and scientific activities.</p>	<p>The local community and First Nations appreciate the significance and uniqueness of the CLLMM region and overwhelming want to help generate and share knowledge to be able to be part of the solution to the impacts of change climate. Our model of operation recognises these values and attempts to foster them in everything we done. From informal community discussions to strategic input into research projects. A fundamental focus has been capacity building of school aged community members. We have hosted more than 100 school students and are developing an education program to link these capacity building into the high school curriculum. This focus will help to further enhance the long-term prosperity of the region.</p>
<p>4 Establish the CLLMM region as a world-leader of the creation, integration and adoption of the scientific knowledge of First Nations, communities, governments and researchers for the sustainable management of wetlands.</p>	<p>The CLLMM Research Centre is implementing a bottom-up participatory approach to developing the Science Program and providing opportunities for community and First Nations and research-user participation throughout project delivery. Importantly, the input of all involved in the Research Centre is valued equally. This approach has rarely been done in Australia and the even the world. The CLLMM Research Centre is committed to continually strengthen and enhance how we achieve the creation, integration and adoption of the scientific knowledge of First Nations, communities, governments and researchers.</p>
<p>5 Develop internationally recognised environmental water leaders in South Australia a local community engaged in science to address future challenges for the region.</p>	<p>Model of operation of the CLLMM Research Centre is establishing a collaborative platform to address the priorities of the community and First Nations as well as the critical management needs of the region. The keys to achieving the network of Goyder partner and local scientists who are internationally recognised in their fields along with the well-informed and passionate local community and First Nations.</p>

Looking Ahead

Looking ahead, we will continue to prioritise strategic engagement as a key focus.

Key strategies for enhancing our engagement efforts will include:

- Establishing clear objectives and measurable outcomes for research and engagement activities.
- Investing in capacity-building initiatives to empower staff and stakeholders with the skills and resources needed for effective engagement.
- Embracing technology and digital platforms to facilitate education and reach diverse audiences.
- Regularly evaluating and reviewing our engagement strategies to ensure continuous improvement and relevance.

The CLLMM Research Centre's second year promises to build upon the solid foundation established in its inaugural year. The next phase will see the implementation of the comprehensive Science Program, which aims to advance research and innovation within the region.

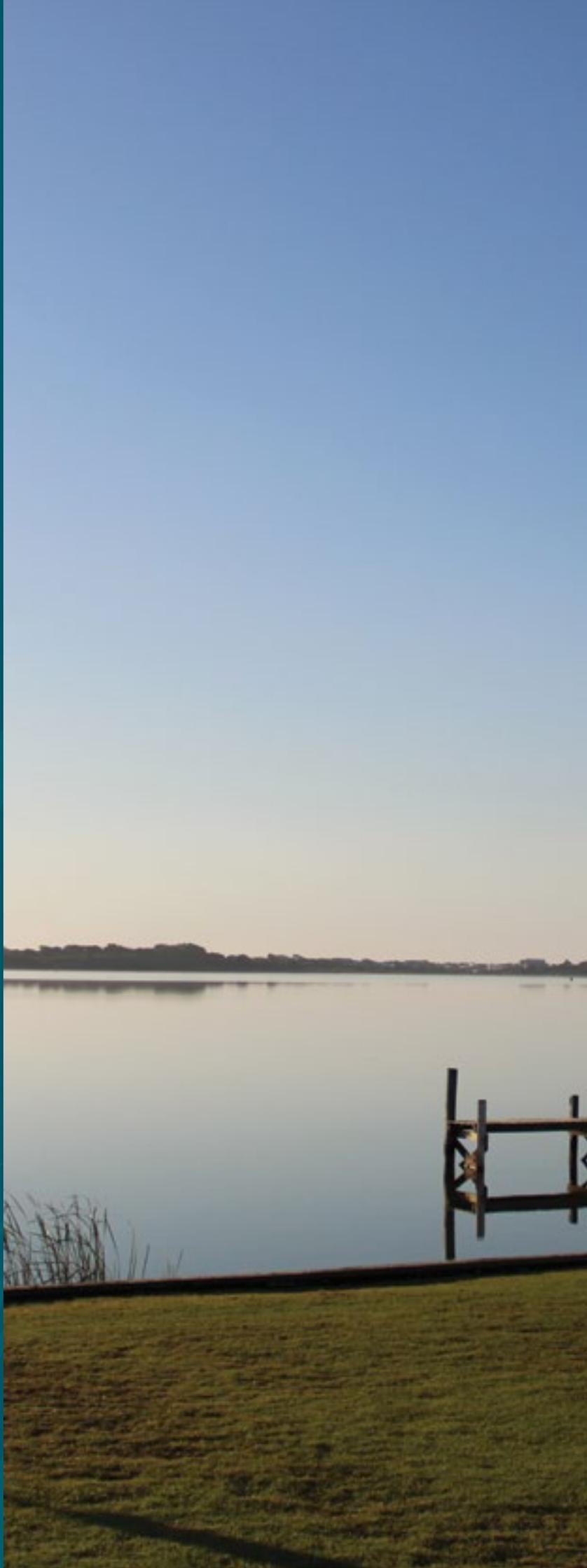
A key focus will be the ongoing engagement with First Nations communities, ensuring their active participation and input in the Centre's activities. This includes the ongoing development and prioritisation of research projects that address the specific needs and interests of First Nations.

Furthermore, the Centre will initiate a horizon-scanning process to identify and understand emerging research areas and future priorities, ensuring that the Centre remains at the forefront of scientific and environmental developments.

The continued development of the Centre's education program will play a crucial role in fostering knowledge and skills among students and the broader community.

Additionally, the Centre will enhance its communications and engagement efforts to raise awareness, foster community involvement, and facilitate broader participation in its work.

These efforts will help solidify the Centre's role as a leader in research and community engagement, driving positive outcomes for the region and its people.



CLLMM
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Appendix 1

Summary of Key Guidance and Decisions by RCAF (Research Centre Advisory Forum)

RCAF01 29th February 2024

1. Introduction of Participation Principles

Objective: Ensure active and inclusive participation in the centre's activities.

Action: Established guidelines for staff and stakeholders.

2. Staff Introduction

Objective: Introduce new staff members and clarify their roles.

Action: Emphasised the contributions and roles of new staff within the governance structure.

3. Ratification of Terms of Reference

Objective: Official approval of the operational framework.

Action: Ratified the Terms of Reference for the governance structure.

4. Director's Presentation

Objective: Provide historical context and operational insights.

Content:

- Historical overview of the Goyder Institute of Water Research.
- Evolution and establishment of the CLLMM Research Centre.
- Design, implementation, and delivery aspects of the centre.
- Governance and reporting structures.

5. Science Program Presentation

Objective: Discuss research activities and engagement strategies.

Content:

- Overview of research activities prioritisation.
- Emphasis on engaging with community, First Nations, and end-users.

6. Research Themes Prioritisation by RCAF Members

Objective: Rank and prioritise research themes.

Process: Individual ranking by RCAF members.

Results:

- **Climate Mitigation and Adaptation:** Focus on threatened species, biodiversity, ecosystem services, and mitigation strategies.
- **Water Research:** Addressing social, economic, environmental, and cultural impacts on communities.

7. Emergence of Flagship Research Projects

Objective: Highlight key projects for discussion.

Projects:

1. **Climate Adaptation:** Investigating regional vegetation's capacity to sequester carbon.
2. **Ecosystem Services:** Exploring the potential of regional vegetation in carbon sequestration.
3. **Estuarine Connectivity (in development):** Understanding regional vegetation's role in carbon sequestration.
4. **Blue/Teal Carbon:** Assessing regional vegetation's potential in carbon sequestration.

8. Interactive Research Topics Prioritisation Activity

Objective: Rank top research topics.

Process: RCAF members ranked their top 10 research topics under each theme.

9. Introduction of the Members Portal as a communication tool

Objective: Overview of portal functions and future uses.

Content:

- Overview of portal functions and purposes.
- Announcement of an instruction manual in the meeting minutes.

10. Communication Enhancements

Objective: Improve communication among members.

Actions:

- Announced member bios on the RCAF members page, including papers and upcoming agendas.

RCAF02 4th April 2024

1. Timeline of CLLMM Research Centre

Discussion: Chair introduced the 'Wheel of Time' which will support members to understand the research project phases and timeline.

2. First Nations

Update: Provided an update on First Nations engagement and collaboration.

3. Science Program Presentation

Research Prioritisation:

- Recap of RCAF01 meeting and prioritisation activities.
- Emphasised the importance of guiding projects based on prioritised themes and topics.

Flagship Projects:

- **Lead Researcher presented on Estuarine Connectivity Project Concept:** Discussed project scope and objectives.
- **Lead Researcher presented on Blue/Teal Carbon Project Concept:** Discussed project scope and objectives.
- **Lead Researcher Climate Adaptation/Ecosystem Services Concept:** Discussed project scope and objectives.

Action Item:

Director to meet with partners to discuss communication pathways for research project within the partner organisations.

4. Comms & Engagement Update

Annual Science Forum:

- Discussed the framework and plan for the forum.

School Education Program:

- Discussed the framework and objectives for engaging with schools.

Appendix 2

Summary of Key Guidance and Decisions by CSC (Commonwealth Steering Committee)

CSC01 21st February 2024

1. Welcome and Introduction

Introduction: All members and organisational roles introduced.

New Chair Announcement: The next meeting will introduce a new Chair.

Agenda: Draft agenda accepted.

2. Introduction to CLLMM Research Centre

First Meeting Objective: Understanding the CLLMM Research Centre and promoting cooperation between Commonwealth agencies and Goyder.

Project Overview: Director of the Goyder Institute for Water Research introduced the CLLMM Research Centre, detailing its inception, delivery phase, and future perspective. Over 300 people, including political figures, attended the launch. Scientific activities and the Augmented Reality Immersive Experience were introduced.

Support and Cooperation: Discussed how the Australian Government can best support the CLLMM Research Centre.

End-User Involvement: Discussion regarding ensuring end-of-river voices are heard through CSC and RCAF governance structures.

Science and Politics: Discussion on maintaining an independent view of science and data of CLLMM Research Centre outputs. Goyder emphasised their role in delivering unbiased scientific information to inform decision-making.

CSC Member Observations:

- Noted the conclusion of the establishment phase and the commencement of the delivery phase from January 1, 2024.
- Emphasised the importance of science translation to decision-making.
- Discussed the project's role in integrating scientific knowledge from First Nations, community, governments, and researchers into regional management.

3. CLLMM Research Centre Governance

Governance Structure: Goyder Institute for Water Research Director, introduced the structure, noting Jodie Swirepik as the new Independent Chair of the Goyder Institute.

Funding Administrator Role: Committee queried and discussed the role and benefits.

Communication: Emphasised ongoing communication for transparency.

Governance Levels: Ensuring local needs are met while informing broader Basin-wide decision-making. Positive evaluation of the model may lead to future replication.

Augmented Reality Experience: Discussed potential adaptation for broader use.

4. Commonwealth Steering Committee

Terms of Reference: Discussion on CSC's role as an advisory body. Agreed on the consolidation of guidance from members.

Conflict of Interest: Agreed to include as a standing item in meetings.

Action Item:

Both parties to review and revise Steering Committee Terms of Reference and distribute to members.

5. Research Centre Presentations

- Science Program Presentation.
- Communications & Engagement Presentation.
- First Nations Presentation.

6. Facilitation between Goyder and Commonwealth Agencies

(This agenda item was addressed on Monday 25th March 2023 at 12.30pm via Teams due to time restrictions to the original meeting).

Goyder's Communication Strategy:

- Goyder Institute for Water Research initiated the discussion on the strategy for informing the CSC and included organisations about ongoing activities and research.
- The goal is to ensure there is no excessive overlap in activities and to identify new opportunities moving forward.

Update on Foundational Projects:

- Goyder Institute for Water Research provided updates on the progress of each Foundational Project, detailing their status and achievements.

Committee Discussion:

- The Committee engaged in a discussion, sharing ideas and thoughts on both existing and potential research activities.
- These discussions were aligned with the CLLMM Research Centre model to ensure coherence and integration of efforts.

Actions:

Informal Meeting:

- **Objective:** Map out existing research and identify gaps across the organisations.
- **Purpose:** Understand how the group can work together, share information, and enhance knowledge exchange.
- **Timing:** November was nominated as a suitable time for this meeting.



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