

RIVERINE PLAINS

ANNUAL REPORT 2022 - 2023





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ABOUT RIVERINE PLAINS

VISION

A TRUSTED PARTNER IN FARMING EXCELLENCE
FOR THE RIVERINE PLAINS

PURPOSE

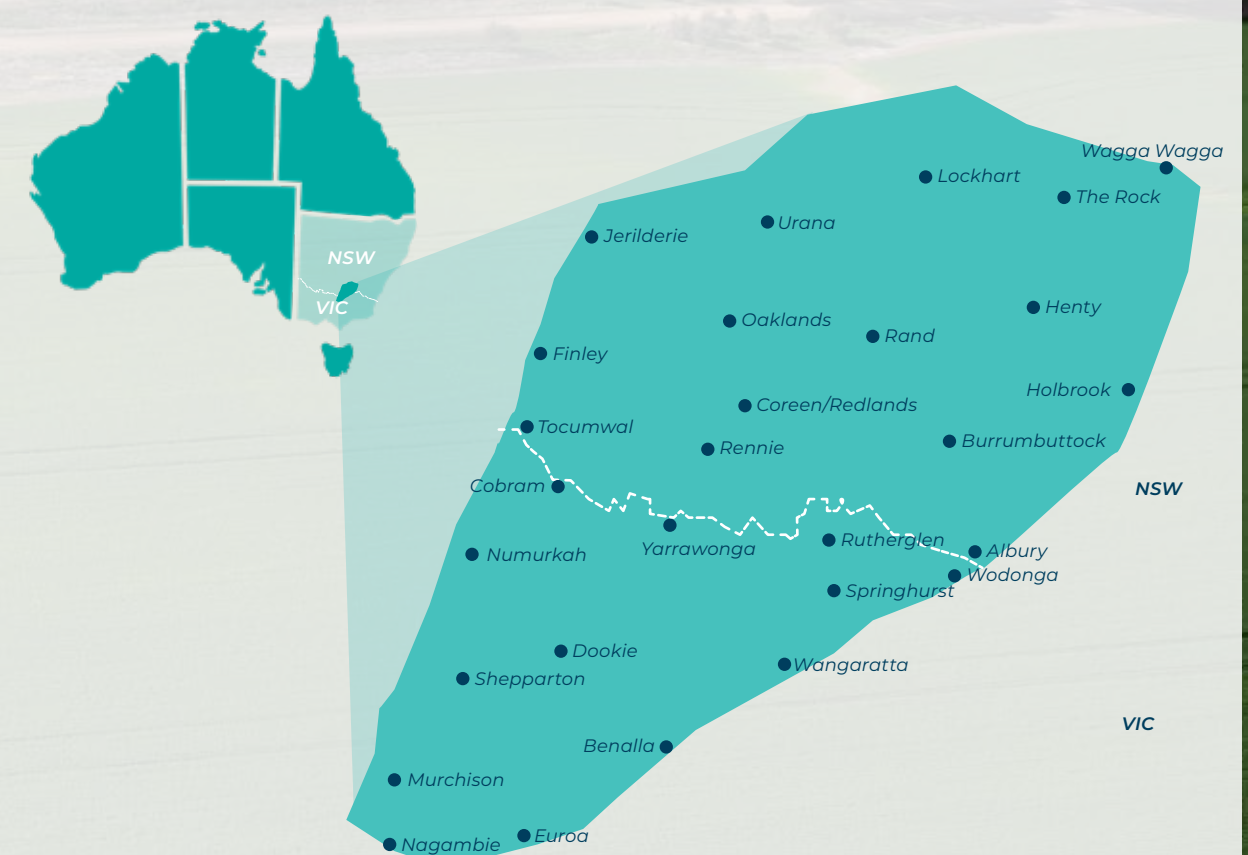
TO GROW MEMBER PROSPERITY BY BUILDING
KNOWLEDGE AND SKILLS

Established in 1999, Riverine Plains Inc. is an independent, for purpose, incorporated association dedicated to improving the prosperity of our members, associates and partners. With over 450 members and over 30 agribusiness partners across northeast Victoria and southern New South Wales, our organisation is known for its high-impact project delivery, clear, targeted communications and valuable events. Our motto is 'farmers inspiring farmers', and all the projects we deliver are driven by our members' curiosity and need to fill knowledge gaps in their businesses.

Riverine Plains specialise in providing independent, timely and relevant information through a rigorous research program and our annual schedule of events and publications. To date, we have successfully delivered over

\$11 million in cash for research, extension and validation projects across our region. Current and completed projects have covered aspects of stubble management, AgTech, containment feeding of livestock, water use efficiency, harvest weed seed control, soil health and soil carbon, weather and climate data, pulse adoption, canola nutrition, nitrogen management, precision agriculture, and improved winter cropping systems.

Riverine Plains staff have an experience base of over 130 years in agriculture, research, field work, communications, business and industry. Along with formal tertiary, graduate and post graduate qualifications, the majority of the team have extensive practical experience working on farms, providing know-how, and capacity to deliver on the Riverine Plains purpose.





ACHIEVEMENTS AT A GLANCE

EVENTS 2022 - 2023

- Innovation Expo

In-season update

Youth in Ag Dinner 2022

Soil Extension workshop

Fodder for the future

Charles Sturt University farm tour

Harvester workshop

Sykesy's Buraja Meeting 2023

Preliminary results breakfast Rand

Preliminary results breakfast Murchison

Preliminary results breakfast Burramine

Irrigation field walk

Livestock workshop
- Youth in Ag Dinner 2023

Livestock trigger point workshop Dookie

Livestock trigger point workshop Rutherglen

Livestock trigger point workshop Savernake

Victoria Drought Resilience Adoption and Innovation Hub Stakeholder engagement workshop

Stock management area demonstration

Member discussion group Gerogery

Farm data webinar

Livestock electronic identification field day

Member discussion group Rand

Member discussion group Murchison

Livestock electronic Identification webinar


EVENTS





25

EVENTS

FLAGSHIP EVENTS

YOUTH IN AG DINNER 

 RIVERINE PLAINS INNOVATION EXPO

HARVESTER WORKSHOP 


1,113

ATTENDEES
AT EVENTS



28


CURRENT
PROJECTS



14

COMPLETED
PROJECTS





VALUE
OF NEW
PROJECTS

\$1.7 MILLION

COMMERCIAL PARTNERSHIPS

COMMERCIAL
PARTNERS

37



PARTNERSHIP
OPPORTUNITIES

42



RESEARCH
PARTNERS

45



MEMBERS

2022 - 2023

469 MEMBERS

INDUSTRIES COVERED

 SOILS

 LIVESTOCK

 CLIMATE

 AGTECH

 FARM DATA

 GRAINS

 PASTURES


 COMMUNITY

 ENVIRONMENT

IMPACT CAPACITY AND CAPABILITY


SCHOLARSHIP
RECIPIENTS

6



STAFF

12



RESEARCH
SITES

22



ORGANISATIONAL PARTNERS

PREMIER PARTNERS



SIGNATURE PARTNERS



VALUED PARTNERS



YOUTH IN AG PROGRAM PARTNERS 2023



EVENT PARTNERS

INNOVATION EXPO 2022

INNOVATION CONFERENCE PARTNER:



(now known as RAGT)

WELCOME DRINKS PARTNER:



FIELD DAY BBQ LUNCH PARTNER:



GALA DINNER PARTNER:



newedge|microbials
Growing Better

CONFERENCE LUNCH PARTNER:



WATER BOTTLE PARTNER:



CONFERENCE MORNING TEA PARTNER:



CONFERENCE COFFEE PARTNER:



FIELD DAY COFFEE VAN PARTNER:



INNOVATION CONFERENCE SUPPORT PARTNERS:



GRANT SUPPORT

- MOIRA SHIRE
- AGRIFUTURES
- NSW GOVERNMENT DESTINATION NSW

- GRAINS RESEARCH AND DEVELOPMENT CORPORATION
- THE AUSTRALIAN GOVERNMENT'S NATIONAL RECOVERY AND RESILIENCE AGENCY



THANK YOU TO OUR HOST FARMERS

Thank you to the members who very generously donated their time, paddocks and experience to enable Riverine Plains to undertake research, extension and validation locally. Your contribution to our region is noted, appreciated and impactful.

The Brown family

John and Sarah Bruce

Peter Campbell

Victor Clifton

Andrew Dickie

Chantelle and Christine Gorman

Roy, Leanne and Michael Hamilton

Peter Holmes

Adam and Ingrid Inchbold

Sam Kellock

Tom and Carly Marriott

The Marshall family

Lee Menhenett

Nathan and Kara Lawless

Beau and Rebecca Longmire

Steve Ludeman

Don Piper

Andrew and Sue Russell

The Sandral family

Curt Severin

The Spence family

Wayne and Therese Thomas

Craig Thomas

Lawson Thomas

Emily and Phil Thompson

Denis and Rebecca Tomlinson

Ian and Melanie Trevethan

Tim and Lara Trevethan

Corey Uebergang

Ian and Kaye Wood



CHAIR'S REPORT

It has been another significant year of growth for Riverine Plains as we continue to deliver on our purpose of building prosperity in our members through enhancing knowledge and skills. We have diversified our project offering to cater better to the complexity of Riverine Plains farming systems and in January we welcomed a new Livestock Officer, Sophie Hanna to the team. Sophie joins an outstanding team with Kate Coffey, Jane McInnes, Michelle Pardy, Sara Hely, Rhiannan McPhee, Brooke Sanderson, Claudia Powell, Lynn Macaulay, Anna Lonergan, Katherine Seddon, led by our dynamic CEO Catherine Marriott. On behalf of the board, I would like to thank you all for your dedication and the inspiring enthusiasm you bring to our organisation.

Catherine Marriott stepped down as CEO of Riverine Plains at the Innovation Conference in August 2023. We have been incredibly fortunate to have benefited from Catherine's energy and enthusiasm over the past two and a half years, during which we have seen enormous growth across the organisation. Catherine has built upon our solid foundations, bringing together a cohesive, dedicated team, focused on delivering value to our members. She has left Riverine Plains in a strong position, which provides an exciting starting point for our next CEO, Pip Grant. We are very sad to say goodbye and on behalf of myself, our board and our members, I sincerely thank Catherine and wish her all the very best.

One of our many achievements during 2022-2023 was the delivery of our inaugural Innovation Expo in July 2022. The three-day event combined a Farm Tour, Welcome Drinks, AgTech focused Field Day, Gala Dinner and Conference.

The event was extremely well received and effectively contributed value to our members and the broader community. A huge thank you to our partners who made this event possible, particularly, our major partners Seed Force (now RAGT) and New Edge Microbials.

We could not provide such excellent benefits to our members without the generous support of our organisational partners. Thanks to our Premier Partners IK Caldwell AGnVET and Commonwealth Bank, and to all our Signature and Valued Partners for their continued support. Their financial and intellectual support, together with their attendance and contribution to many of our events throughout the year, adds enormous value to our members. Their participation is vital and greatly appreciated.

I would like to recognise our incredibly generous volunteer board who give their time, energy and skills to govern and guide our organisation. Independent director Alison Penfold, who has been on the board for two years, and long-standing committee and board member Ian Trevethan have both indicated they will step down at the AGM in October 2023. Ian has had a long service record since joining the committee in 2012, culminating in his role as our inaugural Board Chair. Ian successfully guided the organisation through a period of enormous change and has helped set us up extremely well for the future. I wish to extend the thanks of the entire Riverine Plains community to Ian and Alison for their dedicated service. They leave the organisation in a strong position ready to embrace opportunities as they arise.

Fiona Marshall
Chair, Riverine Plains



CHIEF EXECUTIVE OFFICER'S REPORT

This past financial year has seen another successful period for Riverine Plains and our members. We have focused on being proactive, valuable and innovative for our members, while ensuring we run a professional, sustainable and efficient organisation. Providing value to our members involves equipping them with the necessary information to maintain profitable, sustainable and successful businesses. We have increased our membership base, increased attendance at events, added additional partnerships, developed a Youth in Ag program, held our first Innovation Expo in July 2022, attracted more project partners and increased our research sites, ensuring we are delivering value across our entire catchment.

KEY HIGHLIGHTS

- **Increased membership by 10%.**
- **Increased the value and diversity of our organisational and commercial partners.**
- **Developed and delivered a comprehensive 'Youth In Ag' program.**
- **Hosted our first Innovation Expo in July 2022.**
- **Conducted research at 22 sites across the region, showing diversity and relevance.**

This year, our priority was to be a valuable organisation for members, partners, and staff. To deliver on our strategy of being a high-impact organisation, we launched a number of initiatives to enhance value for all key stakeholders.

From a member's perspective, we have increased the depth and breadth of our events, developed projects that focus on member needs, grown our project partners, initiated a highly successful 'Youth in Ag' program and rolled out our first local member discussion groups.

We have boosted partner engagement, brought in seven new organisations, expanded investment prospects and prioritised creating valuable connections with our members.

We have enhanced event quality, strategically merging topics to maximise value for our members in minimal time. This year we hosted 25 events, with a total of 1,113 people in attendance. A particular highlight was our first Innovation Expo, developed to challenge thinking, network, share ideas and learn from each other. The event combined an AgTech Field Day, showcasing and demonstrating the latest in agricultural technology, a conference with high calibre speakers, and a farm tour to showcase both cropping and livestock technology. There were also welcome drinks and a Gala Dinner to network and build relationships.

We continue to grow communication with our community – increasing our digital following and engagement on social media, providing relevant, timely information via our 'Fortnightly 5' and fortnightly blogs, along with our quarterly newsletter and annual 'Trial book'. During the reporting period we added LinkedIn to our social media channels, adding to our existing profiles on Twitter, Facebook and Instagram.

It has been another very successful year for Riverine Plains. We have outgrown our current premises and moved just down the road to 9/95-103 Melbourne Street, Mulwala. We welcome all members and partners to come in for a cuppa and enjoy our new facilities.

Success is bred from a team working well together. This organisation would not be where it is without the leadership of the board. All directors give their time freely and take time away from their families and businesses to ensure the region is well positioned for the future. Thank you to our Member Directors, our Chair Fiona Marshall, Vice Chair Melissa Brown, Treasurer Murray Scholz, Ian Trevethan and Ryan Berndt. A special mention also to our Independent Directors, Brondwen MacLean and Alison Penfold, who give of their time and expertise freely because they want to make a difference. Their generosity is particularly remarkable as they don't own farming businesses in the region.

To the incredible team we have built: thank you for your support, hard work, dedication, leadership, and generosity. I have never worked with a group of people who care so much about what they are working towards. Your work ethic and attitude are inspirational and will remain a highlight of my career. What a wonderful year we have had together.

Thank you to all our partners and event sponsors who have believed in Riverine Plains, our members and our vision for building prosperity in the region. Your ongoing support is a large part of our success – not just the financial support – but the intellectual capital you share at our events, which ensures we have quality speakers who care.

Finally, and most importantly, thank you to our members for your ongoing loyalty and support. Our members are why this organisation exists and your engagement and support are key to our success.

As this is my final CEO's report, I wanted to reflect on the privilege it has been to work with you all. Together we have learned, challenged, inspired, grown and changed the shape of agriculture in our region. I am looking forward to seeing where the next chapter of Riverine Plains takes you all.

Catherine Marriott OAM
Chief Executive Officer, Riverine Plains

FINANCIAL REPORT

The 2022-2023 financial year has been another successful year for Riverine Plains. We saw income exceed \$2.5 million for the first time and delivered a surplus for reinvestment back into our members.

Riverine Plains' income is predominantly derived from publicly funded projects and Research and Development Corporation collaborations, delivering research to assist members grow their knowledge and support their decision making. Income from commercial research and events such as the Innovation Expo has also grown, helping to lift the total income for the organisation. Membership continues to remain an important part of the operating budget.

The organisation's finances are overseen by the Audit and Risk Committee, a subcommittee of the board who meet three times a year to oversee the cash flow budget and financial projections.

We have continued to grow staffing levels this year to ensure that Riverine Plains can deliver on its commitments. This growth tested the limits of the current office, and the board made the decision to invest in a larger facility to enable staff to have a quality workspace. We also received an infrastructure grant from the Grains Research and Development Corporation (GRDC) that has enabled purchase of equipment such as a drying oven, a boom spray and new vehicles.

Our largest expense remains staffing costs, followed by contractors, including both commercial companies and colleagues from other farming systems groups, with whom we are collaborating.

We also thank members for the contributions they make to Riverine Plains. We value the time and knowledge that is freely shared, the land for trials and demonstrations, the farm venues for events, the machinery for demonstrations, the stories for our communications and the time on both our board and Research Advisory Council.

Thanks must go to Partners and Scholarship Partners for their ongoing support. Their decision to invest in Riverine Plains helps us deliver events, provides services such as the weather stations and assists the next generation to grow their skills.

Audit was conducted by Mogg Osborne.

Murray Scholz
Treasurer, Riverine Plains

RESEARCH HIGHLIGHTS

- Consolidated our 22 research sites to ensure they are squarely focused on the demonstration of relevant and relatable issues facing our members.
- Increased our research staff by a further two full-time equivalents.
- Added a further \$1.7 million of new projects in the last 12 months.
- Secured a further 18 new projects since the last Annual report in line with the Riverine Plains strategic plan, with a growing number of projects in the livestock space.
- Delivered 25 events which have also included a greater emphasis on livestock enterprise.

The last 12 months has delivered yet another successful year of new projects, new investment, and new ideas for future areas of investment. We have seen funders continue to support Riverine Plains following the completion of projects, showing that we are delivering high quality outcomes for them, and they are bringing return business.

Our Research Advisory Council (RAC) has played an ongoing role identifying issues, which the team at Riverine Plains have successfully converted into projects funded by state and federal government and Rural Research Development Corporations. The increase in project investments has meant that we have needed to continue to grow the team to increase our capacity in new areas of work such as soil carbon, pests, disease and weed management. At the same time, we have continued our focus on building resilience for future variables, climate and drought.

We have an ongoing focus on identifying potential future commercial income sources that could allow us to decrease our reliance on project income. In doing so, we will have a greater amount of agility in responding to our members' needs for reactive and strategic issues that may not be aligned to our funders needs.

We have identified very clearly in the last 12 months that what Riverine Plains does best is validation. We have great collaboration with world leading scientists, who have spent years identifying management practices that will deliver step and transformation changes in profitability and productivity to farmers. We have honed our project design to take this research, and demonstrate it in environments and farm management systems that allow farmers to make the easy leap to adopting them. True to our motto, our farmers are inspiring other farmers through this work in demonstration.

This financial year we have 28 current projects and 14 have been completed. This includes projects looking at climate variability, pasture resilience, containment feeding, community, soils extension, agronomy, social research on the impacts of climate, business, AgTech uptake and extension.

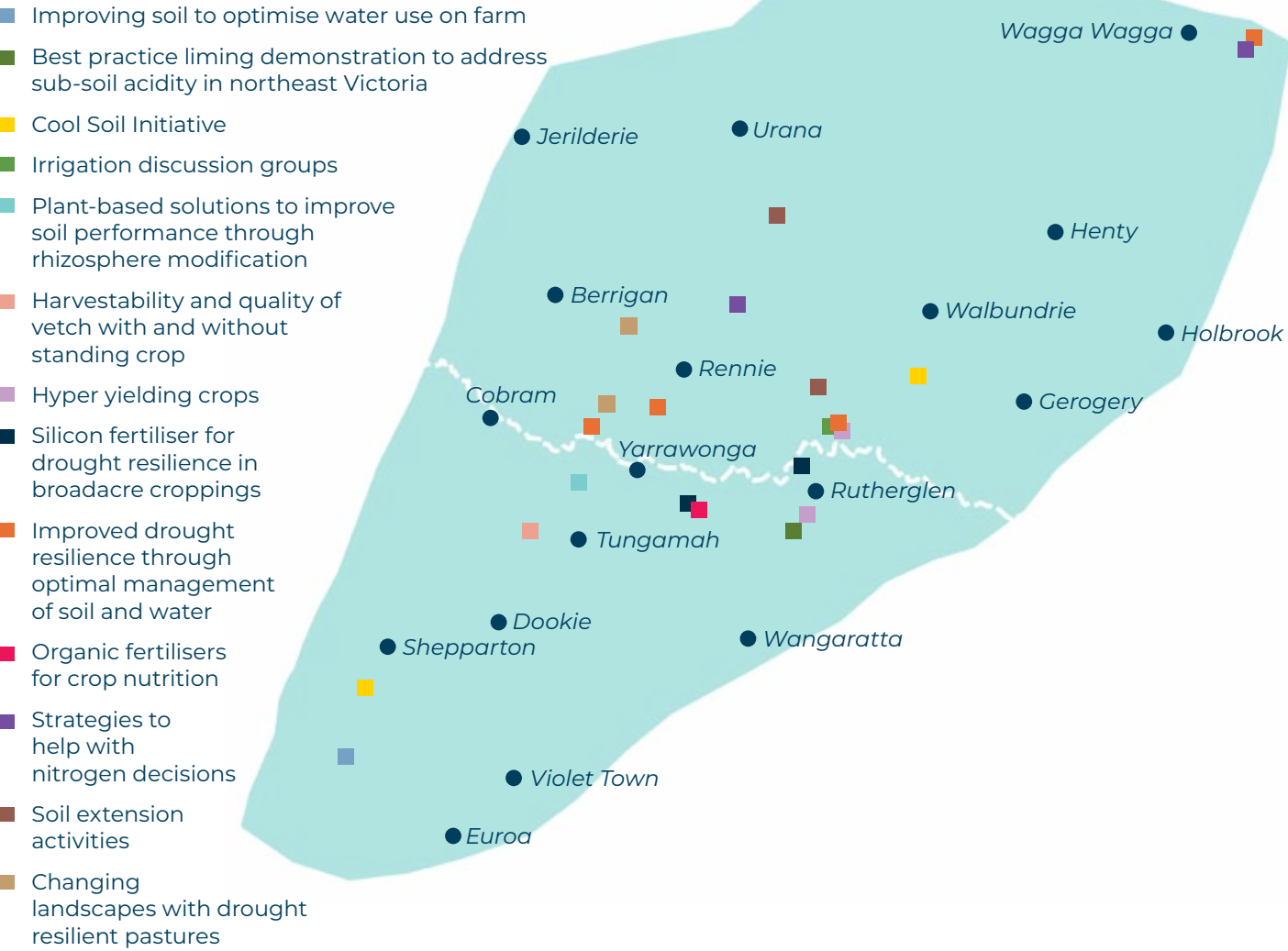
The following matrix shows the alignment of our projects with our strategy over the past year, which now more than ever captures the key themes and topics identified in our strategic plan. Refining projects across these themes will be a focus of the next financial year.

Dr Sara Hely
Chief Operating Officer, Riverine Plains

	SOILS	GRAIN	LIVESTOCK	CROSS SECTOR
Capacity building	✓	✓	✓	
Business	✓			✓
Production	✓	✓	✓	
Carbon	✓	✓	✓	
Climate	✓	✓		✓
Traditional Owner				✓
AgTech (innovation)	✓	✓	✓	✓
Biosecurity		✓		
Environment/Natural Capital		✓		✓
Social				✓

RESEARCH SITES ACROSS RIVERINE PLAINS REGION

TRIAL AND DEMO LOCATION 2022 - 2023



SCHOLARSHIPS 2023

RIVERINE PLAINS SCHOLARSHIP

The inaugural Riverine Plains Scholarship was established to support tertiary students studying a degree or diploma in agriculture, agricultural science, agribusiness or engineering, or who demonstrate a passion for agriculture in another discipline.



2023 RECIPIENT
ZOE WILSON

From a young age, Zoe had a great love for animals and all things that grow. Zoe is currently studying a Bachelor of Agriculture at the University of Melbourne's Dookie Campus.

ALVAN BLANCH AUSTRALIA SCHOLARSHIPS

Established in 2023, these scholarships provide support to either agriculture or engineering students from non-farming backgrounds who are considering a career in agriculture.



2023 RECIPIENT AGRICULTURE
HAYLEE MURRELL

Haylee grew up near Gunnedah in northwest New South Wales and is now studying a Bachelor of Agriculture at the University of New England. She has a passion for the cropping industry.



2023 RECIPIENT ENGINEERING
LEONARD O'CALLAGHAN

Leonard is interested in agrotechnology, genetics, climate change research and protein-rich crop development. He is currently studying a Diploma of General Studies at The University of Melbourne's Dookie Campus.

CORTEVA AGRISCIENCE SCHOLARSHIP

Corteva Agriscience is proud to be helping young people develop their passion for agriculture. The Corteva Agriscience Scholarship was established in 2022 and has a focus on plant breeding and agronomy.



2023 RECIPIENT
AVA ROBERTSON

Ava is currently studying at The University of Sydney. Ava's future goal is to find solutions to maximise yields and minimise constraints on finite natural resources, ensuring future food and water security.

HANRAHAN FAMILY SCHOLARSHIP

The Hanrahan Family Scholarship was established in honour of the late John Hanrahan, a valued member from Coreen. John's community spirit, passion for agriculture and thirst for knowledge was renowned.



2023 RECIPIENT
TIFFANY THOMAS

Tiffany grew up on a sheep and cropping property and believes life is best on the land. Tiffany is furthering her passion by studying a Bachelor of Agricultural Business Management at Marcus Oldham College.

UNCLE TOBYS SCHOLARSHIP

The Uncle Tobys Scholarship was established in 2021 to support future leaders in agriculture, especially those from the local region, who are crucial to the success of the food industry.



2023 RECIPIENT
KURT LUKIES

Kurt is currently studying a Bachelor of Agricultural Science at The University of Melbourne and is looking forward to starting a career in agronomy and plant and soil science.

BOARD OF DIRECTORS

Riverine Plains is overseen by a voluntary board of five Member Directors and two Independent Directors.

MEMBER DIRECTORS



FIONA MARSHALL
(Chair, appointed October 2022)

Fiona and her husband Craig own and manage a mixed enterprise farm consisting of both dryland grain and a prime lamb business. Fiona is a life-long learner with a background in applied science and education.



MELISSA BROWN
(Deputy Chair, appointed October 2022)

Melissa is a partner in a family run mixed farming business near Murchison, Victoria. Melissa is the Technical Development Manager for Broadacre Crops for BASF Agricultural Solutions. Melissa has a Bachelor of Agriculture from Dookie College.



IAN TREVETHAN
(Secretary, appointed October 2022. Retired as Chair, October 2022)

Ian runs a mixed farm with dryland and irrigated crops, along with a self-replacing merino sheep enterprise. Ian studied agricultural science at The University of Melbourne's Dookie Campus.



MURRAY SCHOLZ
(Treasurer)

Murray Scholz runs his family farming business producing grain, oilseeds, beef, and lamb in the Eastern Riverina. Murray is an experienced Board Director with over 10 years of commercial and not-for-profit experience.



RYAN BERNDT
(Public Officer, appointed October 2022)

Prior to returning home to the farm in 2022, Ryan spent 18 years in corporate agribusiness. Ryan has held numerous roles, including in agronomy and national fertiliser management, with Elders, Hi Fert, Impact, Viterra, Ruralco and Nutrien.



JOHN BRUCE
(retired October 2022)

John and his wife Sarah operate a broadacre irrigated and dryland cropping and sheep operation near Barooga, New South Wales. John has been a Riverine Plains Committee and Board Member since 2011 and has been a champion for local research, hosting numerous trials and extension activities.

INDEPENDENT DIRECTORS



ALISON PENFOLD

Alison's expertise has seen her work in a variety of influential roles in government, the corporate sector and running a national industry body. Alison currently works in Canberra for the Federal Shadow Minister for Trade and Tourism.



BRONDWEN MACLEAN

Brondwen MacLean is a Director of Pivotal Management Consulting. Brondwen worked for 20 years at the Grains Research and Development Corporation, retiring as General Manager of Research Programs in 2019.

RESEARCH ADVISORY COUNCIL (RAC)

The Research Advisory Council is chaired by Riverine Plains Board Member Melissa Brown (Miepoll, Victoria) and facilitated by Riverine Plains Chief Operating Officer, Dr Sara Hely.

MEMBERS

Scott Bartlett (Kialla, Vic)

Dr. (Paul) Long Cheng (Dookie, Vic)

David Gooden (Lockhart, NSW)

Rob Inglis (Wagga Wagga, NSW)

David Leah (Gerogery, NSW)

Angus Malmo (Yerong Creek, NSW)

Tom Marriott (Barooga, NSW)

Craig Marshall (Rennie, NSW)

Dr. Madeline Mitchell (Melbourne, Vic)

Eric Nankivell (Albury, NSW)

Rhiannon Sandford (Yea, Vic)

Dr. Cassandra Schefe (Rutherglen, Vic)

Corey Uebergang (Peechelba East, Vic)

John Bruce (Barooga, NSW)

STAFF

In 2022-2023 Riverine Plains staff grew to 12. The team work from both the Mulwala office, remotely and of course across our region at field sites.



CATHERINE MARRIOTT
OAM Chief Executive Officer

Catherine brings a wealth of experience in building farmer member-based organisations, building partnerships, identifying value, business management and growth, and developing and managing research.

As inaugural CEO, Catherine was involved in developing and delivering a values-driven strategic and operating plan. These ensure relevant research, events and services continue to be delivered to members, increasing profitability and value for all members, partners and the organisation.



DR SARA HELY
Chief Operating Officer

Sara has been working in agricultural science and rural industries for 20 years, holding management roles in agricultural research in state and federal

government, as well as large investors in rural research, development and extension. Sara has a PhD in climate change research and specific knowledge in the grains industry.

As the Chief Operating Officer, Sara is responsible for leading all operations of the organisation, across both the research, communications, marketing areas of the organisation, and ensuring Riverine Plains meets expectations and organisational growth.



BROOKE SANDERSON
Executive Assistant

Brooke joined Riverine Plains as Executive Assistant in 2022 and oversees the day-to-day operations of the organisation. Brooke holds extensive

knowledge and a range of skills and attributes that are helping create the foundations of Riverine Plains.

Brooke strives to be regarded as honest and trustworthy, while combining hard work, discipline, efficiency, dedication and passion.



KATHERINE SEDDON
Corporate Communications Manager

Katherine holds over 20 years' communications experience in the not-for-profit, education and research sectors. Katherine

has a passion for soil health and farming, and is excited to be working closely with farmers to bring them the most up-to-date, relevant research in a timely and regionally relevant way. Katherine manages all corporate communications and works on special projects for Riverine Plains.



KATE COFFEY
Senior Project Officer

Kate has worked at Riverine Plains since 2013. Kate's key roles are project management and project development. Kate enjoys bringing farmers and

agribusiness together to share ideas, network and solve problems.

Kate's current projects include irrigation, weather stations, improving soils, pastures and hyper yielding crops.



JANE MCINNES
Senior Project Officer

Jane has been with Riverine Plains since 2018. As Senior Project Officer, Jane works across a portfolio of research, development and extension

projects, including projects on managing subsoil acidity and soil health.

Jane previously worked in state government, with a background in surface water and nutrient modelling, and gully erosion research. Jane brings strong mapping and computing skills to the team.



CLAUDIA POWELL
Communications Manager

Claudia manages Riverine Plains' communications channels, through collaboration with the Executives, Research Team and industry stakeholders.

Claudia grew up on a mixed cropping and livestock farm in northwest New South Wales, which has given her a connection to, and a love of, agriculture and country life. Claudia holds a Bachelor of Media and Communications from the University of New England.



RHIANNAN MCPHEE
Project Officer

Rhiannan commenced as a Project Officer in March 2022. Since then, she has taken on several project extension roles and is a Knowledge Broker for

the Southern NSW Drought Resilience Adoption and Innovation Hub.

Rhiannan has agronomy experience across horticulture and broadacre cropping systems (irrigated and dryland), as well as experience in logistics management. Rhiannan has a Bachelor of Agriculture from The University of Melbourne.



MICHELLE PARDY
Communications Officer

Michelle creates and edits content for the Riverine Plains newsletter, blogs and other publications, and produces the group's media releases.

She served on the Riverine Plains Committee from 2006-2015, before becoming the group's Communication Officer in 2016.

Michelle has a background in grain production systems, extension (grains) and agricultural writing.



LYNN MACAULAY
Membership Officer

Lynn's role is to service members while also aiming to grow the Riverine Plains' membership base. Lynn has previous experience working on broadacre cropping

farms in New South Wales and WA, as well as in England, where she completed her degree in Agriculture and Business Management.

She has a keen interest in and passion for innovation, diversification and technology in agriculture.



ANNA LONERGAN
Project Support Officer

As Project Support Officer, Anna provides administration and project management support to the leadership team, as well as field support for Field and Project

Officers with new and existing projects.

Anna has a background in environmental science and management, and has a strong passion for sustainable agriculture, research and development, and the conservation of native ecosystems.



SOPHIE HANNA
Project Officer - Livestock

Sophie is passionate about improving farm productivity and efficiency and strives to achieve this as the Livestock Project Officer.

Having grown up and worked on a beef cattle grazing farm in the Upper Murray, Sophie is particularly interested in livestock production, soil science and genetics. Sophie holds a Bachelor of Agriculture from The University of Melbourne and completed an Honours year in soil science at CSU, Wagga Wagga.

RESEARCH PROJECTS



NEW PROJECTS IN 2022-2023

SUPPORTING CLIMATE RESILIENCE THROUGH WEATHER STATIONS

Term Date: 2022-2024

The project will investigate the feasibility of bringing together five networks of weather stations and moisture probes across southern Australia into a single, standardised platform to inform key stakeholders on a series of localised climatic information to assist with disaster planning.

This project received grant funding from the Australian Government through the Preparing Australian Communities Program.

ORGANIC FERTILISERS FOR CROP NUTRITION

Term Date: 2022-2024

In partnership with FAR Australia, this two-year pilot project will look at the value of faba bean stubble with and without organic manures in restoring fertility and increasing yield in the following wheat crop. The impact of two different timings of nitrogen application on the faba crop in the subsequent wheat crop will also be assessed.

This project is funded by the Grains Research and Development Corporation.

CHANGING LANDSCAPES WITH DROUGHT RESILIENT PASTURES

Term Date: 2022-2024

Led by the Holbrook Landcare Network and the Southern NSW Drought Resilience Adoption and Innovation Hub, this project aims to use the latest research on species and management to increase the use of perennial pasture species within farming landscapes and increase resilience in dry seasons.

The project will help farmers to improve their pasture base, either by using practices to enhance favourable species already present, or to establish new pastures. This will help address feed-base management and farmer concerns around its impact on drought resilience.

Demonstration sites have been established across the mid to high rainfall zones of central and southern New South Wales to showcase modern pasture species combinations and management practices known to build greater resilience into landscapes.

This project is funded by the Australian Government's Future Drought Fund, through the Drought Resilient Soils and Landscapes Program.

SAVING SOIL DURING DROUGHT

Term Date: 2022-2023

Soils that are exposed due to loss of groundcover often become dry and powdery, making them vulnerable to wind and water erosion. Appropriate management of livestock during drought is critical to the resilience capacity of soils, vegetation and farming enterprises. This project demonstrates best practice application of Stock Management Areas (SMA), supported by a comprehensive suite of tools, materials and information across southern New South Wales, to provide producers with knowledge and confidence to adopt SMAs for maximum benefit.

This project is delivered through the Southern NSW Drought Resilience Adoption and Innovation Hub, supported by Local Land Services, through funding from the Australian Government's Future Drought Fund.

REWARDING SOIL STEWARDSHIP

Term Date: 2022-2025

This project, led by Charles Sturt University, will configure, trial and evaluate novel financial mechanisms to reward soil stewardship.

The project will work to improve connections among soil scientists, growers and the finance sectors, and review the benefits, costs and uncertainties related to different soil stewardship practices, as well as the available returns from different markets/sources.

This project is funded by the Soil CRC.

BUILDING SOIL RESILIENCE AND CARBON THROUGH PLANT DIVERSITY

Term Date: 2023-2026

This project, led by Southern Cross University, follows on from the *Plant-based solutions to improve soil performance* project. The project continues to investigate changes in soil function, resilience and carbon stocks under a range of agronomic practices that incorporate plant diversity in cropping systems. The project also investigates how much carbon from rhizodeposits from cover crop and intercrop species is stabilised in soil, and its contribution to soil aggregation.

This project is funded by the Soil CRC.

HELPING REGIONAL COMMUNITIES PREPARE FOR DROUGHT – GOULBURN COORDINATION

Term Date: 2023-2025

This project will strengthen drought preparedness and drive local action in the Goulburn region through the coordination of Community Impact Program activities and evaluation administration.

This project was supported by FRRR through funding from through the Australian Government's Future Drought Fund.

VISUALISING AUSTRALASIA'S SOILS

Term Date: 2023-2024

This project aims to increase the soils data and related information that can be discovered through the Visualising Australian Soils portal, to sustain a soil knowledge system that is inherently useful for research, development, extension and adoption.

This project is led by Federation University and is funded by the Soil CRC

CURRENT PROJECTS

BEST PRACTICE LIMING TO ADDRESS SUBSOIL ACIDITY

Term Date: 2021-2024

This project involves a replicated lime treatment field trial at Lilliput, Victoria. It aims to increase awareness of the speed of acidification and stratification of soils in the region, and the availability of tools to assist in the management decision process. The trial aims to demonstrate best practice liming methods and how the incorporation of top-dressed lime can improve its distribution down the soil profile, lessening the impacts of soil acidity on subsequent crops.

This project is funded through the Grains Research and Development Corporation.

RESEARCH PROJECTS



COOL SOIL INITIATIVE

Term Date: 2018-2023

The *Cool Soil Initiative* aims to increase the long-term sustainability and yield stability of southern New South Wales and northeast Victoria grain producing regions, by adopting innovative agronomic strategies to improve soil health and related function.

This project seeks to create a platform for the food industry to support grain farmers in reducing greenhouse gas emissions, leading to increased long-term sustainability.

The project is funded by Mars Petcare, Kellogg's, Manildra Group, Corson and Allied Pinnacle, in partnership with Charles Sturt University and the Food Agility Cooperative Research Centre, with support from the Sustainable Food Lab.

HYPER YIELDING CROPS

Term Date: 2020-2024

This project aims to close the yield gap of wheat, barley and canola in the high rainfall zone. Riverine Plains has established annual focus farm sites at various locations in support of the NSW Centre of Excellence at Wallendbeen. Riverine Plains has also established Discussion Groups to link local growers with the focus farm paddock trials at these sites.

This project is funded by the Grains Research and Development Corporation.

VICTORIA DROUGHT RESILIENCE ADOPTION AND INNOVATION HUB

Term Date: 2021-2024

The *Victoria Drought Resilience Adoption and Innovation Hub* is led by the University of Melbourne's Dookie Campus and is conducted in association with Deakin, La Trobe, and Federation universities and Agriculture Victoria.

Riverine Plains is leading the Northeast Victoria 'Node', consulting the agricultural industry through farmers, councils, businesses, health organisations and community groups in their region about building drought resilience at the local level. This process has led to the development of pilot projects to address specific knowledge or technical skill gaps identified through the hubs, capacity building, and the brokering of knowledge between nodes.

This project is funded through the Australian Government's Future Drought Fund.

SOUTHERN NSW DROUGHT RESILIENCE ADOPTION AND INNOVATION HUB

Term Date: 2022-2024

The *Southern NSW Drought Resilience Adoption, and Innovation Hub* is a consortium of nine regional partners including primary producers, Indigenous groups, industry and community groups, researchers, entrepreneurs, education institutions, resource management practitioners and government agencies.

Riverine Plains has appointed a part-time knowledge broker who is assisting to gather and share knowledge to southern New South Wales members and their communities. The outcome of this partnership is user-driven innovation, research, and adoption and the facilitation of transformational change through the co-design of research, development, extension, adoption, and commercialisation activities.

This project is funded through the Australian Government's Future Drought Fund.

OPPORTUNITIES TO CLOSE THE YIELD GAP IN FABA BEAN WITH IMPROVED DISEASE MANAGEMENT, NUTRITION AND CANOPY MANIPULATION

Term Date: 2021-2024

This project, led by FAR Australia, is designed to deliver local development and extension to maximise farming benefits from grain legume production. This will be achieved through grower-driven grain legume validation and demonstration trials across the region.

This project is funded by the Grains Research and Development Corporation.

ASSESSING SOIL WATER STORAGE

Term Date: 2022- 2025

This project aims to improve the understanding of crop access to water and resources. Through installation of field sensors, the project will quantify changes in soil water attributes (infiltration, storage, drainage, and crop interaction), due to the diagnosis and management of soil constraints at an existing Soil CRC project site at Burramine. This will

allow the development of tools supporting soil management for increased access to soil water and give a better understanding of the competition for water and resources between mixed species cover crops, and impacts on soil water availability for the cash crop.

This project is funded by the Soil CRC.

DIAGNOSIS FRAMEWORKS FOR MULTIPLE AND COMPLEX SOIL CONSTRAINTS

Term Date: 2021-2024

The productivity of 77% of Australian agricultural soils is limited by one or more soil constraints, however, improving constrained soils often requires an accurate diagnosis. This project will develop and validate data-centre diagnostic methodologies that can diagnose soil constraints from the data that producers already have access to (e.g. crop yields, surface soil tests), in combination with information in the public domain. This will reduce the cost associated with detailed soil sampling.

This project is funded by the Soil CRC.

SILICON FERTILISER FOR DROUGHT RESILIENCE IN BROADACRE CROPPING

Term Date: 2022-2024

This project is led by The University of Melbourne and is hosted on large plot demonstration or evaluation sites at four locations across northern Victoria.

Around fifty small-scale replicated research trials are being used to evaluate a broader set of varieties and management options, including silicon fertiliser application for drought mitigation in broadacre cropping. In this project, granular silicon fertiliser is being applied below the seed at sowing for wheat and faba beans, while foliar silicon fertiliser is being applied throughout the season.

The potential role of legumes in the standard cropping rotation and dual-purpose wheat options are also being demonstrated. There is also an evaluation of indigenous plant species at all sites under the guidance of experts from Black Duck Foods and Goulburn Broken Catchment Management Authority.

This project is funded by the Australian Government's Future Drought Fund.

RESEARCH PROJECTS

SMALL FARM DAM SUITABILITY ASSESSMENT

Term Date: 2022-2024

This project is led by Southern Farming Systems and aims to create a spatial tool to rapidly calculate the likely runoff (frequency and volume under current future climate scenarios) into existing farm dams to help prepare, cope, and recover from drought. This type of calculator does not exist, with current approaches designed for flood rather than drought planning.

This project is funded by the Australian Government's Future Drought Fund.

IMPROVED DROUGHT RESILIENCE THROUGH OPTIMAL MANAGEMENT OF SOIL AND WATER

Term Date: 2022-2024

This project has established 12 demonstration sites across southern New South Wales and northeast Victoria, covering a range of soil types, environments and land uses. The project will demonstrate three proven strategies that improve drought resilience compared to conventional farming including:

- Diverse legume rotations
- Early sowing of slower-maturing crops
- Measuring residual nitrogen in the soil.

This project is supported through funding from the Australian Government's Future Drought Fund Drought Resilient Soils and Landscapes Grants Program and is co-funded by the Grains Research and Development Corporation.

SOIL EXTENSION ACTIVITIES

Term Date: 2022-2024

This project aims to support land managers by promoting the benefits of increased frequency of extensive soil sampling and testing to inform soil management decisions and take action to improve soil health. Two farmer discussion groups will work to identify high-priority soil

issues through soil testing and will engage with soil scientists at field walks, workshops and demonstrations.

This project is funded through the Australian Government's National Landcare Program Small Farms Small Grants initiative and the Grains Research and Development Corporation.

AGRIFUTURES PRODUCER TECHNOLOGY

Term Date: 2023-2024

Riverine Plains' initial Producer Technology Uptake program involved online technology workshops and case studies of local farmers adopting new technology, as well as providing funding towards the delivery of the Riverine Plains 2022 Innovation Expo. This project will build on the 'WeedIT' technology demonstrated at the 2022 Innovation Expo, with a demonstration of the Goldacres green-on-green technology 'Weedetec' at the 2023 Expo. An Innovation Workshop and discussion group will help farmers share their experiences with technology, particularly apps, to understand what works and what doesn't. This project also helped deliver future funding for the 2023 and 2024 Riverine Plains Innovation Expo.

This project is funded by AgriFutures Australia.

COMPLETED PROJECTS

EXTENDING THE STUBBLE AND SOIL CARBON PROJECTS

Term Date: 2022

This project updated four farmer case studies that were produced as part of the initial Sustainable Agriculture Victoria: Fast Tracking Innovation Initiative (2014-2017). This included two stubble management and two soil carbon management case studies, as well as a video.

This project received grant funding through FRRR's Fast Track Innovation 2.0 program, with the support of the William Buckland Foundation through Equity Trustees.

ENHANCING COMMUNITY NETWORKS FOR DROUGHT RESILIENCE IN THE RIVERINE PLAINS

Term Date: 2021-2022

This project was designed to help people in Riverine Plains' communities make personal and business connections to better prepare for the next drought or future climate challenges.

This project was funded through the Australian Government's Future Drought Fund.

BUILDING DROUGHT RESILIENCE THROUGH STOCK CONTAINMENT INITIATIVES

Term Date: 2021-2022 (pilot project)

This project delivered a gap analysis and plan for future investment in a larger cross-hub, national initiative. It addressed barriers to investment and adoption of stock containment and confinement strategies.

This project was funded by the Australian Government's Future Drought Fund through the *Victoria Drought Resilience Adoption and Innovation Hub*.

VICTORIAN AGRICULTURAL INNOVATION HUB – AGTECH INNOVATION

Term Date: 2023

This project supported activities focused on increasing the adoption of digital agriculture solutions and increased digital agriculture awareness, education and improved data literacy, data collection, collation and permissions, as well as data access and sharing practices related to electronic identification (EID). Farmers and advisors learnt new approaches for combining and analysing historical and current spatially referenced data to create new insights into the resilience and reliability of different parts of the farm, examined across multiple seasons.

This project is funded by the Australian Government's Future Drought Fund through the Agricultural Innovation Hubs Program with the *Victoria Drought Resilience Adoption and Innovation Hub*.

HARVESTABILITY AND QUALITY OF VETCH WITH AND WITHOUT STANDING CROP

Term Date: 2020-2022

The project was designed to assist farmers adapt to a water-limited future by increasing the knowledge of both grain and dairy farmers by trialling different fodder options and connecting the two industries. This project highlighted the value of 'closed loop' fodder production systems, which involve the transfer of high quality fodder between businesses within the Southern Murray Darling Basin, whilst retaining the value of production locally.

This project was funded by Dairy Australia, through Murray Dairy.

COMMUNITY LED DROUGHT RESILIENCE

Term Date: 2022-2023

This project investigated differences in the multidimensional (economic, social, environmental) experiences of rural women and men to drought. This identified gender specific opportunities, information and training needs to capitalise on the untapped potentials of women and men to build better drought resilience, while also increasing leadership depth within the community.

This project was funded by the Australian Government's Future Drought Fund through the *Victoria Drought Resilience Adoption and Innovation Hub*.

STRATEGIES TO HELP WITH NITROGEN DECISIONS

Term Date: 2022-2023

This project, led by FarmLink, established a replicated trial site that compares 'nitrogen banking' and 'nitrogen demand' based strategies for closing the nitrogen limited yield gap with nil and national average control treatments. An economic analysis of scenarios for nitrogen banking and nitrogen demand based strategies compared to controls was also completed.

This project was funded by the Grains Research and Development Corporation.

RESEARCH PROJECTS

DROUGHT RESILIENCE IN MIXED FARMING SYSTEMS

Term Date: 2022-2023

This project fast-tracked direct support to cropping and livestock farmers across Victoria, South Australia and Tasmania in the management of pastures, the use of livestock containment and different feeding systems for drought resilience.

The use of demonstrations, activities and outputs in this project aimed to improve farm decision making and lead to improvements in soil cover, livestock welfare and nutrition in periods leading into, during and post drought.

This project was funded by the Australian Government's Future Drought Fund through the *Victoria Drought Resilience Adoption and Innovation Hub*.

PLANT BASED SOLUTIONS TO IMPROVE SOIL PERFORMANCE

Term Date: 2019-2022

Riverine Plains established a fully replicated trial site at Burramine, Victoria, to evaluate how green manures, different rotations, cover crops and companion crops affect soil performance. Additional funding from Goulburn Broken Catchment Management Authority enabled trials to look at the influence of alternative cropping practices on soil properties. This site connected with similar sites through QLD, NSW, SA, and WA.

The project was led by Southern Cross University and was funded by the Soil CRC. The project was supported by the Goulburn Broken Catchment Management Authority's 'From the Ground Up' program through funding from the Australian Government's National Landcare Program.

INNOVATION UPTAKE PROGRAM

Term Date: 2021-2022

This project supported the Innovation Expo in July 2022. The aim of the event was to look at four different technologies in the field and target the adoption of such technologies to improve farming practices. A case study addressing subsoil acidity was also produced with Curt Severin, along with a WEED-IT video featuring Riverine Plains member, Craig Thomas.

This project was funded by AgriFutures Australia.

IRRIGATION DISCUSSION GROUPS

Term Date: 2019-2023

This project was led by the Irrigated Cropping Council and assisted the formation of the Riverine Plains Irrigation Discussion Group. This group aimed to link new and innovative irrigated cropping research investments by the Grains Research and Development Corporation with local farmer-driven groups, and to tie these research projects more closely with farmer needs.

This project was funded by the Grains Research and Development Corporation.

IMPROVING SOIL TO OPTIMISE WATER USE ON FARM

Term Date: 2021-2023

This project addressed soil quality parameters, storing more rainfall for crop production and how these are related. The project aimed to provide farmers with a better understanding and knowledge of their soil and how they can identify local constraints, improve production and water retention, and build resilience for future droughts.

This project received funding from the Australian Government's Future Drought Fund.

ADDITIONAL RESEARCH PARTNERS

Along with the research organisations that we receive funding from, Riverine Plains is proud to collaborate with the following research partners: Agriculture Victoria, Australian Government's National Landcare Program, Australian National University, Birchip Cropping Group, Brill Ag, Central West Farming Systems, Centre of eResearch and Digital Innovation, Charles Sturt University, CSIRO, Deakin University, Department of Primary Industries and Regional Development, Federation University, FAR Australia, FarmLink, Food and Fibre Gippsland, First Nations Governance Circle, Foundation for Rural and Regional Renewal, Goulburn Broken Catchment Management Authority, Holbrook Landcare Network, Irrigated Cropping Council, Irrigation Research and Extension Committee, Kellogg's Group, La Trobe University, Local Land Services NSW, Mallee Regional Innovation Centre, Mallee Sustainable Farming, Manildra Group, Allied Pinnacle, Corson, Sustainable Food Lab, Mars Petcare, Meat and Livestock Australia, Murray Dairy, NSW Department of Primary Industries, Pratt Foundation, Rural Aid, Southern Farming Systems, Southern Growers, South Australia Research and Development Institution, Southern Cross University, TechCrop, University of Canberra, The University of Melbourne, University of Wollongong, Bureau of Meteorology and Griffith University.



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