



Performance through collaboration



STRATEGIC PLAN

2023 - 2027





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CONTEXT

The Cooperative Research Centre for High Performance Soils (the Soil CRC) was established in 2017 with funding from the Australian Government and cash and in-kind contributions from its 39 Participants. Our mission is to contribute new knowledge, tools and practices to help farmers better manage their soil to improve the productivity, profitability, sustainability, resilience and well-being of the agriculture sector.

In 2019, the Soil CRC developed and released its first Strategic Plan (2019-2023) which was designed to guide the CRC through Years 3 to 6 of its ten year funding term. In 2023, the Board oversaw the process of reviewing and refreshing its Strategic Plan to guide the CRC through Years 7 to 10 and take it to the end of its current funding term.

The content of this Soil CRC Strategic Plan (2023-2027) was informed by an independent external review of the Soil CRC undertaken in late 2022 by Prof Leigh Sullivan and Ms Caroline Welsh. This review considered the input of key Soil CRC stakeholders including the Soil CRC Patron, the Soil CRC Board, Program Leaders, senior university and grower group representatives, research project leaders, PhD students and major stakeholders.

The review clearly demonstrated that the Soil CRC is performing at a high level. The Soil CRC is meeting all its contracted milestones and targets and enjoys a favourable reputation with both internal and external stakeholders. However, the external review did indicate that there were some areas of the Soil CRC that could be enhanced, and they made several recommendations to this effect. These recommendations informed the refresh of the Strategic Plan.

Also considered were the changes in the external environment over the past four years. The recognition of the importance of soil continues to increase and this was reflected in the release of the National Soil Strategy by the Australian Government in 2021. Soil management and stewardship is fundamental to issues such as agricultural productivity, climate change mitigation and adaptation, drought resilience, market access and sustainability frameworks. This strategy provides an overarching, coherent roadmap for soil related activity over the next 20 years, and the Soil CRC is proud to be associated with its development and its implementation.



Over the ten year funding period of the Soil CRC, there was a natural evolution to devote more resources and attention to research in the initial and middle stages of that period. As we enter the remaining years, there will be an increased focus on integration, adoption and outreach, ensuring that the knowledge outputs of the Soil CRC are appropriately disseminated to next users, and ultimately to the farmers and land managers who are dependent on a high performing soil.

Over the next four years, we will continue to deliver and finalise existing research programs, but we will also work with our delivery partners to ensure that the knowledge generated is delivered to various audiences using both existing and novel delivery pathways. Some areas of Soil CRC activity will result in technology outputs whose route to market will be via commercial pathways, and we will explore commercialisation opportunities with appropriate partners.

A major feature of the Soil CRC is its PhD student cohort, contributing to the capability of tomorrow. We will focus on supporting those students to completion and equipping them with a broader understanding and appreciation of soil and the agricultural sector it supports.

While the major focus will be on delivering against the agreed outputs and milestones of the 10 year CRC, we will also explore opportunities for delivery beyond 2027 and consider how the Soil CRC can maximise its legacy, contribute fully to the implementation of the National Soil Strategy, and ensure that we meet the needs of Australian agriculture.

PARTICIPANTS

MAJOR PARTNERS



PARTNERS



ASSOCIATES



VISION

Australian farmers using best practice soil management to underpin a dynamic, sustainable and profitable agricultural sector.

MISSION

To contribute new knowledge, tools and practices to help Australia's farmers better manage their soils in order to improve the profitability, sustainability, resilience and well-being of the agriculture sector.

VALUES

Collaborative

The Soil CRC is a collaborative and inclusive research and adoption organisation, passionate about soil and bold in its approach to delivering outcomes.

End-user driven and focussed

The Soil CRC is end-user driven in all things it does. Through farmer and other groups, industry are genuine partners in the CRC, helping to set priorities, develop proposals, undertake research, interpret results and communicate the new knowledge.

Multidisciplinary

The Soil CRC employs the necessary disciplines and expertise to deliver change during the life of the CRC, while being aspirational in its long-term goals to ensure a continuing legacy.

Research excellence

The Soil CRC is committed to research excellence – in science practice, capacity building, governance, management, integrity and ethics. The CRC is committed to being a national collaborative leader, recognised as an integral part of Australia's agricultural innovation system.

OUR STRATEGIES

STRATEGY 1. RESEARCH

We will undertake high quality research that enhances the productivity, profitability and sustainability of Australian agriculture, and meet our agreed commitments.

Objectives	Outcomes	Actions
<ol style="list-style-type: none"> 1. Complete all Commonwealth Funding Agreement research outputs and milestones 2. Promote research that is practical, applicable, timely, relevant to industry needs and readily available 3. Promote research excellence 4. Collaborate with end-users in all aspects of research to ensure practical solutions and ease of adoption 5. Ensure intellectual property is appropriately protected and managed 	<ol style="list-style-type: none"> 1. We excelled in the delivery of the Commonwealth Funding Agreement 2. Our research is relevant to industry partners, the broader community and to farmers 3. We produced high quality research 4. The Soil CRC is recognised as a highly credible source of soils knowledge and expertise 5. Farmers and land managers have access to new practices and knowledge that support profitability and sustainability 	<ol style="list-style-type: none"> 1. Monitor, review and revise (where appropriate) all Commonwealth Funding Agreement outputs and milestones 2. Continue to implement a strategically targeted investment process based on assessment of current investments, Commonwealth Funding Agreement outputs and milestones and end-user needs 3. Ensure the Soil CRC delivers high quality sciences through sound project design, integrated programs, rigorous implementation, reputable publication and delivery to target audiences, including through commercialisation of intellectual property 4. Continue to ensure end-user partners are involved in the design and delivery of research projects 5. Foster and support research partnerships within and across the Soil CRC including and specifically beyond the CRC to enhance adoption and maximise impact 6. Ensure active identification and management of intellectual property to maximise adoption and engage expertise to maximise commercial opportunities 7. Ensure research outputs are adoptable and easily findable

STRATEGY 2. ADOPTION

We will deliver new and useful knowledge to farmers, industry partners and Australian agriculture, using multiple platforms and formats, through existing channels and the Soil CRC's own communication pathways.

Objectives	Outcomes	Actions
<ol style="list-style-type: none"> 1. Ensure new knowledge is delivered to industry partners, advisors and farmers through existing and innovative pathways 2. Facilitate relevant knowledge being adopted and used effectively by next- and end-users 3. Use intellectual property to maximise impact by developing and managing commercial opportunities with delivery partners 	<ol style="list-style-type: none"> 1. We improved the capacity of the Australian agricultural sector, including our partners, to manage soils to enhance productivity and sustainability 2. Farmers and other industry partners received new knowledge through multiple formats that suited their needs 3. We delivered knowledge and tools to farmers by the most appropriate pathway, including commercialisation 4. Our commercially valuable intellectual property is identified and developed, with a pathway to providing impact and commercial return to partners 	<ol style="list-style-type: none"> 1. Develop and implement an Adoption Plan that involves all relevant capabilities of the Soil CRC 2. Deliver Soil CRC information face-to-face, through websites, newsletters, social media, fact sheets and other communication products 3. Undertake project-based outreach through existing networks, processes and activities 4. Review project portfolio to enhance opportunities for: <ul style="list-style-type: none"> - integration of projects across programs and themes - increasing adoption and impact for end-users 5. Continue to ensure end-users, partners and key stakeholders are involved in the design and implementation of adoption and delivery plans 6. Ensure that there is a utilisation and/or assignment plan for all commercially valuable intellectual property

OUR STRATEGIES

STRATEGY 3. CAPABILITY AND CAPACITY BUILDING

We will support the development of agriculture industry professionals and industry's capacity to manage soils for sustainable outcomes that support Australian agriculture.

Objectives	Outcomes	Actions
<ol style="list-style-type: none"> 1. Develop the next generation of researchers in areas relevant to soil 2. Ensure all Soil CRC postgraduate students have exposure to industry in all its forms 3. Increase the capacity of grower groups and advisory services to deliver technical information on improved soil management practices 4. Develop the ability of Soil CRC Participants to collaborate and innovate 	<ol style="list-style-type: none"> 1. We have achieved our target of 46 PhD student enrolments and 40 PhD student completions 2. Students have had exposure to the broader Soil CRC community, especially to industry users and have a broad understanding of industry interests in soil management. 3. We have increased the capacity of industry to manage soil for productivity and sustainability 	<ol style="list-style-type: none"> 1. Ensure Soil CRC PhD students are enrolled, supported in projects that complement the delivery of our outputs and milestones, and complete PhDs in a timely manner 2. Develop and deliver a comprehensive PhD 'industry exposure' program to enhance skills in writing, grant applications, intellectual property, commercialisation, communication, and working within industry 3. Develop and deliver, with industry partners and suppliers, theme and project-based training packages, resources and workshops 4. Deliver training activities and resources that improve the collaboration skills of Soil CRC Participants

STRATEGY 4. PARTNERSHIPS AND LEADERSHIP

We will actively engage our partners in all stages of planning, design, development and implementation of research, outreach and adoption activities and we will demonstrate national leadership in soils.

Objectives	Outcomes	Actions
<ol style="list-style-type: none"> 1. Ensure all partners have the opportunity to engage and be active 2. Develop and enhance national and international collaboration and opportunities for research and impact 3. Seek additional funding to increase resources available for research and adoption 4. Advocate for the importance of soil, soil management, soil research and the Soil CRC for maximising agricultural productivity and sustainability 5. Demonstrate effective and dynamic national leadership in collaborative soil research and innovation 6. Instil a culture of a collaborative community and a sense of belonging 7. Ensure that the Soil CRC will have a legacy of ongoing beneficial research, collaboration and practice change 	<ol style="list-style-type: none"> 1. Our partners are active and vocal supporters of the Soil CRC 2. Our communication has effectively conveyed the unique achievements of the CRC, our national leadership and impact 3. Enduring partnerships and collaborations have arisen from the Soil CRC 4. We have increased our resources, allowing us to deliver greater impact. 5. We are widely known and recognised as a national leader in soil research and innovation 6. Our Soil CRC community is engaged, outcomes focussed, supportive and committed to the CRC and future collaborations 7. Our partners are actively engaged in maximising the legacy of the Soil CRC and its collaborations 	<ol style="list-style-type: none"> 1. Develop and implement a detailed wind-up plan to maximise the legacy of the Soil CRC, in consultation with partners and stakeholders 2. Implement a revised communication plan, including stakeholder engagement to funders, partners and participants; Soil CRC branding and storytelling opportunities, including from 'hero' projects 3. Engage and communicate effectively with partners through multiple platforms, including face to face and through the annual Participants Conference 4. Continue to seek partnership and collaboration opportunities 5. Provide national leadership and actively promote the value of soil, soil management, soil research and the Soil CRC at multiple fora, including through government submissions and networks 6. Hold annual Soil CRC Participants Conference to enhance the CRC partnership, science quality and collaborations, adoptions and impact, and raise the profile and value of soils (as above) 7. Support the culture of community and inclusiveness, with regular opportunities for engagement by Soil CRC Participants and external stakeholders

OUR STRATEGIES

STRATEGY 5. GOVERNANCE AND MANAGEMENT

We will pursue the highest standards of governance and management, including the development of capacity and capability, embracing diversity and equal opportunity. Our management systems will be fit for purpose, efficient and focussed on supporting the Soil CRC's goals.

Objectives	Outcomes	Actions
<ol style="list-style-type: none"> 1. Employ best practice governance standards, including Board and committee review, diversity and professional development 2. Ensure best management practices employed in the Soil CRC office, including risk management, professional development, diversity and equal opportunity, succession planning and demonstration of values 3. Ensure rigorous fiscal accountability 4. Collate and evaluate evidence to demonstrate the value of Soil CRC investment to partners, stakeholders and funders 	<ol style="list-style-type: none"> 1. The Board was actively engaged in setting the strategic directions and monitoring performance of the organisation 2. Risks, including financial, were clearly identified and actively managed and minimised 3. Resources were used efficiently, effectively and appropriately to maximise the impact of the Soil CRC 4. Our communication has effectively captured the unique achievements of the CRC, our national leadership and impact 5. Monitoring and evaluation efforts provided clear evidence of the impact of the Soil CRC and the value to each Participant 6. Soil CRC participants are strong advocates for soil research 	<ol style="list-style-type: none"> 1. Undertake annual reviews of Board and committee performance 2. Actively manage risk through the risk register and the Audit and Risk Management Committee 3. Monitor the implementation of the Strategic Plan and develop an annual operational plan and Board-approved budget 4. Develop and implement a monitoring and evaluation plan to provide evidence of the impact of the Soil CRC 5. Develop a robust wind up plan that maximises the legacy and impact of the Soil CRC





OUR PROGRAMS

1. Investing in high performance soils

Supporting farmers to maintain the long-term integrity and fertility of soils for future generations.

OUTCOMES:

- Farmers may be financially rewarded for assured soil stewardship
- Improved design of soil-related policy
- Improved design and uptake of new soil management products and services
- Increased adoption of sustainable soil management practices by farmers

2. Soil performance metrics

Developing tools that allow farmers to monitor and assess the performance of their soils and take action where needed.

OUTCOMES:

- Improved resource use through mapping and monitoring of key soil indicators
- Optimised fertiliser and irrigation inputs and reduced negative environmental impacts
- Assurance of environmental credentials through use of sensor technologies
- Better informed decision making by farmers



3. New products for soil fertility and function

Developing a range of new products to better address challenges in soil management.

OUTCOMES:

- Optimised fertiliser input and reduced negative environmental impacts
- Better matching of nutrient release from soil reserves with plant demand
- Increased capture and re-use of nutrients in agriculture
- Mitigation of soil constraints using novel materials and application technologies
- Increased microbial inoculation efficiency in soil

4. Integrated soil management solutions

Synthesising and applying our current understanding of soil science to the key soil types across Australia.

OUTCOMES:

- A greater range of strategic management options to address soil constraints to maximise water use efficiency and productivity
- Maintained and enhanced soil function and increased rhizosphere vigour
- Enhanced landscape-scale soil carbon storage
- Improved decision support tools to assist farmers in managing soils



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