



Vic Hub
**DROUGHT &
INNOVATION**

Victoria Soil Coordinator

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This project is supported by the Australian Government's
Smart Farms Program



Australian Government

National
Landcare
Program



soil health axiom

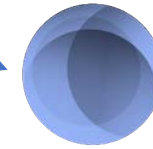


- Including ecosystem services, Australia's soil provide roughly \$930 billion annually to the economy (McBratney et al., 2017)
- From agricultural production alone, soils directly contribute approx. \$63 billion annually to the economy (Jackson et al., 2018)
- Soil acidity in WA costs > \$400 million annually through lost production (Herbert, 2009)



Australian Government

\$214.9 million National Soil Package



Future Drought Fund

\$5 billion Future Drought Fund
⇒ \$100M p.a.



Soil Monitoring Program (\$54m)

Soil Science Challenge (\$20m)

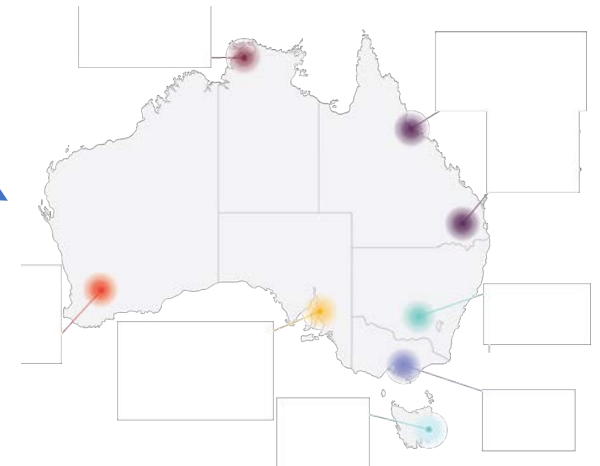
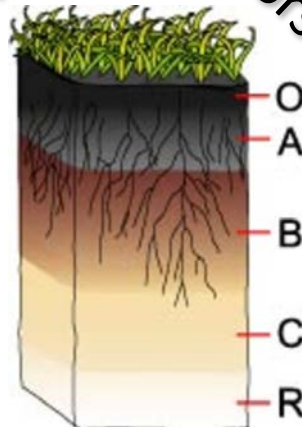
Historical Soil Data Capture Payments Program (\$21m)

Food Waste for Healthy Soils (\$67m)



Smart Farm Small Grants (\$18m)

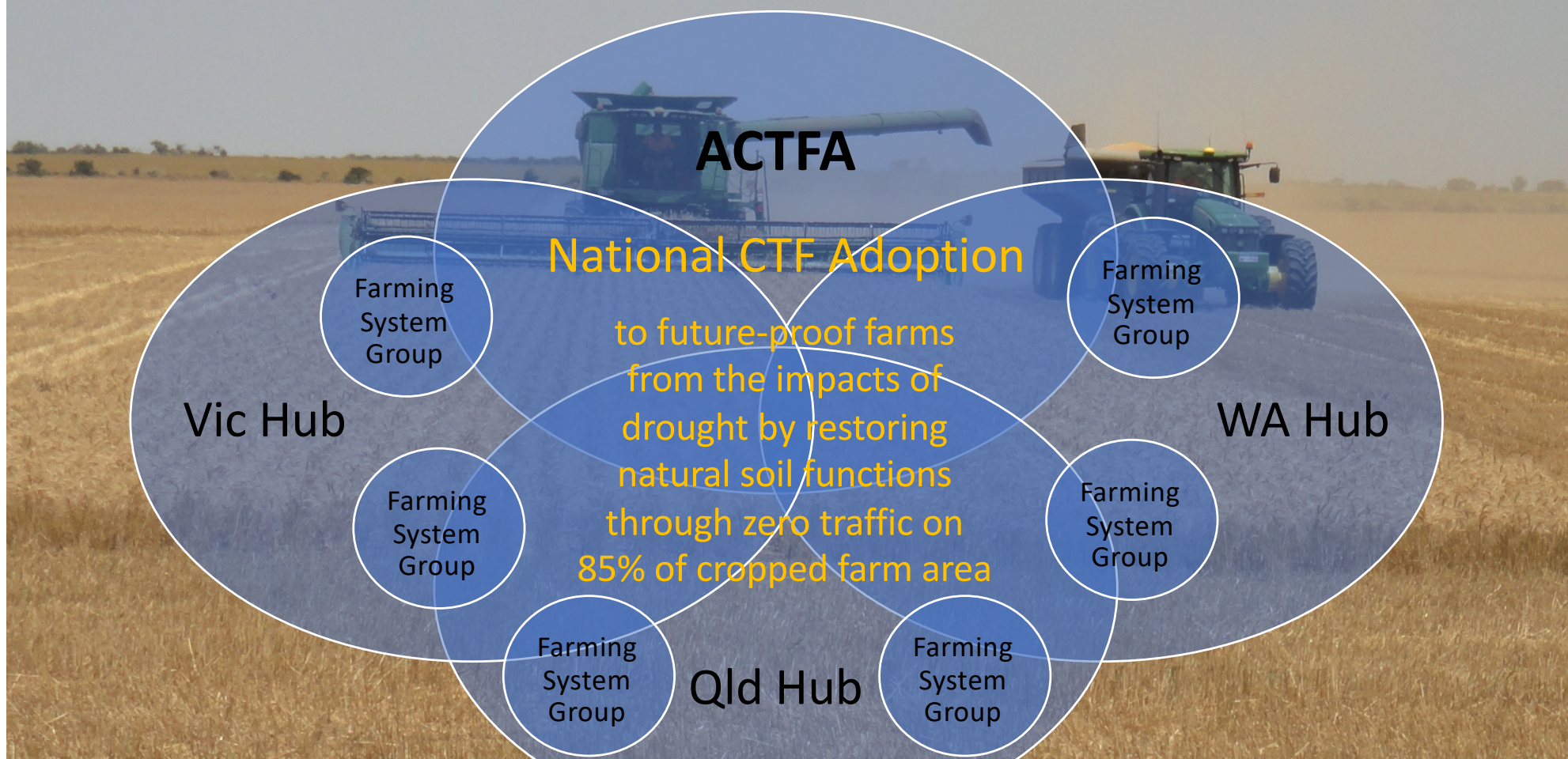
Soil Coordinators



Regional Soil Coordinators

- Support the exchange of knowledge, facilitate the dissemination of findings, and provide science input to the DAFF Soils Package, especially SFSG projects.
- Promote coordination for responses to future DAFF funding opportunities.

FDF Extension and Adoption of Drought Resilience Farming Practices



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- Promote coordination for responses to future DAFF funding opportunities.
- Provide DAFF with a gap analysis in soil extension and research to help direct future funding initiatives.

STAKEHOLDER SURVEY

Section B. The following Section is about Identifying your major regional soil issues and gaps that require more investment

1. Rate the impact of each soil issue in your work region:
Tick ONE box in each row

	No impact	Frequent Small impact	Large impact in occasional seasons	Frequent Large impact
Chemical issues:				
Salinity				
Sodicity				
Topsoil acidity				
Subsoil acidity				
Low fertility				
Nutrient leaching				

Section A. The following Section is about the current and preferred sources of soils information and advice for the growers in your region

1. How do most growers in your work region rate the value of the following resources providing useful soils information?

	No value	Low value	Some value	High value	Don't know
Local farming systems groups (including field days)					
Industry groups (e.g. GRDC, MLA, CRDC, HIA)					
Paid advisors/consultants					
Government extension advisors					
Researchers (State/Federal/University)					
Internet searches					

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The pilot Soil Monitoring Incentives Program (\$54M)

Rebate of \$275 per site for 6 tests

Test (ave 6 cores except BD)	Cost
Bulk density (single core)	\$6 x 3 depth
Soil texture (Hand)	\$20 x 3 depth
Total OC (LECO)	\$24 x 3 depth
EC (1:5 water) pH (CaCl ₂ or water)	\$15 x 3 depth
Ammonia-N (2M mKCl) Nitrate-N (2M KCl)	\$17 x 3 depth
Available Phosphorus (Olsen or Colwell)	\$16 x 1 depth
TOTAL	\$262

- Each sampling site is composed of a cluster of 7 cores, one core is used for bulk density and 6 cores are aggregated for chemical analysis.
- Three depths ranges (0 – 10, 10 – 20, 20 – 30 cm).
- A minimum of 4 sites per business.

- Data will be uploaded into the Australian National Soil Information System (ANSIS)
- Southern Cross University (SCU) will appoint soil sampling providers
- Land managers can receive a maximum of \$10,000

Approx. cost after Government rebate including sampling: between \$170 to \$94 per site for 4 to 20 sites respectively

The pilot Soil Monitoring Incentives Program (\$54M)

Rebate of \$275 per site for Organic Carbon

Test	Cost
Topsoil Total OC (LECO) under 2021 CFI Methodology, gravel content, air-dry mass, gravimetric water content on the air dry soil, and bulk density.	\$48 x 3 core
Subsoil Total OC (LECO) under 2021 CFI Methodology, gravel content, air-dry mass, gravimetric water content on the air dry soil and bulk density.	\$72 x 3 cores
TOTAL	\$360

- Each sampling site is composed of a cluster of minimum 3 cores per strata (site).
- Two depths ranges (0 – 30, 30 – 100 cm).
- A minimum of 3 strata (sites) per business.

- Data will be uploaded into the Australian National Soil Information System (ANSIS)
- Southern Cross University (SCU) will appoint soil sampling providers
- Land managers can receive a maximum of \$10,000

Approx. cost after Government rebate including sampling: between \$600 to \$500 per site for 3 to 20 sites respectively