

Western Australian Soil Health Strategy

Background



The continued prosperity of our natural environment and our primary industries depends on the health of our soils.

The State Soil Health Strategy has been initiated to help advance WA's vital agricultural and pastoral industries.

The Soil and Land Conservation Council suggests that the Strategy should provide direction for research, development, extension, and monitoring activities that support ongoing improvements in soil health in terms of soil function and ecosystem services.

Vision



Western Australians will receive the benefit of healthy and diverse soil ecosystems now and into the future, supporting a healthy environment, agricultural production, and infrastructure protection

Core elements



A discussion paper has been prepared to provide an opportunity for stakeholders in the agricultural and pastoral industries to shape the development of the Strategy.

Three themes have been identified as key matters for consideration:

- Research and application
- Carbon sequestration
- Soil governance

Research and application



Research, development, extension and monitoring activities support new technologies and practices to provide ongoing improvement in soil health.

Some areas for discussion:



The development of soil health technical expertise amongst service providers and technical specialists, in both the private and public sectors



Best practice soil testing that will support evidence-based decision-making and characterise soil health and risks



The protection and improvement of agricultural soil health through research, innovation and adoption of practices and new technologies that address current known threats to soils and improving soil resilience

Carbon sequestration



An increase in soil organic matter and carbon sequestration in agricultural and pastoral soils through practices adapted to local environmental, social, and economic conditions.

Some areas for discussion:



Co-investment and strong partnerships between industry, community and government to assess the role of soil organic carbon in climate adaptation



Research into the efficacy of soil carbon sequestration from higher densities of perennials and development of the means of achieving this



Research and development into rebuilding complex and diverse vegetation in suitable landscapes.

Soil governance



Effective and innovative policies support soil health and protect high-quality agricultural land and soil resources.

Some areas for discussion:



Development of transparent and robust mechanisms to set priorities and better support on-ground soil health actions



Sharing of knowledge and building partnerships with grower and industry groups



Extension of high quality land mapping across designated priority areas and the remainder of the South West Land Division of Western Australia

6

Principles to drive change

These guiding principles are suggested for developing a state-level strategic approach to maintain and manage healthy soils in Western Australia.

1

The key principle of *shared responsibility* between landholders and government to mitigate land degradation and sustain soils for future use is set out in the SLC Act.



2

Healthy soils contribute to food security, environmental sustainability, and climate change mitigation and adaptation.



4

Soil health management is intrinsically related to good groundcover management and maintenance of sufficient biodiversity within the broader landscape.



3

Soil function priorities and goals should incorporate an ecosystem services approach that applies to all landscapes in Western Australia.

5

Soil and land degradation mitigation practices should be actionable and cost effective, drawing on new and existing technologies and future opportunities that improve land and soil health.

6

The role of government includes policy development, research and innovation, extension of soil management information, maintenance of soil data and maps, and monitoring the state of soil health.

