

Soil and Land Management Information from DEW

The Department for Environment and Water (DEW) manages South Australia's soils data and information that guides and influences sustainable land management in SA. This soils information helps land managers to achieve environmentally sound management of the soil and land resource in both the agricultural and broader landscape in South Australia. All of this soil information is available either directly or through links from DEW's Soil and Land Management web pages available at:

www.environment.sa.gov.au/topics/soil-and-land-management



Evidence based knowledge of soil and land management located at this web site can improve informed decision-making capacity and used for:

- **Sustainable soil and land management**
- **Delivery of natural resource management and landscape projects**
- **Research and Education**
- **Land use planning**
- **Native vegetation and biodiversity management**
- **Sustainable water management**
- **Landscape modelling, land use potential, potential impacts of climate change** on land use, land degradation or **soil carbon**.
- **Monitoring soil health and other environmental qualities**

DEW enables this information to be made available through various portals: [Soil Sites SA](#) (raw site data); [NatureMaps](#) (soil and land attribute maps); [Enviro Data SA](#) (reports, fact sheets, pdf maps); [Data.SA](#) (spatial data).

- DEW's data and products support: PIRSA's [AgInsight](#) (i.e. soil-based crop suitability maps); and CSIRO via the [Soil and Landscape Grid of Australia](#) and ASRIS – the [Australian Soil Resource Information System](#). The 'Grid' now makes SA soil data available via farmer-friendly apps used for crop yield forecasting and estimating soil-water availability.
- Ongoing data collection is important for managing soil health and productivity, particularly for dynamic properties such as pH, fertility, and soil carbon. Soil projects across DEW and PIRSA will retain new soil data in DEW's [Soil Sites SA](#) – which can then be used to improve local and national mapping.

Sustainable soil and land management

The sustainable use of soil and land in agricultural areas of SA is of increasing importance, particularly in the face of a changing climate. A range of initiatives help identify threats to our soil and land resources (eg erosion, acidification, salinity), as well as opportunities for improving management and condition.

Delivery of natural resource management and landscape projects



Identifying the location, extent and severity of land management issues and areas prone to degradation; supporting whole-of-landscape sustainable land use and management decisions for both production and nature conservation.

Research and education

Identifying where in the landscape particular research outcomes apply; education of land managers, advisors, policy makers, planners, industry and the community about better soil and land management, and associated planning and policy development.

Land use planning

Identifying limitations and opportunities for particular land uses and developments, from agricultural to urban, including the identification of 'prime agricultural land'.

Native vegetation and biodiversity management

Supporting whole-of-landscape environmental management planning; identifying suitable areas for habitat restoration; identifying threats to the environment.

Sustainable water management

Identifying soil and land conditions, land management practices and land uses that impact on water resources, as well as developing whole-of-landscape solutions.



Landscape modelling

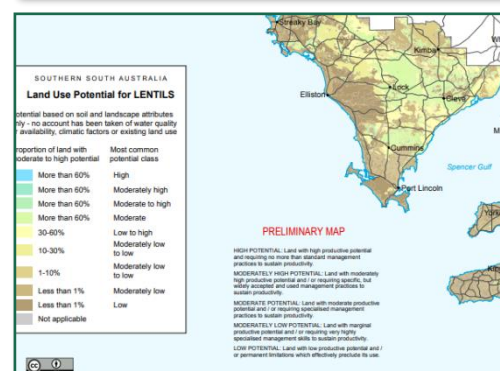
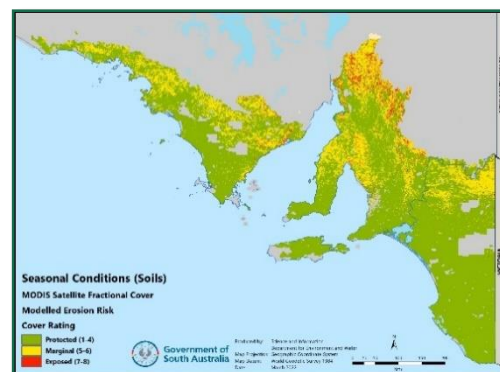
Developing conceptual models that answer specific questions, such as: environmental risk assessment (eg land salinisation); identification of biodiversity assets for protection (eg wetlands); **land use potential** (eg crop potential modelling); land management potential (eg suitability of areas for specific soil amelioration); infrastructure risk (eg underground cabling); and scenario modelling (eg modelling the **potential impacts of climate change** on land use, land degradation or soil carbon).

Monitoring soil health and other environmental qualities

Informing what to monitor and where; extrapolation of monitoring results across the landscape.

Relevant Links:

[Soil Sites SA:](#) [Soil Sites SA Home \(environment.sa.gov.au\)](http://environment.sa.gov.au)
[NatureMaps:](#) [NatureMaps Home \(environment.sa.gov.au\)](http://environment.sa.gov.au)
[Enviro Data SA:](#) [Land Resources Soils \(environment.sa.gov.au\)](http://environment.sa.gov.au)
[Data.SA:](#) [Dataset - data.sa.gov.au](http://data.sa.gov.au)
[AgInsight:](#) [AgInsight South Australia](#)
[Soil and Landscape Grid of Australia:](#) [Soil and Landscape Grid of Australia - CSIRO](#)
[Australian Soil Resource Information System:](#) [A S R I S \(csiro.au\)](http://csiro.au)



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