Land Management Control Policy





Land Management Control Policy Statement

The Northern and Yorke Landscape Board (the Board) Land Management Control Policy provides guidance to landholders, staff and stakeholders of the Board's approach to exercising its powers under Part 7 of the Landscape South Australia Act 2019 (the Act). The policy outlines land degradation risk factors within the regional context.

The Board will encourage and support voluntary remedial action by landholders in the management of land.

Where options for a voluntary solution are unsuccessful the policy outlines formal compliance measures that will be taken.

Regional context

Agricultural cropping and grazing production account for 80% of land use across the Board's region (the region). The region is subjected to typical Mediterranean climatic conditions with mild, wet winters and hot, dry summers. Annual average rainfall varies across the region ranging from 300mm in the far east to 200mm in the north of the region and up to 600mm to the south.

The Northern and Yorke region is made up of three major landforms:

- Yorke Peninsula a plain of loam over clay, shallow calcrete or calcareous loams with some areas of dunefields and saline land. Wind and water erosion, soil fertility and salinity are the main soil degradation issues.
- Coastal plain shallow calcrete and calcareous loams with some areas of duneswale and sand. Wind erosion and saline soils are the main issues.
- Northern Mount Lofty Ranges and southern Flinders Ranges – neutral loamy soils over red clay subsoils. Water erosion, dryland salinity and soil acidification are the main issues.

Land management

The responsible management of land is critical for preventing environmental damage and maintaining long term sustainability and productivity. Land degradation, as defined in the Act, Section 97 - "is any change in the quality of land, or any loss of soil, that has an adverse effect on water, native vegetation or other natural resources...".

Land degradation can result in reduced soil fertility, reduced productivity of crops and pastures and increased susceptibility to wind and water erosion. Soil erosion occurs when the surface is disturbed, and the loss of 1 mm. of soil from 1 ha of land equates to approximately 14 tonnes of soil. Thus, even minimal erosion can result in a significant loss of soil from the paddock. Wind erosion may cover plants and seed reserves, pose health risks by affecting breathing, and reduce visibility for traffic. Water erosion may result in soil deposition in creeks, rivers, and marine environments, potentially impacting aquatic ecology and altering hydrology.

Soil erosion can be influenced by soil type, topography and management. Areas prone to wind and water erosion can be found throughout the region; however, improper management practices can render any area vulnerable. Soil erosion may arise from activities such as cultivation, livestock movement, or vehicle traffic. In addition, low levels of ground cover can make soil more prone to erosion, this is particularly relevant in poor seasonal conditions, especially during late summer and autumn.

In dry conditions, landholders use sacrificial paddocks or containment areas. These are designated sections of the property that are intentionally subjected to a high stocking rate, resulting in minimal ground cover, to maintain ground cover across the remaining land. When these areas are managed according to best practice guidelines the benefits to the entire property are evaluated in terms of reducing the risk of degradation.

Evidence of land degradation

Visual signs of land degradation can include (but are not limited to):



Movement of soil during wind events (>30km/hr) (photo: Georgie Keynes, 2025).



Build-up of soil, dung and litter along fence lines and around plants (photo: Jessica Cavallo, 2025).



Muddy and silted dams (photo: Georgie Keynes, 2025).



Gullies, rills and tunnelling across paddocks (photo: Soil Erosion Protection Field Survey Manual, Giles Forward, DEW 2021).

Preventing land degradation

Preventing land degradation can be achieved by retaining ground cover, plant bulk and maintaining residual plant height. These factors will depend on soil type, topography and crop or pasture type however as a guide for best practice:



A target of 70% ground cover provides low risk for wind and water erosion.



A threshold or absolute minimum of 50% ground cover with at least a third of it anchored to the ground must be maintained.



On slopes and higher risk soil types, retain 80-90% ground cover and over 1000kg of dry matter per hectare.

Photos: Georgie Keynes, 2025.

Risk of land degradation

The risk of land degradation and possible examples are listed in the tables below. Where the erosion risk rating is medium to high, actions may be taken by the Board to support landholders. Cover ratings (Table 1) and Ground cover examples (Figures 1-4) can be utilised to support decision making.

Table 1: Cover rating descriptions (Soil Erosion Protection Field Survey Manual, Giles Forward, DEW 2021).

Rating	Height	Cover %		
	(wind erosion)	(water erosion)		
1	Residues 40cm or higher.	75 to 100%.	- 11111-1111111111-1	
	Bulk: Very high level of plant mat is anchored and stable (not easily			
2	Residues between 10cm and	Even coverage of approx. 75 to		
	40cm.	100%.		
	Bulk: High amount of plant matte Anchorage: Majority of cover is a			
3	Residue height variable from less than 10cm to 40cm.	More variable cover of approx. 75 to 100%.	<u>і</u> ш п.л п	
	Bulk: Moderate to high but more Anchorage: Cover often slightly fl			
4	Residues 2cm to 10cm , but of	50 to 75% cover, residue		
	moderate bulk. Residues a	colour dominates.		
	mixture of upright and flattened.			
	Bulk: Moderate.		-	
	Anchorage: Majority of residues a			
	flattened or damaged.			
5	2cm of relatively even but thin	50 to 75% cover, residue		
	residue cover remain; or, cover	colour still dominates.		
	variable from sparse 40cm to less than 2cm cover.			
	Bulk: Low, damaged through mod	doratoly hoavy grazing or traffic	. []	
	by animals and/or machinery. An	шин на		
	anchored, most residues are dam			
6	Height is variable and less than	Soil colour dominates, 25 to	PRODUCT STATE	
	10cm high to bare.	50% cover.	mlan da	
	Bulk: Low amounts of plant mate			
	are anchored; most are damaged	k		
7	Mostly bare although some residues can be seen. Grazed or	Soil colour dominates, 1 to 25% . Scattered residues		
	cultivated virtually bare .	(and/or rocks) remain.		
	Bulk: Minimal amount of plant ma			
	probably unanchored.			
8	Nil cover (bare)	0% cover		
	Bulk: Nil.			
	Anchorage: Nil.			

Table 2: Actions relevant to cover rating and erosion risk

Cover rating	Erosion risk	Action	
Rating 1-2	Negligible	No action required.	
Rating 3-5	Low	Monitor ground cover levels.	
Rating 5-6	Medium	Initial investigation required into risk of erosion, taking into account cropping cycle, seasonal conditions, soil type and external events.	
		Management actions may need to be developed to reduce risk.	
ir		Further investigation required into risk of erosion, taking into account cropping/ pasture cycle, seasonal conditions and soil type.	
		Management actions will be developed and put into place to reduce risk.	

Wind erosion cover rating: stubble and fallow



Figure 1: Wind erosion cover rating: crop stubble/fallow. Soil Erosion Protection Field Survey Manual, Giles Forward, DEW 2021.

Wind erosion cover rating: crop

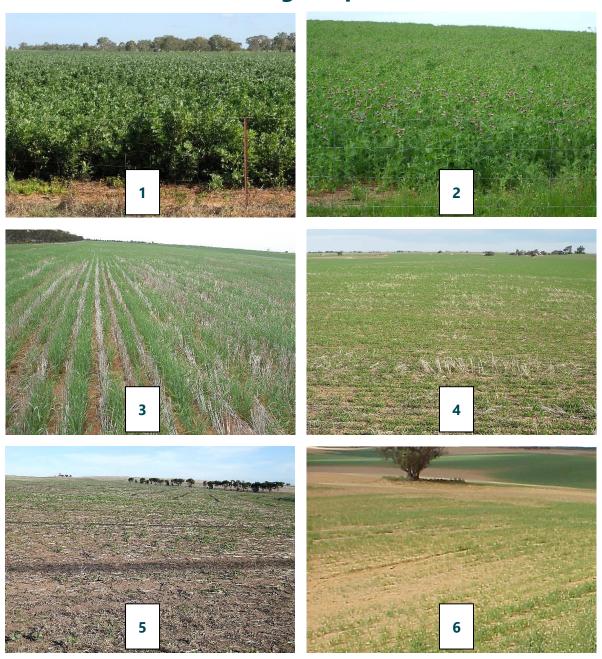


Figure 2: Wind erosion cover rating: crop. Soil Erosion Protection Field Survey Manual, Giles Forward, <u>DEW 2021</u>.

Wind erosion cover rating: pasture

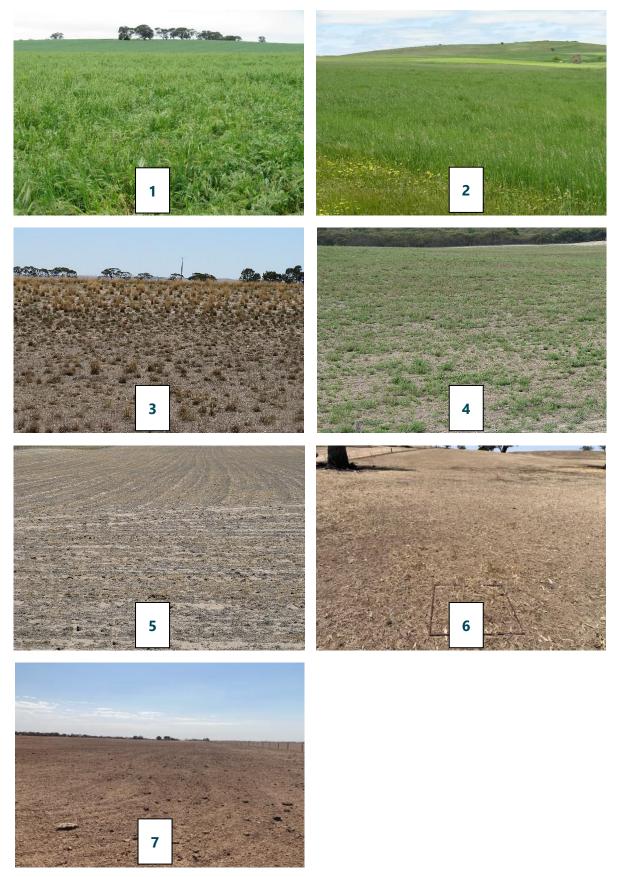


Figure 3: Wind erosion cover rating: pasture. Pictures 1-5: Soil Erosion Protection Field Survey Manual, Giles Forward, DEW 2021. Pictures 6-7: Georgie Keynes 2025.

Ground cover examples

20% ground cover





- High area of bare ground susceptible to wind and water erosion
- Highly susceptible to water run-off
- Low water infiltration
- Low plant numbers anchored to the soil
- Low litter (plant material and dung)
- Grazing paddocks areas around troughs and under trees likely to have less cover

50% ground cover





- Half of the area covered by plants and litter
- Medium level of plant numbers anchored to the soil
- Some evidence of litter (plant material and
- Medium risk of wind and water erosion
- Lowest benchmark required to reduce risk of erosion

70-80% ground cover





- Low area of bare ground
- High percentage of anchored plants
- High level of litter (plant material and dung)
- High water infiltration
- Benchmark for best practice management
- Low risk of wind and water erosion

100% ground cover





- No bare ground evident
- Plants anchored
- High level of litter (plant material and dung)
- Benchmark for slopes and higher risk areas
- Negligible risk of wind and water erosion

Figure 4: Ground cover - dry and green pasture. Greg Lodge, NSW DPI (20% and 40% photographs), Primary Industries South Australia, 1996, Pasture Pics: easy estimation of pasture dry matter levels, Appila/Bundaleer Pasture Group, Appila, SA (50, 80 and 100% photographs). Adapted from: Monitoring Groundcover and Soil Degradation; Vic DPI.

Land management provisions

The Board is the relevant authority for the management and protection of land under the Act. Under Section 98(1) of the Act, the Board can require a landowner to prepare an action plan (Section 99) if the Board considers:

- a. that an owner of land has been, is, or is likely to be, in breach of the general statutory duty on account of land management practices or activities undertaken in relation to land for which the owner is responsible; and
- b. that those practices or activities have resulted in, or could reasonably be expected to result in, unreasonable degradation of land or an unreasonable risk of degradation of land.

Degradation is any change in the quality of land, or any loss of soil, that has an adverse effect on water, native vegetation or other natural resources associated with, or reliant on, land, any other aspect of the environment, or biological diversity as per Section 97 of the Act.

Under section 98(2) of the Act, the Board must consider whether a practice or activity involves (or may involve) unreasonable degradation, or an unreasonable risk of land degradation. To this effect, the following Provisions will guide the Board's considerations:

- 1. A landholder is responsible to minimise the risk of land degradation, including:
 - a. managing their land within its capacity; and
 - b. not impacting surrounding properties, biodiversity, infrastructure or social or public health and wellbeing.
- 2. When unreasonable degradation or unreasonable risk of degradation is observed by the Board or delegate, the cause(s) of degradation must be determined by an appropriate investigation.
- 3. The investigation must be undertaken by the Board or delegate, and will:
 - a. Determine if land degradation was caused by inappropriate management

- practice or external event(s) such as fire, flood or drought.
- b. Determine if this is a 'once off' event or an ongoing breach, and the level of action(s) being taken to remedy the breach.
- c. Determine if the degradation is a localised issue or widespread throughout a district or region.
- d. Determine the scale of the impact, the area affected and the broader impacts on neighbours, natural resources, biodiversity, infrastructure and social or public health.
- e. Determine rate of degradation and urgency of action required.
- Subject to Provision 5 or 9, should the investigation determine that land degradation was a result of a management practice(s) or lack thereof, then the following actions must be initiated in this order:
 - a. The Board or delegate to pursue the landholder to implement voluntary action to prevent further land degradation.
 - b. The Board or delegate to pursue the landholder to implement voluntary practice change to remediate land degradation.
- 5. Should the investigation identify that unreasonable land degradation is occurring at an unacceptable rate, then the Board may immediately request the landholder to prepare and implement an action plan under section 99 of the Act.
- 6. Subject to Provision 7, should the investigation determine that unreasonable land degradation was caused by an event beyond the control of the landholder, then the landholder is to take voluntary action to remediate land degradation caused by the event within a reasonable timeframe.
- 7. Should a landholder fail to take voluntary action within a reasonable timeframe in relation to Provision 4 or 6, then the Board

may request the landholder to prepare and implement an action plan under section 99 of the Act.

- a. The plan will be for a period of up to three years and will be amended in accordance with environmental events or seasonal conditions.
- 8. In some situations, a Protection Order under section 207 or Reparation Order under section 209 may be better suited. These situations may include:
 - a. The impact of land degradation is extreme and/or requires immediate or significant action.
 - b. The issue will require ongoing supervision and review or costs associated with compliance may be high or ongoing.
 - c. The person in breach indicates or demonstrates a low level of commitment to or capacity to achieve voluntary compliance or completion/implementation of an action plan.
- 9. In the event land management issues are widespread within, or across districts, due to seasonal conditions or changing climate, the Board will:
 - a. Develop a strategic district or regional approach to reducing the impacts of land degradation or risk of land degradation.
 - b. Facilitate regenerative land management research and development opportunities.
 - c. Seek opportunities to leverage funds to support management, adaptation and extension opportunities.
 - d. Take a case-by-case approach to initiating compliance with an individual property owner taking into consideration regional/district context and strategic approach.

Further resources

Please visit these websites or contact your local Board Office for more information.

- Soil Management Northern and Yorke Landscape Board
- Soil Erosion Protection Field Survey Manual – Giles Forward DEW, November 2021
- Monitoring Groundcover and Soil <u>Degradation- Agriculture Victoria</u>
- **Emergency Measures to Curb Wind Erosion- Department Primary Industries SA**

Erosion Risk Potential:

- Wind Erosion Potential factsheet
- Wind Erosion Potential map
- Water Erosion Potential <u>factsheet</u>
- Water Erosion Potential map

Contact us

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www.landscape.sa.gov.au/ny



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Policy approval

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Responsible officer	General Manager	Review date	19/02/2026	
Policy author	Molly O'Dea, Sustainable Agriculture Facilitator			

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Quality control

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