

DRYLAND SALINITY

- AN INTRODUCTION

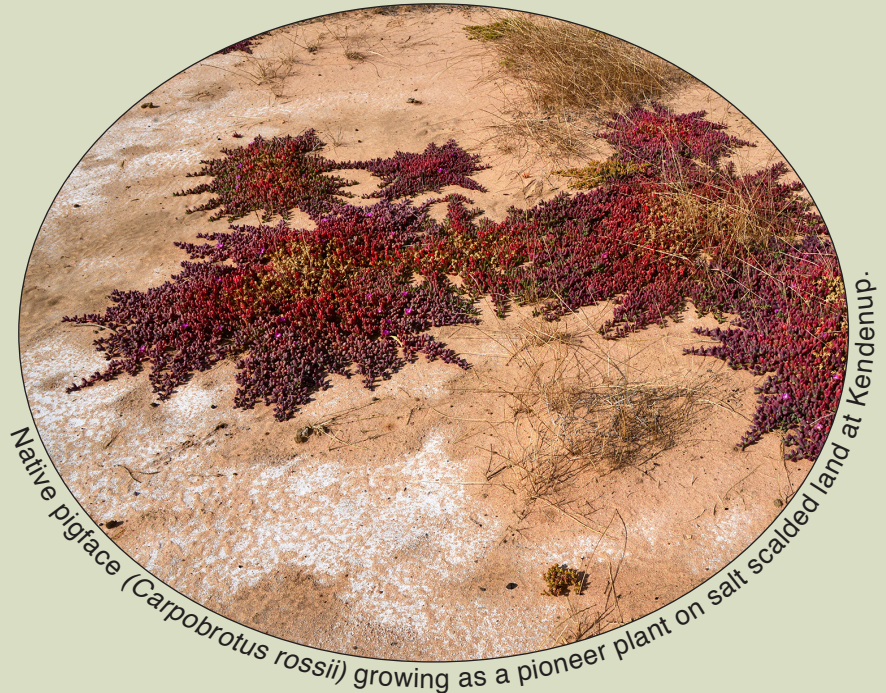


WHAT IS DRYLAND SALINITY? ●●●

Dryland salinity refers to all soils in non-irrigated areas that have become saline since being cleared for agriculture.

In WA, dryland salinity is the result of an altered water balance caused by the clearing of land for agriculture and the removal of deep rooted native perennial vegetation with shallower rooted annual crops and pastures.

It is estimated that more than 2 million ha of broadacre farmland in Australia is currently affected by dryland salinity (ABS, 2002), with more than half of this area located in WA. Dryland salinity affects the land resource and also impacts on water resources and natural biodiversity and can cause damage to roads, buildings and other infrastructure.

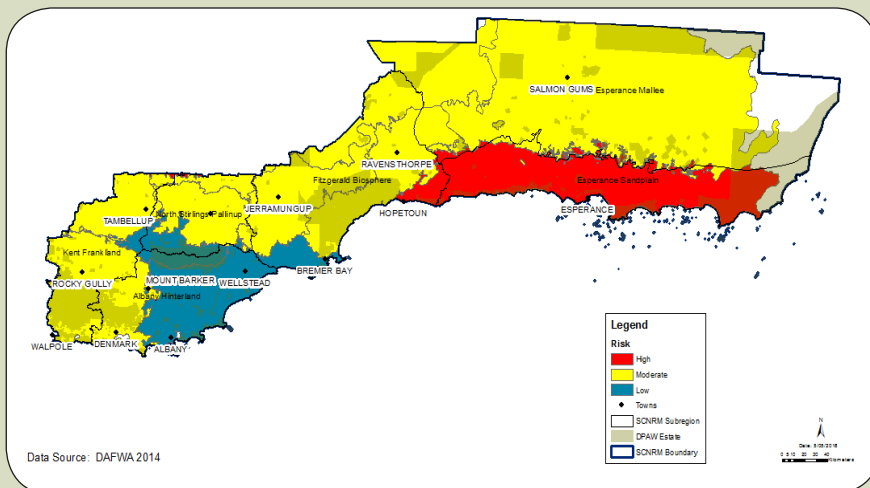


Native pigface (*Carpobrotus rossii*) growing as a pioneer plant on salt scalded land at Kendenup.

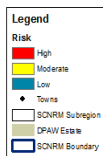
BENCHMARK TARGET ●●●

- Containment of current salinity on-farm through recharge control.
- Rehabilitation of saline land with revegetation and saltland pastures.

CURRENT POSITION on the SOUTH COAST ●●●



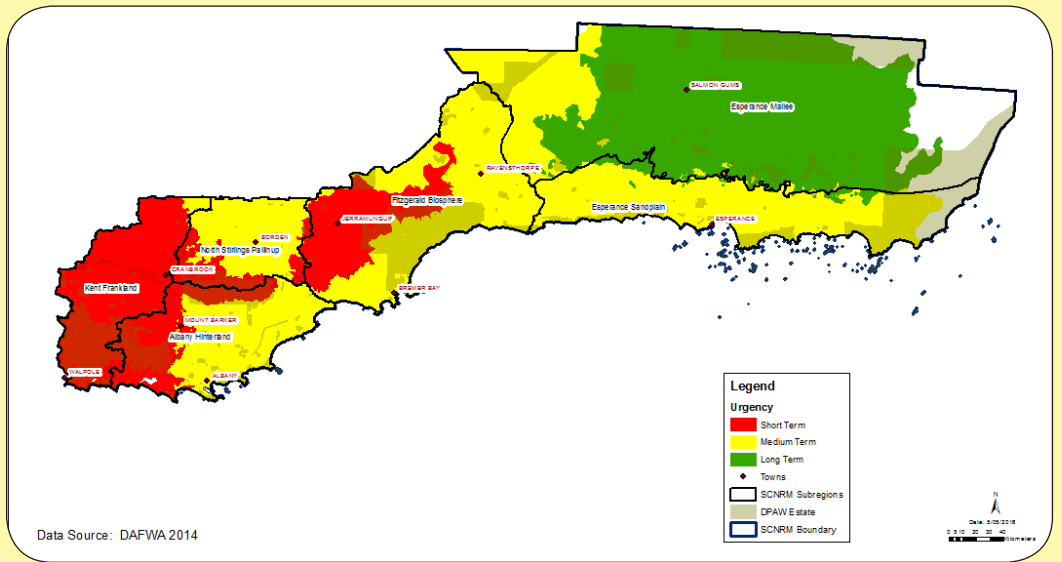
Data Source: DAFWA 2014



Summary of salinity risk across the South Coast NRM region.

Salinity risk is high on the Esperance sandplain, where groundwater levels are still rising, but is moderate in the Pallinup, Jerramungup Plain, Ravensthorpe and Salmon Gums Mallee where groundwater levels continue to rise.

The Kent-Frankland catchment has only a moderate salinity risk due to water tables being mostly stable, so the potential area at risk from salinity has already been affected. The Albany hinterland generally has a low risk of salinity.



TREND ●●●

Groundwater levels are commonly still rising in the Esperance, Ravensthorpe and Jerramungup areas, variable in the Albany, Borden and Cranbrook areas and have been fairly stable over the past few years in the Frankland and Denmark areas.

With the broadscale removal of blue gum plantations in these areas, water tables may begin to rise again and monitoring is critical.

PRACTICES to ACHIEVE TARGET ●●●

Simple farm management practices you can use to control groundwater tables and rehabilitation of agricultural land affected by dryland salinity include:

- Strategic introduction of deeper rooted perennial vegetation to the landscape.
- Sustainable grazing of saline lands - fodder shrub systems with saltbushes, tall wheatgrass and puccinellia.
- Strategic use of earthworks and other engineering solutions to manage surface water and lower water tables. Check with DAFWA if you need to do a "Notice of Intent to Drain".
- Monitoring of groundwater levels across farms/catchments.

PLEASE NOTE: Unless specifically referenced, the information in this resource information sheet has been summarised from the *Report Card on*

Sustainable Natural Resource use in Agriculture by the Department of Agriculture and Food WA. For more information go to: www.agric.wa.gov.au/soil-constraints/report-card-south-west-western-australia.

REFERENCES ●●●

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FURTHER READING ●●●

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- Saltland Pastures Association (2010) Glove Box Guide Productive Saltland Pastures for the South Coast.
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