

# Technical Information

## Are activities being undertaken to conserve our threatened ecological communities?

This document describes the sources of information, advice, methods, indicators and data processing procedures used to develop the reports. Reliability of data, as well as metadata attributes, are also described.

### **State NRM Plan Guiding Target:**

Improve the conservation status of species and ecological communities.

### **State NRM Plan Representative Measure:**

Proportion of all EPBC listed species and ecological communities with conservation actions and monitoring occurring.

### **Data collection period:**

2013.

### **Expected frequency of reporting:**

Annual.

### **Data sources:**

1. EPBC listed threatened ecological communities are listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Australian Government – Department of the Environment (DoE 2013)) ([www.environment.gov.au/biodiversity/threatened/index.html](http://www.environment.gov.au/biodiversity/threatened/index.html)).
2. A questionnaire was sent to native vegetation/flora experts in each NRM region to obtain data relating to the conservation actions and monitoring being undertaken for EPBC listed threatened ecological communities in each NRM region.

### **Indicators used:**

1. Number (percentage) of EPBC-listed threatened ecological communities for which conservation actions are occurring in South Australia.
2. Number (percentage) of EPBC-listed threatened ecological communities for which monitoring of extent is occurring in South Australia.
3. Number (percentage) of EPBC-listed threatened ecological communities for which monitoring of condition is occurring in South Australia.

### **Methods of data collection and processing:**

**Presence:** EPBC listed threatened ecological communities are listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Australian Government – Department of the Environment (DoE 2013)) ([www.environment.gov.au/biodiversity/threatened/index.html](http://www.environment.gov.au/biodiversity/threatened/index.html)).

The presence of threatened ecological communities in South Australia is determined from DEWNR's [statewide floristic vegetation mapping](#) and represents a combination of desktop studies, which review information from a range of databases and publications, and consultation with regional staff and other contacts. Limited field checking of the presence of each threatened ecological community has occurred. The distribution of the threatened ecological community "Giant Kelp Marine Forests of South East Australia" is unmapped in South Australia, however, it is known to exist in the South East NRM region and may also exist on the southern coast of the Kangaroo Island NRM region. No conservation actions or monitoring are occurring for this threatened ecological community in South Australia and no data are presented in the report.

**Conservation actions and monitoring:** A questionnaire relating to the presence/absence of conservation actions and monitoring (vegetation extent and condition) was developed in consultation with threatened species officers from the Adelaide Mount Lofty Ranges NRM region and sent to threatened species experts in each NRM region. Questionnaire responses were then collated for



all regions and analyses undertaken to determine the percentage of SAs EPBC-listed threatened species that have conservation actions and/or monitoring activities occurring in **all** the NRM regions where they have been recorded.

#### **Information Omitted:**

The current and pre-European extent (in number) of Subtropical and Temperate Coastal Saltmarsh have not been included in this report. Nor did the proportion that remains.

Floristic mapping was used to calculate the potential extent of saltmarsh communities (both current and pre-European) and the following sapphire communities were considered appropriate under the listing: *Tecticornia* spp. Low Shrubland, *Tecticornia arbuscula* Shrubland, and *Sarcocornia quinqueflora* Low Shrubland.

The total calculations do not line up with the coastal saltmarsh extent referred to in target 10: extent and condition of coastal and marine communities. This is partly on account of more veg descriptions being included in the saltmarsh community for this report. Coastal saltmarsh was reduced by 25% in this report, whereas the numbers calculated using above veg descriptions suggested the extent had grown by 141%.

Likewise the proportion of saltmarsh community that occurred within each region did not equal the numbers reported in the extent and condition of coastal and marine communities reports.

These issues are inherent through using the area mapped by the TEC committees and as such, can not be resolved.

For TEC reports, extent and proportion remaining of subtropical and temperate coastal saltmarsh will be listed as **unknown**, both statewide and regionally, according to the EPBC listing advice for the community.

#### **Future reporting measures:**

DEWNR may work to develop methods of finer-scale (region/subregion) reporting for this measure in the future.

#### **The following government agencies contributed to this report:**

1. The Department of Environment, Water and Natural Resources (DEWNR).
2. Australian Government – Department of the Environment.

#### **The following non-government agencies contributed to this report:**

None.

#### **Key stakeholders:**

Natural Resources Management Council, Natural Resources Management Boards, DEWNR regional staff, DEWNR Strategy and Advice Group & NRM communities.

#### **Information reliability scoring:**

Information is scored for reliability based on average scores given for information currency and applicability, and its level of spatial representation (Tables 1–3).

**Table 1. Information currency**

Reliability	Criteria
5	Information up to 3 years old
4	Information up to 5 years old
3	Information up to 7 years old
2	Information up to 10 years old
1	Information >10 years old

**Table 2. Applicability of the information**

Reliability	Criteria
5	All data based on direct indicators of the measure
4	Most data based on direct indicators of the measure

3	Most data based on indirect indicators of the measure
2	All data based on indirect indicators of the measure
1	Data are based on expert opinion of the measure

**Table 3. Spatial representation of information (sampling design)**

Reliability	Criteria
5	Information is collected from across the whole region/state (or whole distribution of asset within the region/state) using a stratified sampling design
4	Information is collected from across the whole region/state (or whole distribution of asset within the region/state) using a sampling design that is not stratified
3	Information is collected from an area that represents less than half the spatial distribution of the asset within the region/state
2	Information is collected from an area that represents less than 25% the spatial distribution of the asset within the region/state
1	Information is collected from an area that represents less than 5% the spatial distribution of the asset within the region/state or spatial representation unknown

Based on tables 1, 2 & 3 above, respectively, the reliability of information relating to the number of nationally listed threatened ecological communities in South Australia that have conservation actions and monitoring being undertaken is  $(5+5+5)/3 = 5$  (Excellent).

**This report is linked to the following report cards/snapshots:**

1. [How many of our species are extinct or threatened with extinction?](#)
2. [How many of our ecological communities are extinct or threatened with extinction?](#)
3. [Are conservation activities being undertaken to conserve our threatened plants and animals?](#)
4. [Is the condition of our native vegetation improving?](#)
5. [Is the extent and connectivity of our native vegetation improving?](#)
6. [How much of our native vegetation is protected?](#)
7. [Are the extent and condition of our seagrass improving?](#) (*Posidonia* dominated seagrass meadows have been nominated for future listing under the *EPBC Act 1999*).
8. [Are the extent and condition of our saltmarshes improving?](#) (The nationally threatened ecological community 'Subtropical and temperate coastal saltmarsh' includes a portion of saltmarsh in coastal areas of South Australia).

**Metadata description:**

<b>Project/Dataset name:</b>	EPBC listed threatened ecological communities in South Australia (presence)
<b>Abstract/description</b>	Dataset is the mapping of area of extent of all threatened ecological communities recorded in NRM regions of SA, as determined from DEWNR's <a href="#">statewide floristic vegetation mapping</a> . Mapping represents a combination of desktop studies, which review information from a range of databases and publications, and consultation with regional staff and other contacts. Limited field checking of the presence of each threatened ecological community has occurred. Data entered up to 28/2/2013.
<b>Data types</b>	GIS mapping layers.
<b>Organisation/ DEWNR business area that sponsors/holds/manages the data</b>	DEWNR
<b>Date range</b>	Updated as of 28/2/2013.
<b>Study area</b>	South Australia

<b>Data format</b>	Excel
<b>Data distribution rules</b>	Licensed under <a href="#">Creative Commons Attribution 3.0 Australia</a>
<b>Is the dataset source data (raw), value-add data (analysed/summarised) or final indicator/score data?</b>	Value add data

<b>Project/Dataset name:</b>	Questionnaire data for the presence/absence of conservation actions and monitoring occurring for South Australian threatened ecological communities listed under the <i>EPBC Act 1999</i> .
<b>Abstract/description</b>	Dataset is questionnaire results for nationally listed threatened ecological communities within each NRM region that have conservation actions implemented and monitoring programs for distribution and abundance occurring.
<b>Data types</b>	Nationally listed threatened species lists for each NRM region. Numeric and descriptive data with comments.
<b>Organisation/ DEWNR business area that sponsors/holds/manages the data</b>	DEWNR
<b>Date range</b>	2013 only
<b>Study area</b>	South Australia/Australia
<b>Data format</b>	Excel
<b>Data distribution rules</b>	Licensed under <a href="#">Creative Commons Attribution 3.0 Australia</a> .
<b>Is the dataset source data (raw), value-add data (analysed/summarised) or final indicator/score data?</b>	Value add data

**Photo credit details:**

AMLR & SAMDB

Title: "wetland community"

Owner: DEWNR

EP and KI

Title: "Coward Springs, Samphire"

Owner: DEWNR

NY

Title: Mokota Conservation Park – Iron grass community

Owner: DEWNR

SAAL

Title: "Main Spring, Dalhousie Springs, Witjira National Park"

Owner: DEWNR, credit: Adam Bruzzone

SE and State

Title: "Bool Lagoon, Naracoorte Caves"

Owner: DEWNR, credit: Bill Doyle

**Scientific literature referred to in the report:**

Bonifacio R. Croft T. and Pisanu, P. (2012). Case Study #1 for the threatened ecological communities project: Eyre Peninsula Blue Gum (*Eucalyptus petiolaris*) Grassy Woodland (EPBC Community). Science Resource Centre, DENR, SA.

Department for Environment and Heritage (2009). Submission to DEWHA on Inland Grey Box Woodland ecological community nomination.

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Hyde, M.K. (1995). The Temperate Grasslands of South Australia; their composition and conservation status. World Wide Fund for Nature Australia, Sydney.

Paton P. (2008). Field testing – condition thresholds – Inland Grey Box (*Eucalyptus microcarpa*) Woodlands. Report submitted to the Department of the Environment, Water, Heritage, and the Arts. Canberra.

Sluiter I.R.K., Minchin P.R. and Jaensch S.C. (1997). The Buloke and Pine woodlands of semi-arid and dry sub-humid Victoria and nearby areas. Report by Department of Natural Resources and Environment, Victoria, to Environment Australia.

South East Natural Resources Management Board (2010). Regional natural resources management plan. Part one: regional description. South East Natural Resources Management Board. Mt Gambier, SA.

Specht, R.L. (1972). The Vegetation of South Australia, 2nd Edition, Government Printer, Adelaide.

Taylor B (2006). [Wetland inventory for the Lower South East, South Australia](#). Department for Environment and Heritage. Mount Gambier, SA.

Threatened Species Scientific Committee (2007) [Commonwealth Listing Advice on Iron-grass Natural Temperate Grassland of South Australia](#).