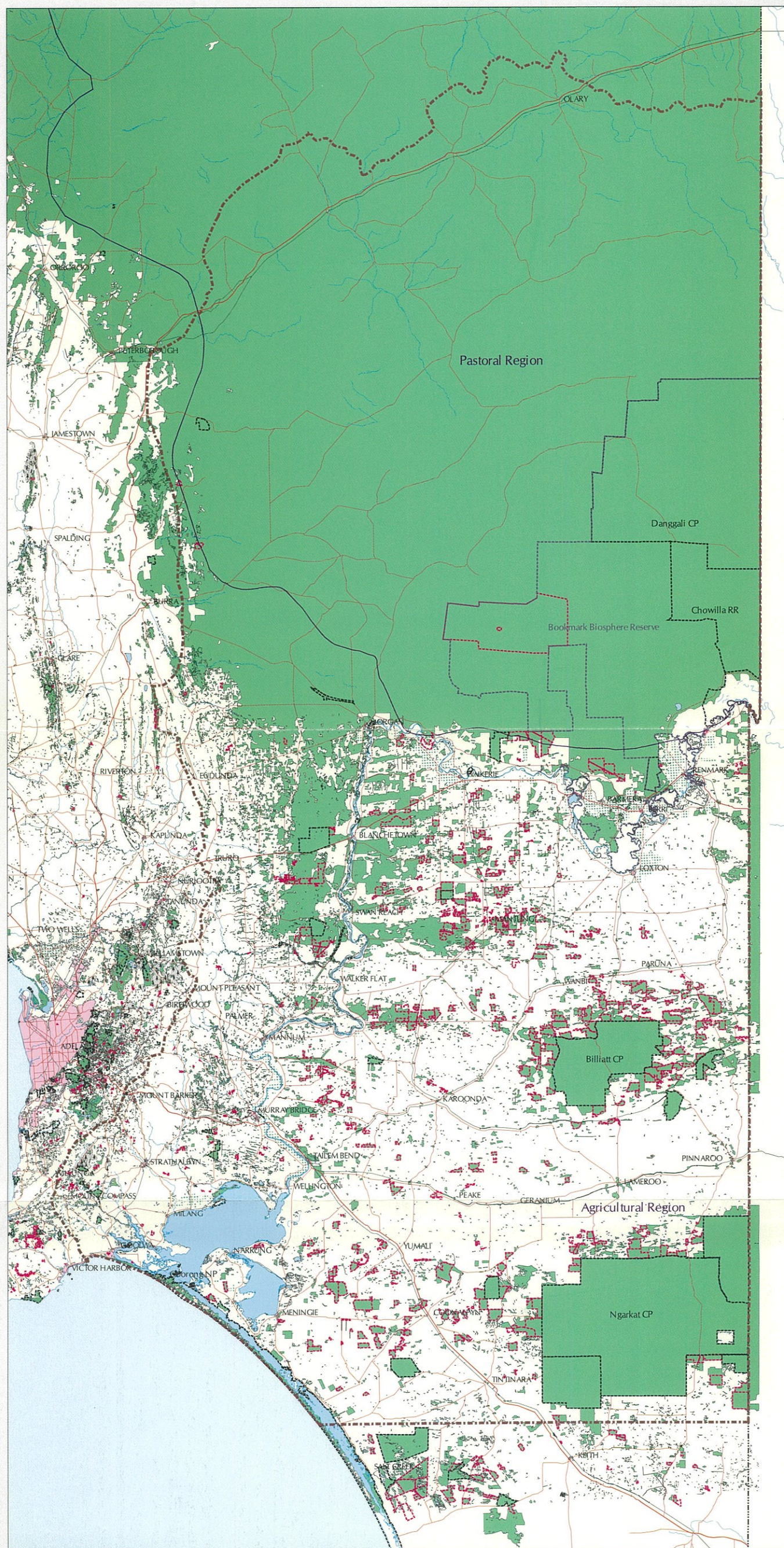


## Native Vegetation Cover SA Murray-Darling Basin



BIOLOGICAL SURVEY  
SOUTH AUSTRALIA





Figure 3-1

Native Vegetation - Broad Structural Formations

SA Murray-Darling Basin

- Cropland / Pasture with occasional low density scattered trees

Native vegetation (no floristic mapping)

River / Lake / Swamp

Forest or Woodland

Mallee

Shrubland

Chenopod shrubland

Shrublands of wet areas

Grassland

Sedgeland
- NPWSA & Conservation Reserve

----

Heritage Agreement

----

Bookmark Biosphere Reserve

----

SA Murray-Darling Basin Boundary

----

Agricultural Boundary

----

State Border

----

Major Road

----

Minor Road

----

Railway

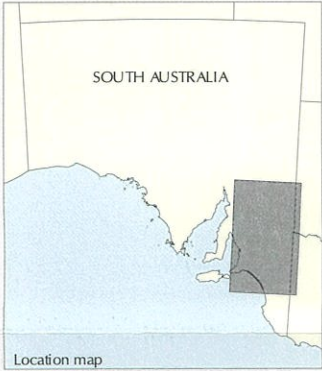
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River

•

Town

Broad structural formation groupings have been derived from floristic vegetation mapping from the following regions: Western Murray Flats, Murray Mallee, South East, Mid North, South Mount Lofty Ranges (1:40,000 Planning SA), and North and South Olary Plains (1:100,000 Department for Environment and Heritage).



Produced by

INFORMATION AND DATA ANALYSIS BRANCH

Planning SA

Department for Transport, Urban Planning and the Arts

Data Source

Landcover mapped using 1985,1987,1989,1991 1:40,000 colour aerial photographs, Planning SA.

Pastoral landcover mapped from 1:86,000 colour aerial photography and 1994 1:100,000 Landsat TM imagery, DEH.

Road, Rail, Rivers, Heritage Agreements & NPWSA Reserves supplied by DEH.

Projection

Datum

Compiled

Lambert Conformal Conic

Geocentric Datum of Australia, 1994

February 2001

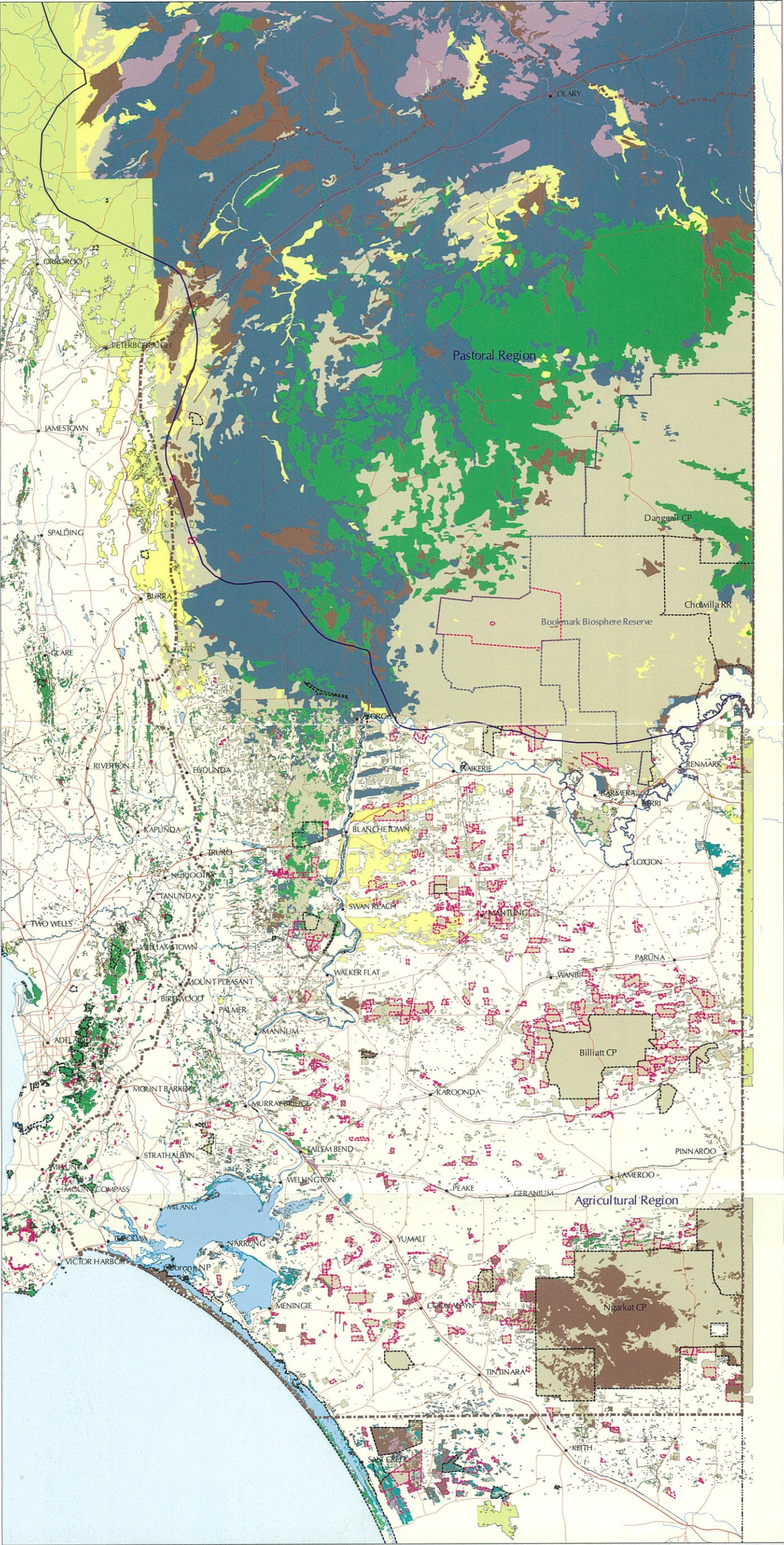
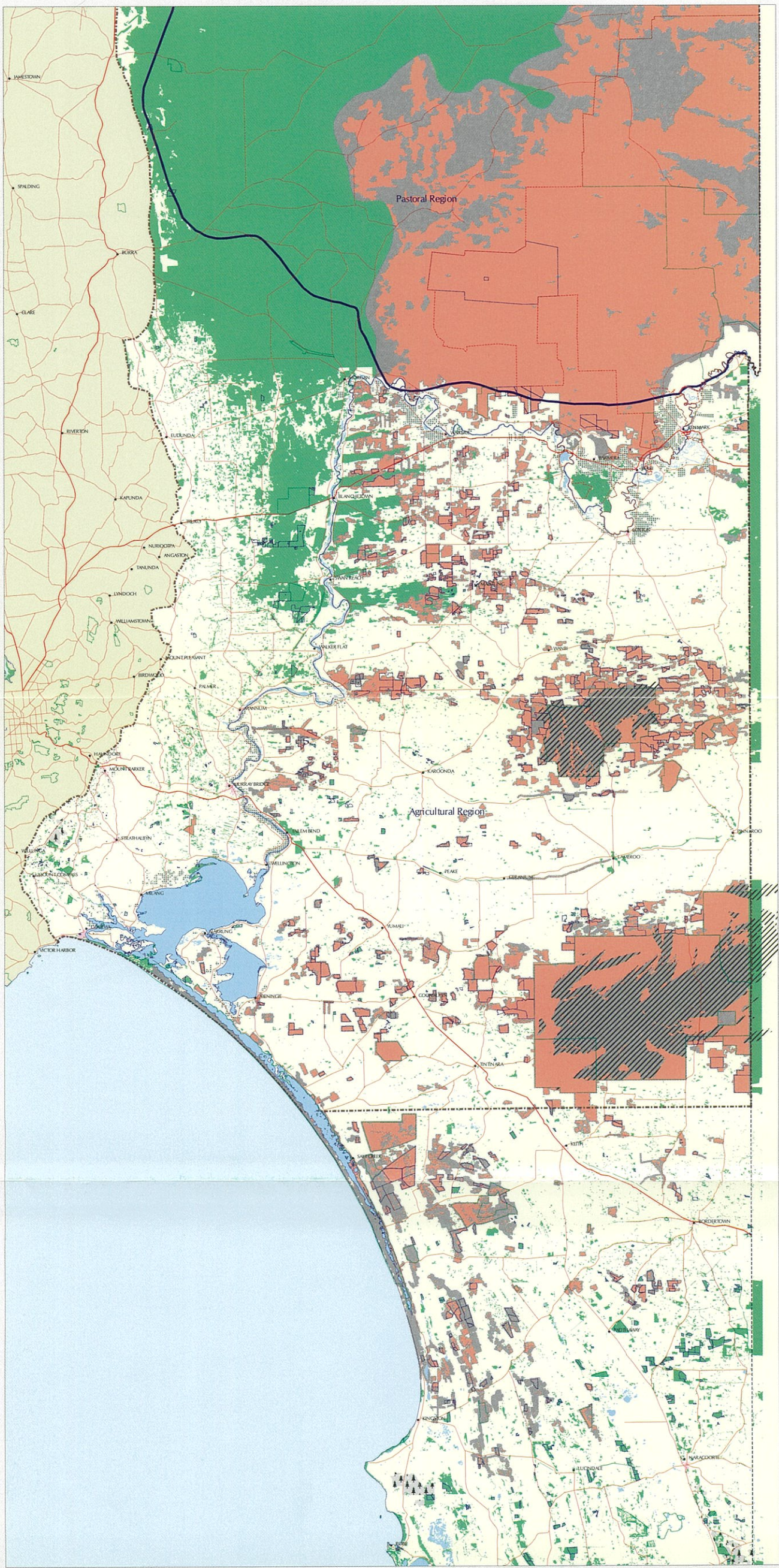




Figure 3-27

# Predicted Malleefowl Habitat

## Murray-Darling Basin & South East Regions, South Australia



- Cropland - Pasture with occasional low density scattered trees
- Native Vegetation (inc. some native grasslands)
- Waterbody
- Ocean
- Irrigated Area
- Softwood - Hardwood
- Outside Biodiversity Region
- Predicted Malleefowl Habitat
- Vegetation Block containing Malleefowl Habitat
- Area burnt since 1988 (not included as habitat)
- NPWS Parks / Reserves
- Bookmark Biosphere Reserve
- Heritage Agreements
- Murray Darling Basin Natural Heritage Trust Region
- Agricultural Boundary
- Coastline
- Main Road
- Stateborder

### Predictive Habitat Modelling

This map shows the results of GIS Predictive habitat modelling for Malleefowl in Eastern South Australia.

Predicted habitat is derived from floristic vegetation mapping which takes into account a minimum area required for 1 breeding pair. Discrete areas of local populations are depicted.

The floristic vegetation units that define habitat were determined from location records of Malleefowl sightings in the region.

The native vegetation blocks > 20ha have been buffered by 250m. This assumes that a gap of 500m between disjoint vegetation blocks presents no barrier to Malleefowl movement.

Minimum habitat area is defined as the minimum total area of habitat (floristic vegetation units) that is found within a discrete block. It is not necessarily all found at the same point within a block. That is, 100 hectares of habitat may be comprised of 4 different sized habitat units within a larger discrete block.

The floristic vegetation groups of *Stipa* sp. Open tussock grassland, *Maireana* spp. Very open shrubland and *Halosarcia* sp. Low very open shrublands have been excluded from the discrete vegetation block areas. These are very open, low or degraded and probably represent the same barrier to Malleefowl movement.

### Fire

Habitat areas that have been burned recently are no longer considered as suitable habitat. A lapse of between 10 to 15 years after fire is required before an area can be considered to be suitable for nesting Malleefowl again.

Fire history mapping is currently only available for the large reserves of Ngarkat Billiart and D'angali. Recently burnt areas in these 3 Reserves have been excluded. Other habitat areas on this map may have been recently burnt and may no longer be suitable however there is currently no way of easily determining this.

### Modelling Criteria

100m grid cells  
Vegetation blocks > 20ha buffered by 250 outwards  
One breeding pair / 100 hectares of habitat  
Habitat defined as a minimum of 100 hectares of appropriate floristic vegetation units

Murray Mallee Habitat  
Floristic vegetation units: 3,03,30,08,10,02,21,01, 14,01,15,01,16,01,17,01,18,01,18,07,18,08,18,12, 18,15,19,01,19,03,19,06,19,08,19,09,19,13,19,15, 19,19,19,20,21,01,21,02,23,07,24,01

Western Murray Flats  
Floristic vegetation units: 1,9

South East  
Floristic vegetation units: 1,3 (60 ha) within a block containing 100 ha of 1,3,4,11

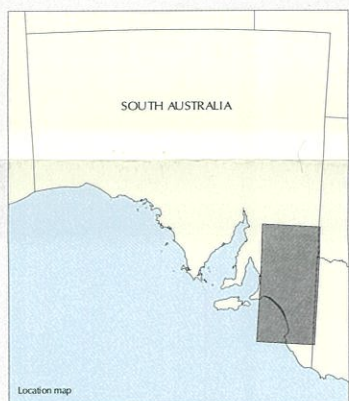
South Olary Plains  
Floristic vegetation units: 1,2,3  
(Refer to regional floristic maps for corresponding floristic vegetation community descriptions)

### Pastoral Landcover Mapping

The native vegetation in the Pastoral Region represents vegetation that is continuous and subject to rangeland grazing. The vegetation includes modified semi-arid mallee woodlands, low woodlands, tall shrublands, chenopod shrublands or native grasslands. The landcover of the pastoral region is mapped from different sources: 1:40,000, 1:86,000 colour aerial photography by Department for Environment and Heritage.

### Agricultural Landcover Mapping

The landcover of the agricultural region is mapped from 1:40,000 colour aerial photographs to a minimum area of 1ha, by Planning SA.



Produced by INFORMATION AND DATA ANALYSIS BRANCH  
Planning SA  
Department for Transport, Urban Planning and the Arts  
Data Source Landcover mapped using 1985/1987/1989/1991 1:40,000 colour aerial photographs by Planning SA.  
Pastoral landcover mapped from 1:86,000 colour aerial photography DEHL.  
Roads, NPWSA Reserves and Heritage Agreements supplied by DEHL.  
Firehistory mapping (0:10,000 to 1:40,000), Planning SA.  
Malleefowl location data supplied by Nature Conservation Society SA, DEHL, SA Museum, Birds Australia.  
Projection Lambert Conformal Conic  
Datum Geocentric Datum of Australia, 1994  
Compiled February 2001

