

5 Conservation and Threat Summary

This project has defined 17 coastal cells making up the Limestone Coast and Coorong coast and has assembled themes of conservation values and threatening processes. Each data variable has been assigned priority values, with these values placed on geographic information system (GIS) maps in detail, to the raster point level (25×25 m). This analysis has contributed to the cell descriptions detailed in Section 6.3.

In addition, conservation values and threatening processes have been summed and averaged. Conservation values from all 32 conservation themes were summed and averaged for each cell and defined as 'highest', 'medium' or 'lowest' value according to breaks in the distribution of values (Figure 5.1). A similar process was used for threatening processes (Figure 5.2).

Note: The terms 'highest', 'medium' or 'lowest' for conservation value and threat total are comparative terms for the region only. They do not imply high or low value within the state or nationally. Thus a cell summarised as lowest value within the Coorong and Limestone Coast coastal zone might, for example, be high value within the Southern Fleurieu region. However, the three categories allocated to cells, based on current available information, inform and prioritise management decisions and actions within the region. [Additional information can easily be added as it becomes available, and values and priorities may change in some areas following periodic revision].

5.1 Conservation and Threat Summary Mean Results

Figure 5.1 below shows the distribution of conservation priorities obtained by summarising the mean values of conservation layers for cells. Four cells have the highest values in the region, (though there is not a large gap between these and the highest "medium" value cells): these are the southern half of the Coorong composite cell (SE15); the northern half of Canunda NP (SE7); Carpenter Rocks (SE5); and Piccaninnie Ponds (SE1). These 4 high value cells have above average mean scores for the following layers: all layers related to threatened species and plant associations; endemic plant associations and threatened species; for numbers of threatened bird species; habitat for threatened reptile species and threatened mammal species; habitat for butterfly species and high viewscape values.

On a region wide basis the threat analysis (Figure 5.2 below) shows that 7 cells within the region have high totals: SE 2 & 3, SE8 and SE 11, 12, 13 & 14; these high threat cells generally have a greater number of above average threat means and tend to pick up threat scores from the land use, existing development, land ownership and feral animal layers. All cells in the region accumulate threat scores from the aggressive weeds layer (confirming the subjective impression that weeds are widespread in the SE coastal zone – though effort levels in recording them has been high in this region) and from viewscape.

Low threat totals are found for the southern half of the Canunda NP (SE6) and the Coorong NP (SE 15, 16, & 17). These 2 areas have had protected status within the parks system for approximately 30 years. When compared with similarly large protected cells (SE7 Canunda NP and SE10 Little Dip CP) the main differences are in the mean scores for mining licences and feral animals.

Cells (in rank order) SE5, SE1, SE7 and SE15 have high conservation totals and examination of Figure 5.2 shows that SE15 has a low threat total and SE7, SE5, and SE1 have medium totals for threat means. Thus this analysis does not identify sub-regional areas averaging high value/high

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threat throughout; however, localities where this occurs are found within the cell descriptions. Detailed local management priorities are shown by the detailed summary analyses cell by cell in Chapter 6.

This an important consideration in reviewing the results of the core analysis in this project: the detailed results – in summary and in individual layers – can at the cell scale contribute to establishing management priorities. On the other hand the cell means, discussed here, give a general guide to where most values and scores accrue, but only a general guide. The fact that a cell may total a low conservation value, does not preclude the cell from containing high value areas significant for the region and under distinctive threat. Thus for this region all cells have been described and analysed in detail in Chapter 6. Following the cell analysis, the management actions for all the cells have been reviewed to build regional actions. Other larger regions, such as Eyre Peninsula and Northern & Yorke, have had to rely on a sample of cell descriptions to pick up the major issues and places where active management has high priority.

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Figure 5.1. Conservation layers: sum of means per cell.

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Figure 5.2. Threat layers: sum of cell means.