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Guidance for the use of the Albany Regional Vegetation Survey in Environmental Impact Assessment

The Environmental Protection Authority (EPA) has endorsed the Albany Regional Vegetation Survey (ARVS) report (Sandiford and Barrett 2010) as a key information source to guide land use planning in the Albany Region. The survey report provides information on native vegetation and flora at a regional level to assist the EPA in making informed decisions on proposals in the area.

The survey was undertaken by the Department of Environment and Conservation (DEC) with support from the Western Australian Planning Commission, City of Albany, South Coast Natural Resource Management Incorporated and Office of the EPA.

The EPA believes that:

- the protection of remnant native vegetation is best achieved by locating development in cleared areas in preference to uncleared lands;
- the survey report provides a key resource to inform State and Local government authorities, industry and developers considering proposals and planning schemes where flora and vegetation is a factor; and
- the information contained in the survey report will be used by the EPA to assess the impact of proposals on ARVS vegetation units.

Albany Regional Vegetation Survey

In 2007, in response to increasing demand for urban and peri-urban development, State and Local Government identified the need for a native vegetation survey of the greater Albany area. The survey was designed to provide a regional context for decisions relating to development proposals where native vegetation is likely to be an environmental factor.

The ARVS report was produced to increase the understanding of regional flora and vegetation in the Albany region. The report describes and maps the vegetation of the survey area and provides a regional context for conservation-based planning and environmental impact assessment in the Albany Region.

The ARVS covered an area of more than 125,400 ha in the City of Albany. The survey was undertaken in an area that extends 30 km east (to Bettys Beach) and west (to Youngs Siding) of Albany and 20 km north to an east-west line running close to the northern edge of Mill Brook Nature Reserve (Figure 1). The survey area is situated at the junction of three biogeographic regions (Warren, Jarrah Forest and Esperance Plains IBRA¹ regions) and includes a variety of landforms from coastal dunes, granitic hills, gently undulating plains, lowland flats, rivers and estuarine fringes (DEC 2010).

¹ IBRA refers to the Interim Bioregionalisation of Australia which divides Australia into a number of regions based on similar factors, such as climate or landforms (Commonwealth of Australia 2011).

EPA Policy Context

A key part of the EPA's Environmental Impact Assessment reform agenda is to provide strategic guidance aimed at improving the efficiency, certainty and effectiveness of the assessment process. The ARVS (Sandiford and Barrett 2010) is an important contribution to that reform agenda and the EPA expects that the ARVS report and associated information will be used to assist strategic land use and conservation planning.

The survey area is located within the agricultural area identified in the EPA Position Statement No. 2 – *Environmental Protection of Native Vegetation in Western Australia* (EPA 2000) in recognition of the high level of land clearing in the agricultural area. Position Statement 2 (EPA 2000) states that to protect biodiversity at least 30% of the original extent of ecological communities should be retained. However, the EPA expects that more than 30% will be retained to prevent unacceptable cumulative, and potentially irreversible, loss of biodiversity.

EPA Guidance Statement No. 33 – *Environmental Guidance for Planning and Development* (EPA 2008) advises that native vegetation should be assessed at international, national, regional and local levels. Regional information provided in this survey should be used to determine the regional significance of vegetation and to support studies undertaken at a local scale.

Findings of the Albany Regional Vegetation Survey

The ARVS provides a local and regional overview to assist land-use and conservation planning in the region

The major findings of the survey (Sandiford and Barrett 2010) include:

- 35% (44,093 ha) of the original extent of vegetation remains within the survey area.
- 19% of this remnant vegetation occurs within formal conservation reserves (IUCN I-IV) and 39% in other Crown reserves.
- Identification of 67 native vegetation units, of which 19 units do not appear to have been described previously.
- Many units only occur as small patches, with 49 units each having an area of less than 1% (<440ha) of the remnant vegetation within the ARVS area.
- Over 50% of units occur at their range limit in the area, reflecting the location of the ARVS area at the junction of three bio-geographic regions.
- Over 25% of units are likely to be restricted to the survey area with four units likely to have <30% pre-clearing extent remaining.
- Over 800 species were recorded during the survey including six Declared Rare Flora, 43 Priority listed species and 19 species occurring beyond their previously known distribution.
- Phytophthora dieback, hydrological change, weed invasion, fire, land clearing and grazing were identified as the major threats.

Comparison between previous broadscale regional mapping in the area (Beard 1979) and the ARVS found little correlation between the two. The ARVS provides more detailed and

contemporary regional context information for environmental impact assessment, however, given the uncertainty around the pre-clearing extent of ARVS units, it was not possible to accurately determine the extent remaining. For consistency, Vegetation Association values identified in Sheppard *et al.* 2002 (digitised by the Department of Agriculture and Food (DAFWA) 2005) should be used to provide pre-clearing and current extent of ecological communities in the Albany Region.

EPA Assessment of Proposals within the survey area

The EPA provides the following comments in relation to the assessment of proposals within the survey area:

- The ARVS does not replace the need for site specific flora and vegetation surveys consistent with EPA Guidance Statement 51.
- The ARVS provides a detailed and contemporary regional context of flora and vegetation in the Albany Region and should therefore be used for environmental impact assessment of proposals.
- Where information is required on pre-clearing and current extent of vegetation, Vegetation Associations (Sheppard *et al.* 2002, DAFWA 2005) should be used until more up-to-date information is available.
- Proponents will also need to undertake fauna surveys and any other survey as dictated by individual site conditions consistent with EPA Guidance Statements and Environmental Assessment Guidelines, for example, EPA Guidance Statement numbers 10, 20, 54 and 56.

References

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