

Coalition for Wanneroo's Environment

31 August 1995

The System 6 Study Team
Department of Environmental Protection
141 St. George's Terrace
PERTH WA 6000

Dear Madam / Sir

SYSTEM 6 UPDATE

The Coalition for Wanneroo's Environment is a community based conservation body working in the city of Wanneroo. The protection of bushland and wetlands has been a focus of our work over the past six years.

We support the System 6 Update as a way of identifying and protecting natural areas of regional conservation value. It should aim to secure a system of conservation areas to protect biological and landscape diversity for the long-term. Following are our comments towards the update including nomination of local areas.

The 1983 System 6 report recognised many important areas, but several of the recommendations have not been implemented and many other significant areas were not included. Increased community concern for the environment, especially remnant bushland, and additional information on the ecosystems of the Swan Coastal Plain and their conservation status must be taken note of. The present system of reserves is inadequate; opportunities to add to the conservation estate and connect reserves diminish as land use decisions are made and development occurs.

The map of remnant vegetation within the Perth metropolitan region in the state government's Urban Bushland Strategy shows that the coastal plain has been extensively cleared. Much of that remaining is within the city of Wanneroo, which has about 46% of its bushland intact. This includes vegetation types and landforms which are poorly represented in reserves, for example Quindalup dune system, Karrakatta central and south vegetation complex and Pinjar vegetation complex.

The diversity, condition, size and location of remnant bushland in Wanneroo offers an opportunity to consolidate existing conservation reserves, set aside additional areas for protection and link reserves with bushland corridors. The importance of some areas has been recognised in the Swan Coastal Plain floristics survey, the East Wanneroo wetlands study and other studies.

However, population growth in Wanneroo is rapid and associated development, especially clearing of land for housing, rural-residential subdivisions and infrastructure, threatens the existence or condition of significant bushland and wetlands. Action is needed to protect these areas; in the interim to allow conservation assessment and in the long-term as part of the conservation estate.

- ✓ (l) • Dundobar Road bushland, Wanneroo. Jarrah-Banksia woodland in Karrakatta central and south vegetation complex. Recognised as important in the East Wanneroo study.
- ✓ (m) • **Bushland corridor between Lakes Jandabup and Gnangara.** Bassendean north transition and Pinjar complex vegetation, in excellent to very good condition. Includes Banksia woodland, seasonal wetlands and drainage lines. Potential corridor between the lakes and surrounding bushland. Identified in East Wanneroo study.
- ✓ (n) • Landsdale bushland, adjoining Landsdale Farm School. An important bushland remnant which includes species-rich Banksia woodland community in excellent to very good condition.
- ✓ (o) • Bushland near Snake Swamp, Landsdale. Banksia woodlands on Karrakatta and Bassendean soils, possibly including important species-rich Banksia woodland community. The rare Southern Brown Bandicoot occurs here. Adjoins remnant vegetation around Lake Gnangara. Bushland near the Alexander Road telecommunications station should be considered too.
- ✓ (p) • Bushland corridor including Beenyup WWTP, Craigie Open Space, Pinnaroo memorial park and Hepburn conservation area. Covers remnant vegetation of the Quindalup and Spearwood dunes including Tuart and Banksia woodland and limestone and Quindalup heathland. Bushland corridor in an urban setting, it has landscape value.
- ✓ (q) • Koondoola Open Space. A significant urban bushland remnant with Banksia woodland in very good condition and Paperbark and Flooded Gum woodland. Includes species-rich Banksia woodland community. The area includes a range of habitat types.

Many of these areas are large. You will appreciate that compiling information on the nature and conservation value of these places takes some time. We have done field work and aerial photograph and map interpretation in drawing up this list. More detailed comments on these areas are being prepared and will be submitted.

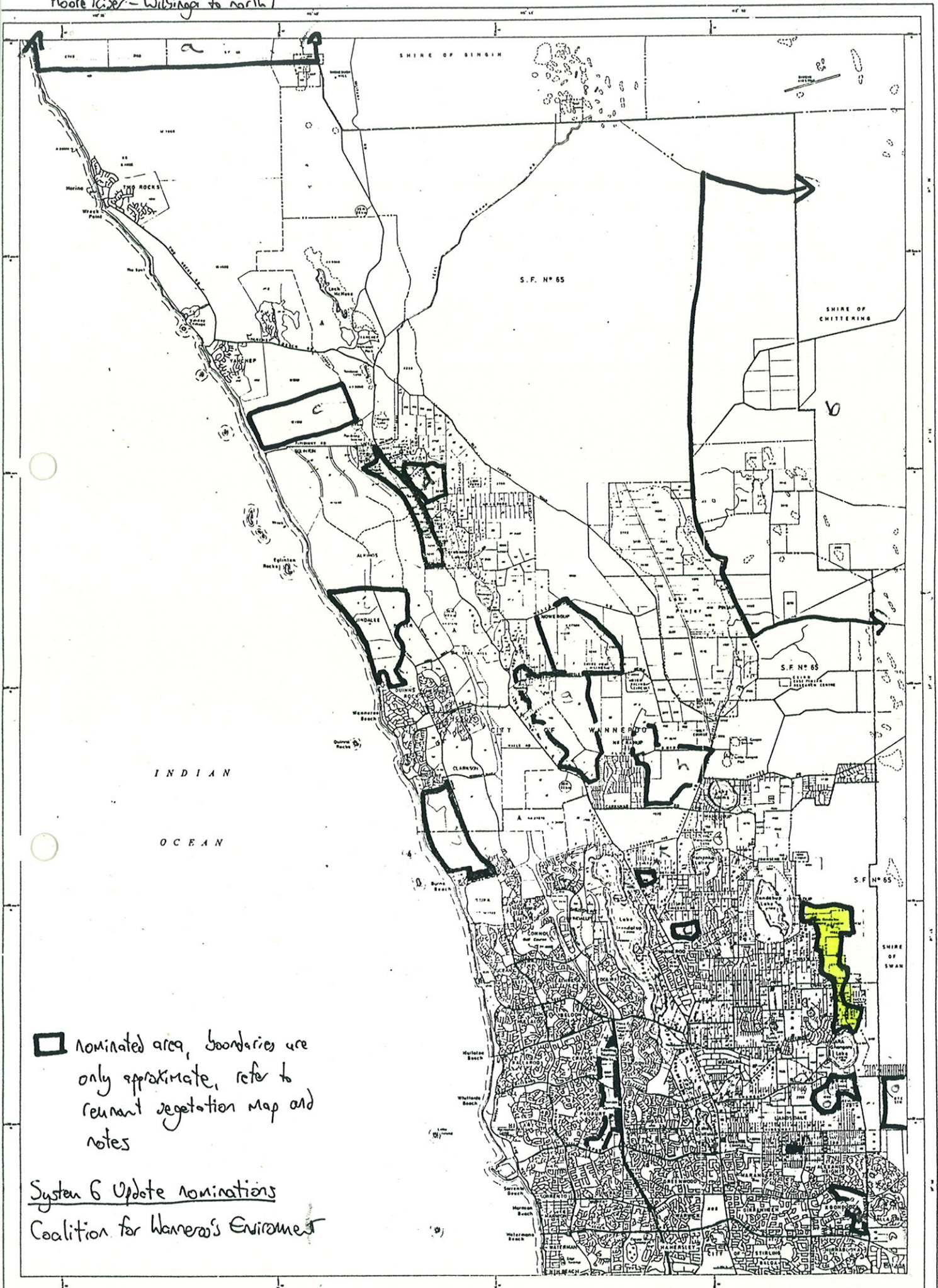
There are twelve System 6 areas in the city of Wanneroo (areas M1 to M12). A review of these areas was undertaken last year, an extract from the report is enclosed for your information. It is being updated and edited for publication. This work makes some important points relevant to the System 6 Update.

We are concerned about threats to existing areas, for example proposed roads and infrastructure in Neerabup National Park, changed hydrology and encroaching urban development affecting Lakes Joondalup and Goollelal, hydrological changes to Lake Gnangara, residential development in Snake Swamp and recreational development which has fragmented bushland in Warwick Woodland. In many cases System 6 recommendations are inadequate, they need to be strengthened and action taken to protect the conservation value and integrity of these areas.

As noted we consider it important to consolidate existing reserves, reserve additional areas and connect reserves to enhance the representativeness and viability of the conservation network. Conservation of remnant vegetation on private land should be promoted through land use controls and incentives such as rate rebates. There should be controls on land clearing in the metropolitan region. The System 6 Update is seeking to identify regionally significant areas; but locally significant areas also need protection. Statutory protection is needed for remnant bushland on the coastal plain; an Environmental Protection Policy should be prepared to this end.

Nature conservation must be integrated with land use planning. Many planning decisions have been made in ignorance or without regard for the conservation value of areas affected or the environmental implications of development. A whole-of-landscape approach to conservation is necessary; reserves alone are not sufficient and there integrity is influenced by external factors. Land use planning and management should promote ecological sustainability, including conservation of biological diversity. Further comments on these points are made in the enclosed papers.

Moore River - Wilbinga to north ↑



□ Nominated area, boundaries are only approximate, refer to remnant vegetation map and notes

System 6 Update Nominations
Coalition for Wanneroo's Environment

6.7.9 MANAGEMENT ISSUES

Stresses

- . Rural land uses.
- . Falling water levels.
- . Recreational use of the lake margins (if Special Rural Zoning approved).

Management Issues

The conservation value of Badgerup is relatively low. The System 6 Study placed it below Lake Gnangara in importance. Its value as a wetland will be determined by water levels which are affected by extraction for rural uses in the surrounding areas.

Any proposal to rehabilitate the wetland function within an area of open space should be examined in the context of water demands for the surrounding area.

Subm 298 NAM

6.8 LITTLE DUNDARBAR (Figures 6.12a and b, 6.13)

The water level record (Figure 6.13) for this wetland shows a sharp and continuing fall in water levels from 1976 to the present. This trend reflects the proximity of the wetland to public water supply bores and to the pine plantation. It lies within private property and has been used for vegetable growing. Figure 6.12 shows vegetation of Little Dundarbar in spring 1976 and in autumn 1985. It is included as an example of the kinds of land use changes occurring in the area. Note that the bed of the swamp has been cultivated as a market garden, and has been changed from being predominantly a sparse sedge bed in 1976. Other areas on the bed of the swamp are showing some rehabilitation from the 1976 condition. This indicates that wetland habitats have a considerable capacity to regenerate following clearing.

6.9 LITTLE MARIGINIUP

Little Mariginiup is at present a winter-wet depression in private property. It is drained towards Mariginiup Lake. The bed of the wetland is under cultivation.

6.10 SYDNEY ROAD SWAMP (Cnr Sydney Road and Gnangara Road: Western Australian Water Resources Council, 1987, uses this name for wetlands near the north end of Sydney Road.)

This area is in private property and is used for grazing - with some green pasture being sustained into the summer months. The western parts of the swamp are increasingly overgrown with Typha. A large sand mine is situated immediately to the west.

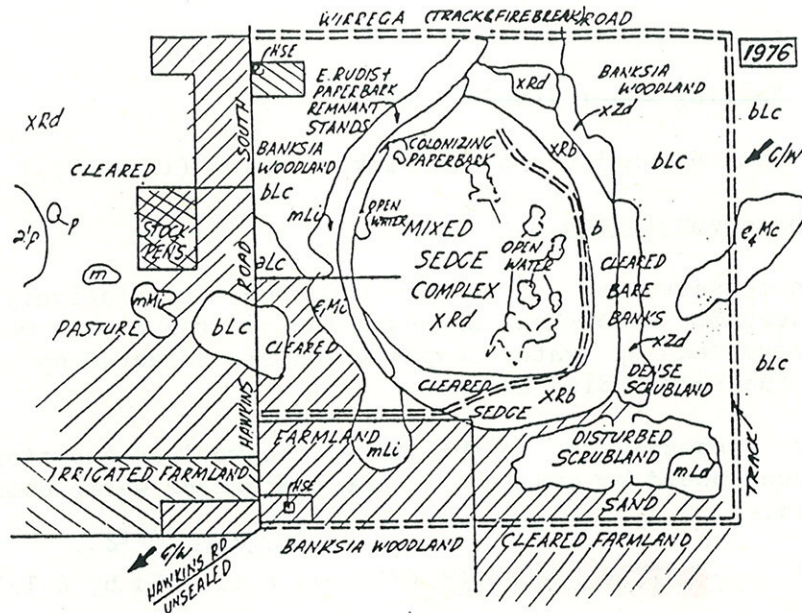


Figure 6.12 (a) Little Dunderbar Swamp: wetland plant communities and surrounding land use 1976.

Banksia low open forest + low woodland.
Melaleuca sp. low woodland + low open forest
Euc. rudis woodland
mixed closed Sedge land
Mixed Tall Shrubland
Mixed closed low Heath
Typha closed sedge land

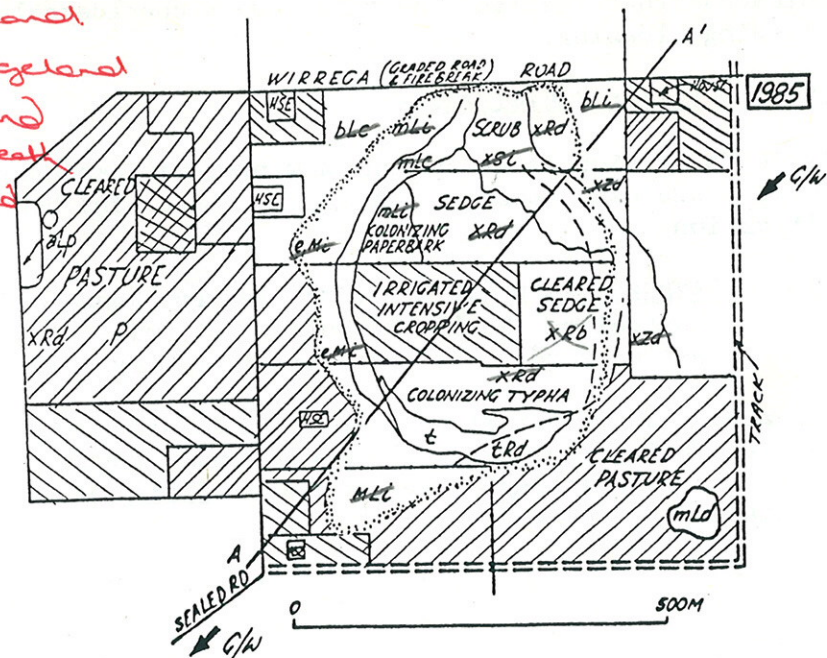


Figure 6.12 (b) Little Dunderbar Swamp: wetland plant communities and surrounding land use 1985.

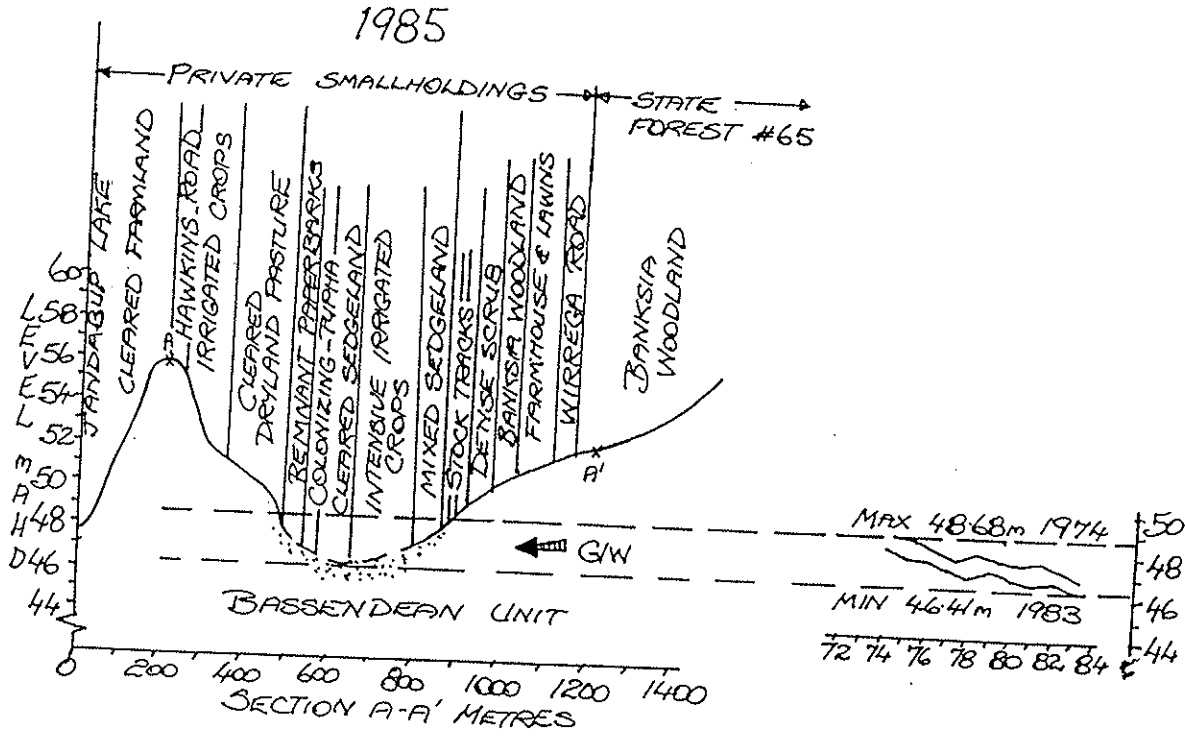


Figure 6.13 Little Dunderbar Swamp: diagrammatic cross-section (1985) and water level record.