



**AREA INFORMATION**

System 6 Area (C or M) or Update Area (Update)

Conservation Area	
Nature Reserve	
Reserve No	
National Park	
Reserve No	
Local Government	
Reserve No	
Other	
Proposed Conservation Areas	
Local Government	
Reserve No	
Other	

Conservation Area	
Nature Reserve	
Reserve No	
National Park	
Reserve No	
Local Government	
Reserve No	
Other	

**AREA**

Total Area	hectares
Completely Degraded	hectares
comments:	

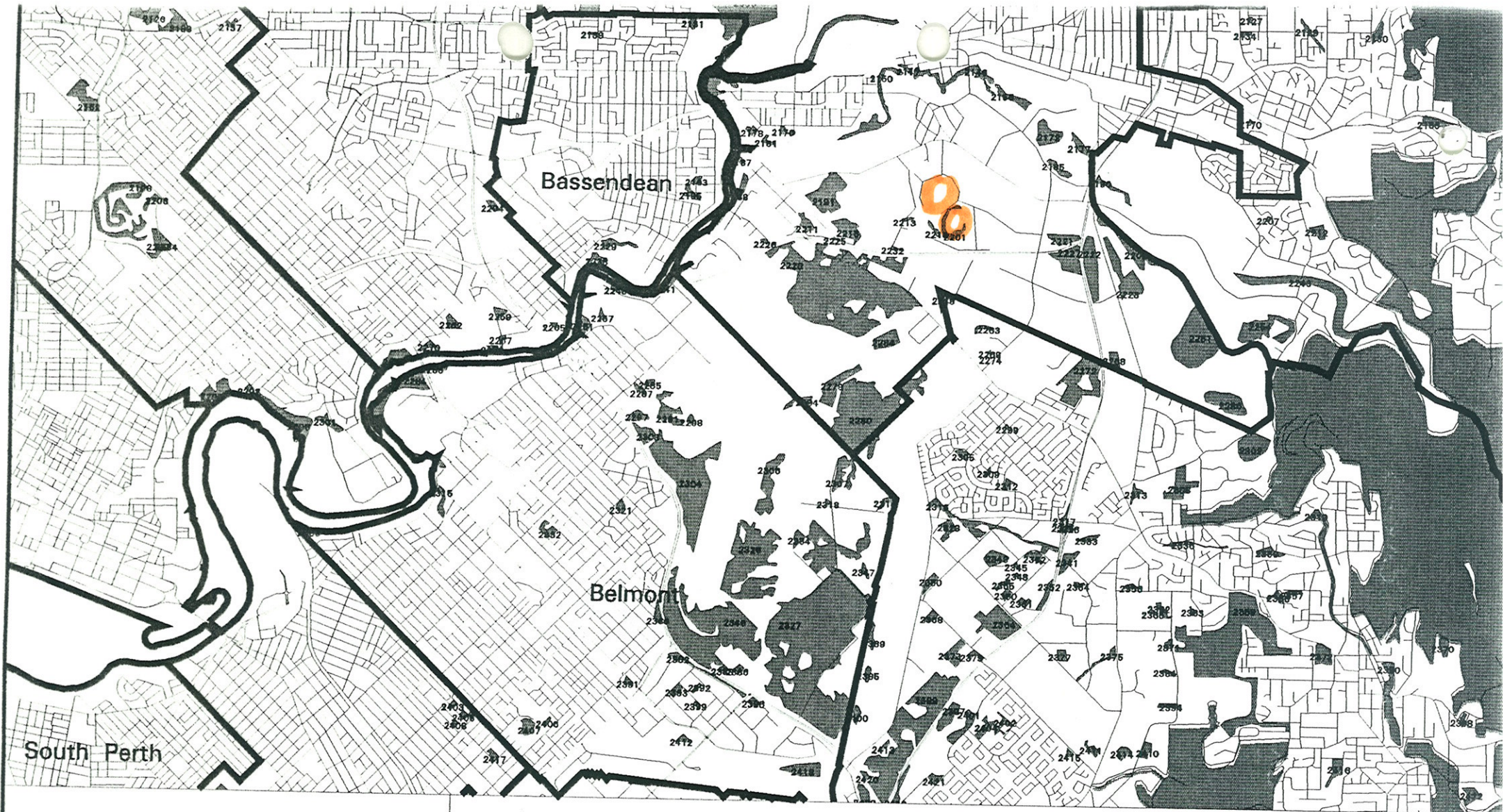
**AREA MAPPED FLORISTIC UNITS**

Boundaries: System6 CALM

Units	Site (Condition)	Code	Bound	Area (ha)	Area(ha)

Boundaries determined by use of

aerial photograph
orthophoto
vegetation map
soil map

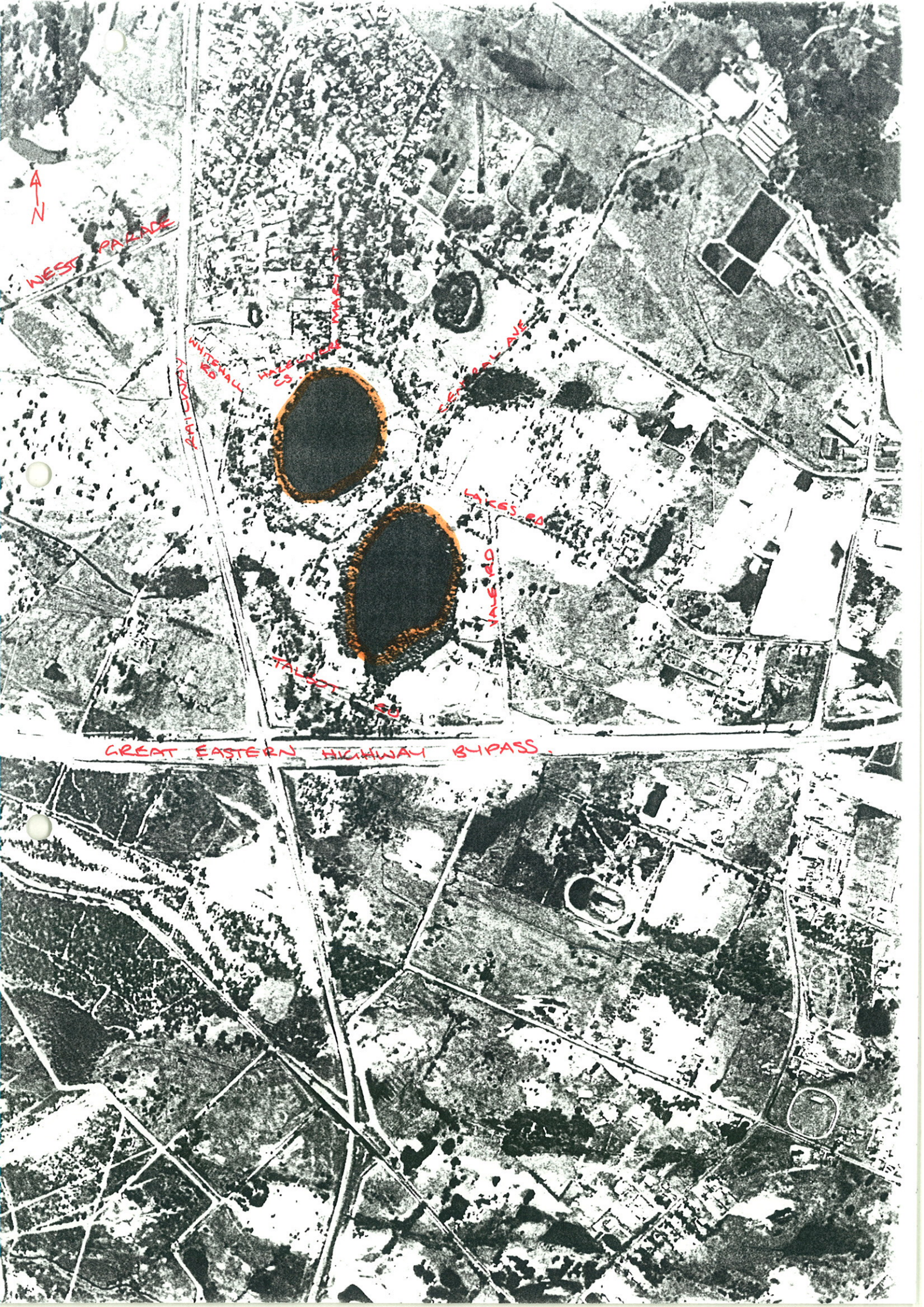


Road centre line data provided by  
Department of Land Administration,  
Midland, WA.

Interpretation of remnant vegetation is from January 1991 1:20000 colour aerial photography and December 1992 SPOT-LANDSAT composite image with 10 m resolution. Photographs and imagery were provided by Department of Land Administration and were interpreted by Catherine Keenan, Perth Environment Project (Jan. - June 1994). Department of Agriculture and Water Authority mapping were used in some instances to assist interpretation.

This plot has been produced for the purpose of ground truthing that interpretation. The Perth Environment Project would be pleased to receive advice as to the accuracy of the boundaries shown, and information regarding the composition and condition of each bushland entity.

The definition of bushland is that by Chambers and Walker (1994): 'Land on which there is



WEST PALM AVE

WATERLOO RD

WALTON ST

WALTON ST

WALTON ST

WALTON ST

WALTON ST

GREAT EASTERN HIGHWAY BYPASS

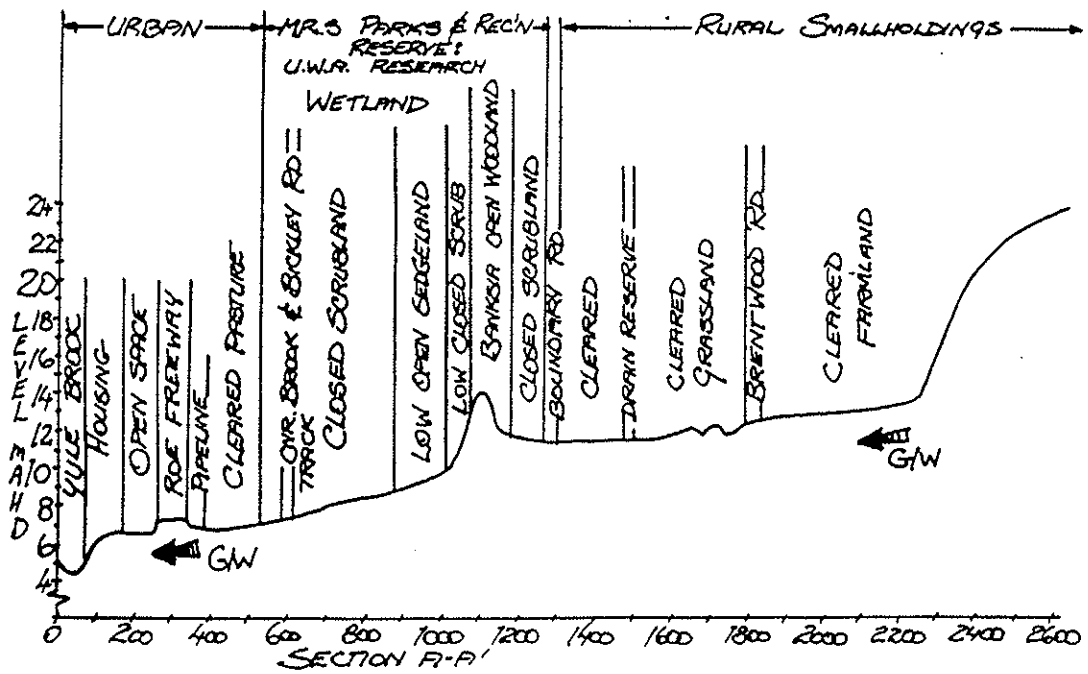


Figure 12.12 Yule Brook Reserve: diagrammatic cross-section.

HAZELMERE LAKES AND OTHER WETLANDS ON THE CLOVERDALE GROUNDWATER FLOW SYSTEM

Bell, D T & Stephens, L J (1984), Seasonality and phenology of kwongan species. pp 205-226 in 'Kwongan: plant life of the sandplain'. Edit J S Pate and J S Beard. University of Western Australia Press, Nedlands.

Speck, N H & Baird, A M (1984), Vegetation of Yule Brook Reserve near Perth, Western Australia. J.Roy.Soc.Western Australia. 66 (4), 147-162.

12.7 HAZELMERE LAKES AND OTHER WETLANDS ON THE CLOVERDALE GROUNDWATER FLOW SYSTEM

12.7(a) GENERAL INFORMATION: HAZELMERE LAKES

LOCAL AUTHORITY: Shire of Swan  
MRS ZONE: Rural (Urban near northern margin)  
LAND STATUS: Freehold land  
SYSTEM 6 RECOMMENDATION: M45  
WAC CLASSIFICATION: LE.f. sm.p.o.  
DRAINAGE: May be affected by adjoining rural uses.

12.7(b) AREAS

(includes both Hazelmere lakes)

Wetland .....	26.5 ha
Paperbark .....	7.1 ha
Sedgeland .....	negligible
Open Water .....	15.2 ha
Modified (pasture) .....	4.2 ha

12.7(c) SETTING (See Figures 12.13 and 12.14)

Whereas wetlands north of the Swan River are generally surface expressions of the Gnangara groundwater flow system and those south and west of the Canning and Southern Rivers are related to the Jandakot groundwater flow systems, those wetlands between the foothills of the Darling Scarp, and the Helena, Swan and Canning Rivers are related to the small Cloverdale flow system (Water Authority of Western Australia, 1987).

The Hazelmere Lakea are the largest of a number of wetlands in the South Guildford, Hazelmere, Newburn, High Wycombe localities, most of which have been affected by developments such as roads, railway, airport and industrial. Gozzard (1986) maps these wetlands as 'marshes in interdunal swales' within the Bassendean Dunes. In this region this Bassendean sand overlies alluvial deposits of the Guildford formation.

The two Hazelmere Lakes are both in private property and none of the other wetlands in the area is reserved for conservation or recreation. The wetland adjacent to High Wycombe within Perth Airport land has been shielded from developmental pressures but would be affected by airport expansion.

12.7(d) REFERENCES

Gozzard, J R (1986), Perth, Sheet 2034 II and part 2034 III and 2134 III. Perth Metropolitan Region, Environmental Geology Series, Geological Survey of Western Australia.

Water Authority of Western Australia (1987), Perth urban water balance study, Vol 1 pp 25-28. Water Authority of Western Australia, Leederville.

HAZELMERE LAKES

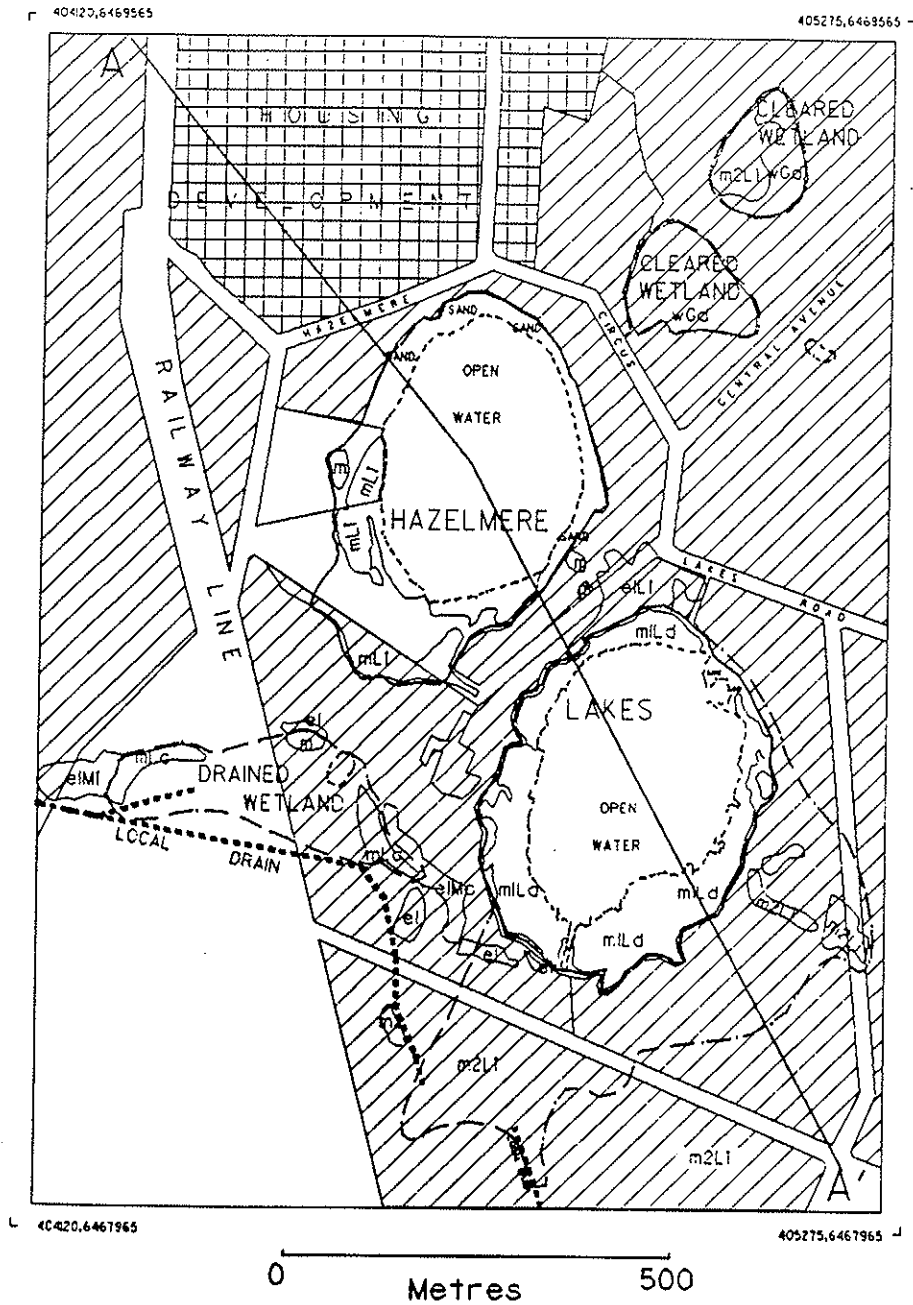


Figure 12.13 Hazelmere Lakes: wetland plant communities and surrounding land use.

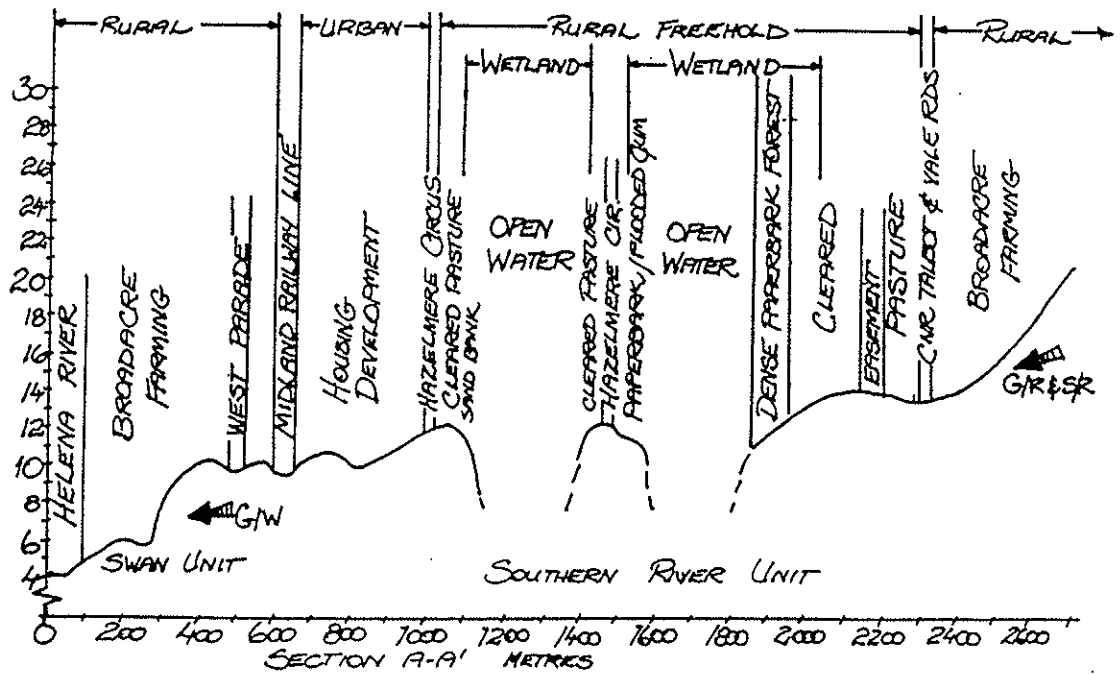


Figure 12.14 Hazelmere Lakes: diagrammatic cross-section.

SYSTEM 6 BUSHLAND SUBMISSION FORM FOR CONSIDERATION IN THE UPDATE PROGRAMME

If you wish to submit more than one area for consideration in the System 6 update, please use a separate form for each area.

Please fill in each section giving as much information as possible.

LOCATION, OWNERSHIP AND ZONING OF THE AREA

1. Location

Please give as accurate and detailed a description as possible of the site location

Please include either a hand drawn or copied map showing the area of the area

a) Bordering Roads: HAZELMERE CIRCUS / VALE RD. / LAKES RD)

b) Nearest Corner: MARY ST / CENTRAL AVE

Lots 124 / 125 / 126 / 127 / 123 / 122 / 120 / 121 / 135 / 363 / 134 / 133 / 1 / 122

c) Lot Number: Street Number:

d) Town/Suburb/Location: HAZELMERE

e) Local Council: SWAN SHIRE

f) Site Name (if any): HAZELMERE LAKES + ASSOCIATED DRYLAND AREA.

g) Approximate size of the area (ha): UNKNOWN

h) Please locate the area on a map and give us map references if possible:

See System 6 Report Figure 114 at M45 p. 218.

i) Map: Streetsmart / UBD / Other:

j) Map no.:

k) Grid Ref:

l) Please give any other information that may help us to find the location:

m) Are you aware of any development proposals that are likely to affect the area?

HAZELMERE INDUSTRIAL AREA
PRIVATE LANDOWNERS DEVELOPMENT (HOUSES SHED HOME BUSINESS ETC)

NOTE: Areas that have already been given development APPROVAL should not be nominated

Please fill out those questions that you can answer

2. Who owns the area? (If owned by the person/s making the nomination please indicate) .....

..... A NUMBER OF LANDOWNERS .....

3. If you own the area, and may be interested in participating in conservation on private land initiatives please indicate (and leave your name and address at the end of this submission form) .....

4. What is the area zoned? (please indicate whether zoning is Town Planning Scheme or Metropolitan Region Scheme) ..... GENERAL RURAL .....

M.R.S. ?

CAN YOU TELL US A LITTLE ABOUT THE PHYSICAL CHARACTERISTICS OF THE AREA

5. Why do you consider this area important? (Refer to Guiding Issues paper)

THE IMPORTANCE AS A CONSERVATION AREA HAS INCREASED DUE TO THREATS TO BUSH AND WETLAND IN AIRPORT SITE AND THE DESTRUCTION OF HABITATS WITHIN THE NEARBY RURAL AND INDUSTRIAL AREAS.

6. What is/are the soil type/s and colours? .....

Type: Sand/Clay/Gravel/Loam/Silt  
Colour: White/Grey/Brown/Orange/Yellow/Red/Black

ALSO HOUSING DEVELOPMENTS NEARBY HAVE DESTROYED HABITATS

7. Does the area have any special features such as unusual landforms / landscapes that still retain their natural vegetation? Yes/No

If yes, what are they? ..... LAKES + FRINGING VEGETATION .....

8. Is the area a wetland or does it include a wetland? ..... YES .....

If yes, what kind of a wetlands is it?

- a) lake
- b) river
- c) stream
- d) swamp
- e) estuary
- f) seasonally wet
- g) other

eg. Residents of Hazelmere have reported a number of bandicoots having taken up residence in a local Park having been forced out of the Rosehill Housing development

9. What percentage of the wetland is open water in summer? *MOST YEARS*  
*Northern Lake dries up occasionally eg 1994/95 100%*

CAN YOU TELL US A LITTLE ABOUT THE VEGETATION /FAUNA ON THE NOMINATED AREA.

10. What percentage of the area is indigenous vegetation? *unknown*

11. If the area includes regions cleared of native bushland please indicate reasons for the inclusion. *Area is used by many birds and animals*

12. Has any previous flora or fauna survey work been done on the area?

*Perhaps for previous system 6 report.*

If yes, please give details of the work

13. How would you rate the condition of the native bushland? (see attached table)

- a) pristine
- b) excellent
- c) very good
- d) good
- e) degraded
- f) completely degraded
- g) don't know

14. Please indicate the disturbances affecting the area and where appropriate the percentage of the area disturbed.

- a) Partial clearing
- b) fragmentation
- c) Selective removal of species: timber cutting, wildflower picking, mowing dieback and other plant diseases
- d) Fire regime, including intensity, season and frequency *burning off.*
- e) 'Enrichment plantings' that is plantings of species not found in that community
- f) Weed invasion *African Love grass*
- g) Animal impact: horses, foxes, rabbits, cats, dogs, camels, goats etc
- h) Soil movement, both removal and dumping
- i) Changes in water regimes; flooding, drainage and watering
- j) Salinity
- k) Fertiliser drift and along waterways nutrient influx
- l) Mining, including that for road works *— some landowners have excavated lake bed and filled & excavated edges of lake.*

Where grazing has been restricted significant regrowth has occurred.

- m) Grazing: stock, overgrazing by feral or native mammals
- n) Proliferation of tracks, fire breaks and walk trails
- o) Off-road vehicle use - dry lake bed is used as vehicle race track by some landowners.
- p) Use as service corridors by the SEC, Main Roads, Water Authority.

(Source: B Keighery. Bushland Plant Survey, September 1994)

15. Does the area contain any plant species of special interest that you know of? (eg. declared rare flora, priority taxa, outlier populations) ..... unknown mostly

Do you know what they are? ..... Many paperbarks / Flooded gum She oak ..... E. Toddlana ..... Marri Banksia

16. Do you know of any native animals that use the area? <sup>YES</sup> Southern Brown Bandicoot

Longnecked Tortoise, Dugites, many frogs, goannas, bobtails

Can you list those you know of? (birds, mammals, reptiles, amphibians etc)

Yellow Billed Spoonbills / Straw necked Ibis / Sacred Ibis / Splendid Wren / Pink eared duck / Black duck / heron / Australian Shelduck / red capped parrot

17. Is the area used by any native animals of special interest? (eg. endangered species, large/important populations) ..... Southern Brown Bandicoot

Euroson Coats / Maned Wood Duck / Many small birds / honeyeaters / Kookabarras / Bee eaters

If yes, please name them and indicate source of information Kingfishers Personal sighting Dead specimens of Bandicoot and dugite

galahs / magpies / magpie lark / Crows / Ravens / Wedge Tailed Eagle / Dead specimen of crimson finch (ID by musea)

CAN YOU TELL US A LITTLE ABOUT THE SURROUNDING AREA

18. Are there any bushland areas (including wetlands) near to this area? ..... SOME MINOR AREAS NEARBY ON PRIVATE LAND AND IN PLANNED INDUSTRIAL AREA.

Port Lincoln / Kingneck / Kookabarras / St...

If yes, how close are they? ..... 1/2 to 3 km

Are they already conservation reserves? ..... NO

What is their approximate size? ..... 1-3 acres

19. Does the submitted area link other bushland areas? ..... THE LAKES AND MINOR WETLAND AREAS ARE PART OF A NETWORK OF WETLANDS + HABITATS ON SWAN COASTAL PLAIN, CLOSELY LINKED TO HELENA RIVER AND

Please attach any additional information about the area which may be of use when assessing it. MUNDAY SWAMP, A MINOR WETLAND ON LOT 82 BUSHMEAD RD ALSO SUPPORTS MOST OF THE ABOVE NAMED ~~SPECIES~~ ANIMALS AND BIRDS. TORTOISES TRAVEL BETWEEN THE NORTHERN LAKE AND THIS WETLAND

NOTE:

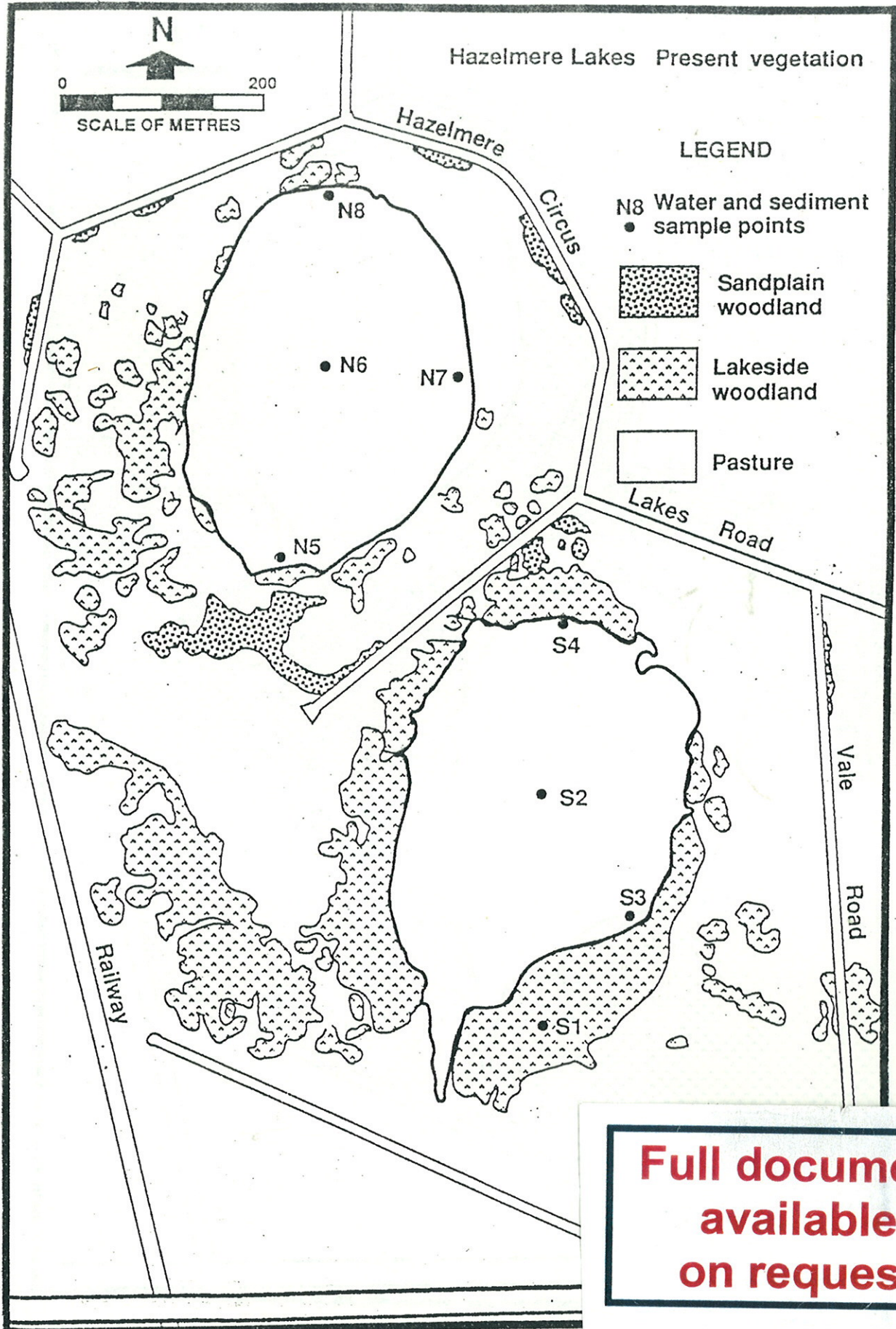
While I know this area is already identified in the 1983 Report I was concerned that authorities seem to regard it as unimportant and "in the way" of planned industrial development and therefore might conveniently be dropped as "no longer worthy of remaining in the system" (see p 2 of your guidelines)

~~Having lived here~~ In the past 10 months I have observed all the species listed and many others I have been unable to identify. I feel it remains a very important area and worthy of protection and hopefully in the future (with govt & community action) of improvement.

I am concerned also that associated dryland and nearby minor wetlands and damplands have been neglected in the previous System 6 report.

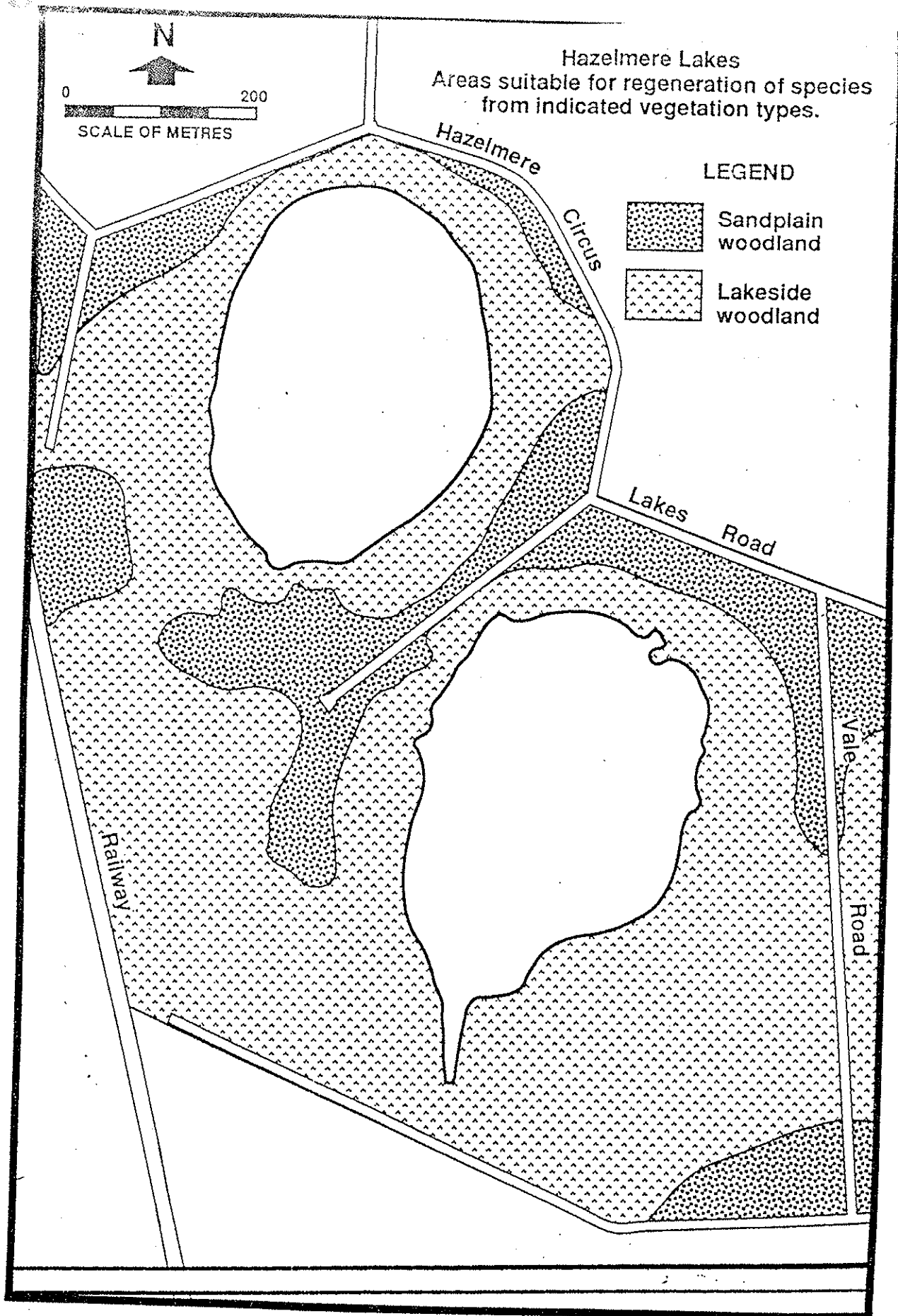
18/7/95

M45.1 Syst. 6 library



**Full document  
available  
on request**

Map 3. The extent of the natural vegetation complexes currently surrounding the Hazelmere Lakes (from Newsome and Ladd, 1991).



Map 4. A conceptual plan showing the extent of the natural vegetation complexes originally surrounding the Hazelmere Lakes prior to clearing (from Newsome and Ladd, 1991).

LAKE

M45 Hazelmere Lakes

Shire Swan Management Plan proceeding

Friends Advocate Management

Other Names:

Specific Study/studies Miscellaneous studies

Flora

Vegetation Map	1	2	3	
Flora list	1	2	3	4
Significant Taxa			done / suitable / doubtful	

Fauna

Mammals	1	2	
Birds	1	2	RAOU
Reptiles and Amphibia	1	2	
Invertebrates	1	2	

Vegetation Condition Map Sites Comment

Disturbance Factors Comment Management

Swan Coastal Plain Floristic Survey

AHC: National Estate- Listed / Interim / Nominated / Notified NT (WA): Heritage Classification

Notes

<b>M45 Hazelmere Lakes</b> Shire Swan Management Plan proceeding		
M45.1 Ways and mean of protecting conservation values of the area be sought through planning procedures.	Recommendation Progressing	The EPA has released a technical report on eutrophication of Hazelmere Lakes. The Shire of Swan has endorsed the report and is preparing to develop a management plan to achieve conservation and recreation objectives.