

## LAKE CLAREMONT, CLAREMONT/SWANBOURNE

**Boundary Definition:** protected area boundary (native vegetation after EPA and WAWA 1990; Lantzke *et al.* 1989)

### SECTION 1: LOCATION INFORMATION

**Bush Forever Site no.** 220

**Area (ha):** bushland 0 (Site also includes open water; note comment under Boundary Definition.)

**Map no.** 45, 46

**Map sheet series ref. no.** 2034-II SW

**Other Names:** Butlers Swamp

**Local Authorities (Suburb):** Town of Claremont (Claremont, Swanbourne)

**System 6 (1983):** M48 part System area bushland and part scattered native plants (canopy), all vegetation described

### SECTION 2: REGIONAL INFORMATION

#### LANDFORMS AND SOILS

##### Spearwood Dunes

Sands derived from Tamala Limestone (Qts: S7)

Tamala Limestone (QtI: LS1)

##### Quindalup Dunes (Holocene Dunes)

Safety Bay Sands (Qhs: S2)

##### Wetlands (within the Spearwood Dunes)

Holocene Swamp Deposits (Qhw: Cps)

#### VEGETATION AND FLORA

##### Vegetation Complexes

###### Spearwood Dunes

Karrakatta Complex — Central and South

**Floristic Community Types:** not sampled, insufficient vegetation

#### WETLANDS

**Wetland Types:** sumpland

##### Natural Wetland Groups

###### Spearwood Dunes

Balcatta (S.2)

**Wetland Management Objectives:** Conservation (16.3ha)

**Swan Coastal Plain Lakes EPP:** 15.8ha

#### THREATENED ECOLOGICAL COMMUNITIES

Not determined

### SECTION 3: SPECIFIC SITE DETAIL

**Landscape Features:** open water, vegetated wetland

**Vegetation and Flora:** limited survey (EPA and WAWA 1990)

**Structural Units:** mapping (EPA and WAWA 1990, Lantzke *et al.* 1989)

Wetlands: *Melaleuca raphiophylla* Low Closed Forest

**Scattered Native Plants:** *Eucalyptus gomphocephala* Open Woodland to Open Forest; *Eucalyptus gomphocephala* and *Agonis flexuosa* Open Woodland — regionally significant vegetation recognised as being included in the area of Site in need of protection

**Vegetation Condition:** >25% Good, <75% Degraded to Completely Degraded (Lantzke *et al.* 1989)

**Total Flora:** not known

**Significant Flora:** none recorded

**Fauna:** multiple surveys for birds (57 species) (Lantzke *et al.* 1989; RAOU 1996 D, 6 visits). Good assemblage of ducks including Hardhead, Australasian Shoveler, Blue-billed, Pink-eared and Musk and several JAMBA/CAMBA species. Significant bird species: category 1 (1), category 2 (4) category 3 (6) and category 4 (2)

**Linkage:** no adjacent bushland

### SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Location for JAMBA/CAMBA species; subject to protection under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

***SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS***

**Criteria:** Rarity, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation, Criteria not relevant to determination of regional significance, but which may be applied when evaluating areas having similar values

**Recommendation:** Site with Some Existing Protection; the existing care, control and management intent of the reserve is endorsed. The purpose of the reserve should be amended to include conservation and appropriate mechanisms applied in consultation with the management body (see Table 3, Volume 1).

## LAKE CLAREMONT, CLAREMONT/SWANBOURNE

**Boundary Definition:** protected area boundary (native vegetation after EPA and WAWA 1990; Lantzke *et al.* 1989)

### SECTION 1: CADASTRAL INFORMATION

(Lots, locations and derived information to be updated in the public submission period)

**Bushplan Site no.** 220      **Map no.** 55      **Map sheet series ref. no.** 2034-II SW  
**System 6 (1983):** M48 part System area bushland and part scattered native plants (canopy), all vegetation described

**Other Names**  
Butlers Swamp  
**Local Authorities (Suburb)**  
Town of Claremont (Claremont, Swanbourne)

**Area (ha):** total 56.7 (includes open water); bushland 0 (note comment under Boundary Definition)

**Zoning**  
**MRS:** Parks and Recreation  
**TPS:** Landscape  
**Lot/Location/Reserve numbers (Purpose), Street name**  
150 Gloucester St; 1, 2 Narla Rd; 101, 151 Fern St; 58, 60 Strickland St; 1, 5, 6, 7, 6223 Stirling Rd; 0, 50, 1366, 7813 Davies Rd; 8 Alfred Rd; 1063 Devon Rd; 51, 2563 Lakeway St  
Crown Reserve

**Ownership Categories**  
Local Government, State Government, Private (commercial organisation)

### SECTION 2: REGIONAL INFORMATION

#### LANDFORMS AND SOILS

**Spearwood Dunes**  
Sands derived from Tamala Limestone (Qts: S7)  
Tamala Limestone (Qtl: LS1)

**Quindalup Dunes** (Holocene Dunes)  
Safety Bay Sands (Qhs: S2)

**Wetlands (within the Spearwood Dunes)**  
Holocene Swamp Deposits (Qhw: Cps)

#### VEGETATION AND FLORA

**Vegetation Complexes**  
**Spearwood Dunes**  
Karrakatta Complex — Central and South

**Floristic Community Types:** not sampled, insufficient vegetation

#### WETLANDS

**Wetland Types:** sumpland

#### Natural Wetland Groups

**Spearwood Dunes**  
Balcatta (S.2)

**Wetland Management Objectives:** Conservation (16.3ha)

**Swan Coastal Plain Lakes EPP:** 15.8ha

#### THREATENED ECOLOGICAL COMMUNITIES

Not determined

### SECTION 3: SPECIFIC SITE DETAIL

**Landscape Features:** open water, vegetated wetland

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**Structural Units:** mapping (EPA and WAWA 1990; Lantzke *et al.* 1989)  
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**Vegetation Condition:** 25% Good, <75% Degraded to Completely Degraded (Lantzke *et al.* 1989)

**Total Flora:** not known

**Significant Flora:** none recorded

**Fauna:** surveyed by RAOU (1996 D), 6 visits, and Lantzke *et al.* (1989) for birds (57). Good assemblage of ducks including Hardhead, Australasian Shoveler, Blue-billed, Pink-eared and Musk ducks and several JAMBA/CAMBA species. Significant bird species: category 1 (1), category 2 (4) category 3 (6) and category 4 (2)

**Linkage:** adjacent bushland to the north

### SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed; Location for JAMBA/CAMBA species



**SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS**

**Criteria:** Rarity, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation, Criteria not relevant to determination of conservation value, but which may be applied when evaluating areas having similar values

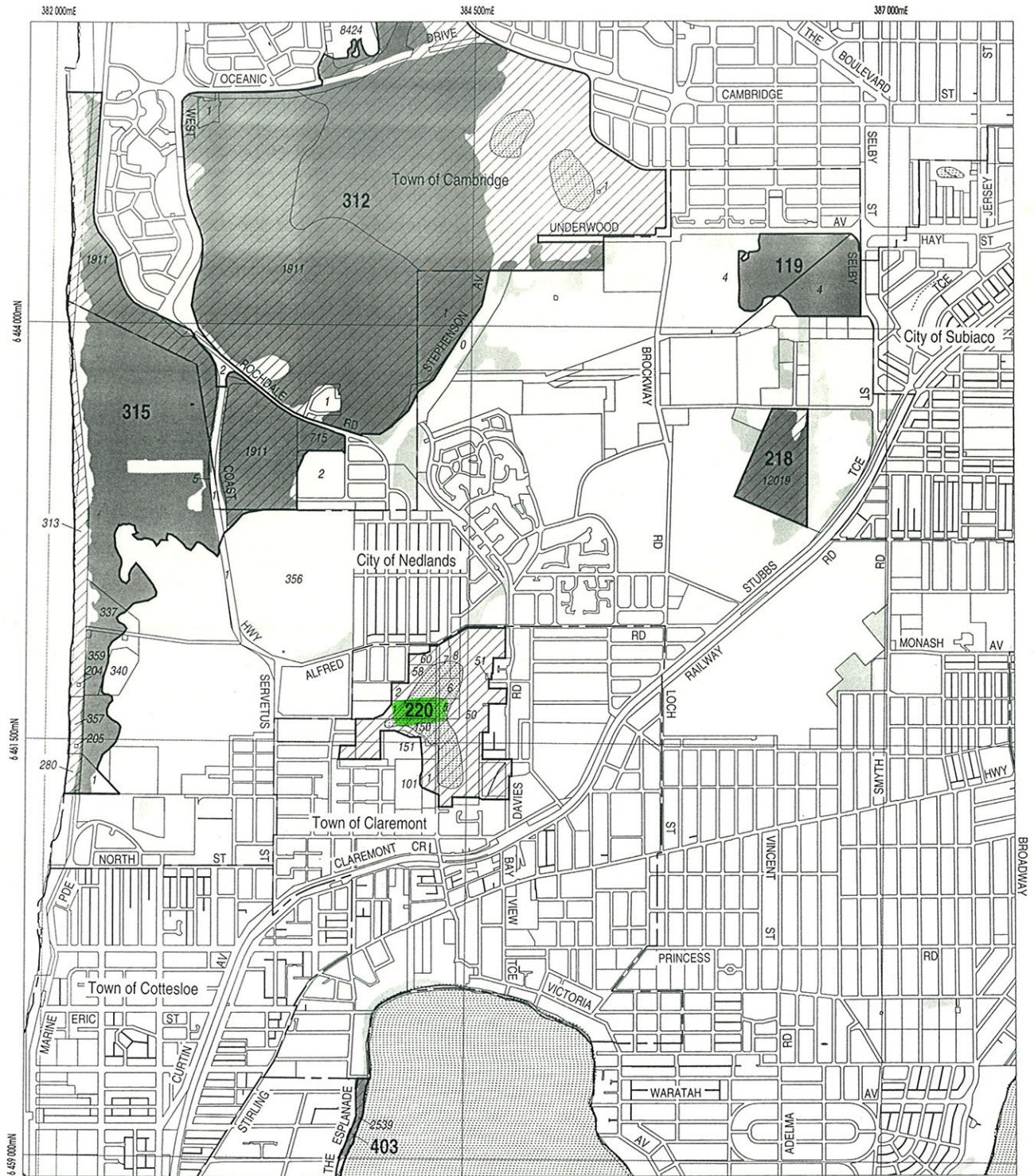
**Opportunities and/or Constraints**

Opportunities: Bushplan Site/part Bushplan Site subject to Swan Coastal Plain Lakes EPP; location of Scheduled Fauna, conservation category wetlands; under MRS Parks and Recreation Reservation and TPS Landscape Zoning, Crown Reserve

Constraints: private land

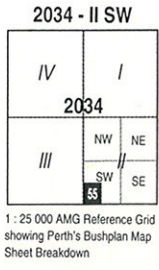
**Recommendation:** The existing care, control and management intent of the reserve is endorsed. Long-term security and support for conservation management of the Bushplan Site to be enhanced by: amending the purpose of the reserve to include conservation; and applying appropriate mechanisms in consultation with the reserve management body.





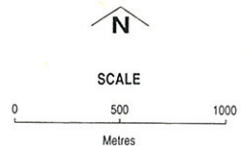
LEGEND

- 472 Bushplan Sites With Regionally Significant Bushland
- Other Native Vegetation
- Conservation Category Wetlands
- Bushplan Sites With Some Existing Protection
- Lot Number, Location Number
- Channel Wetlands
- Local Government Boundary

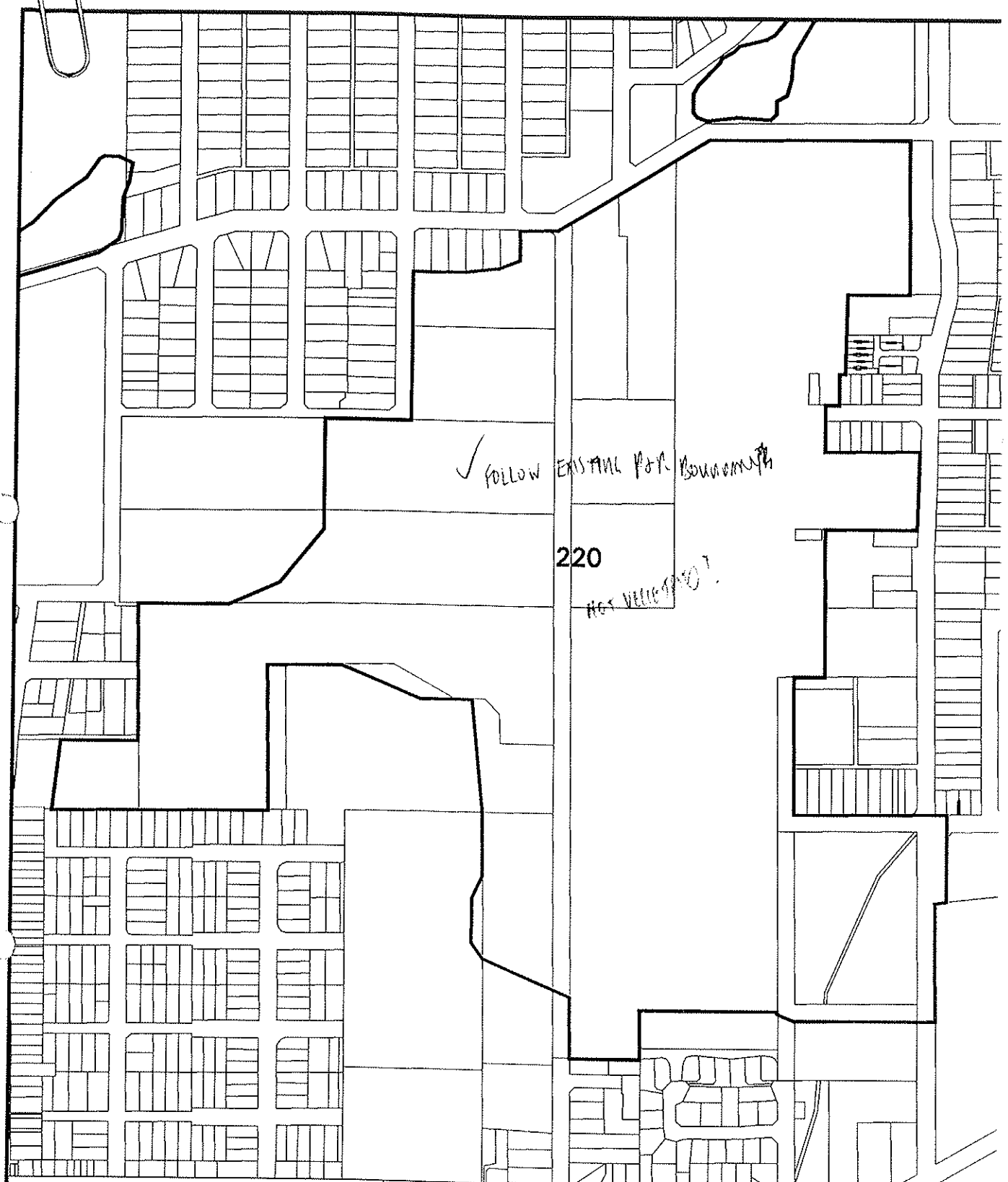


PERTH'S BUSHPLAN MAP INDEX

|     |     |
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| 105 | 106 |



Produced by Project Mapping Section  
 Land Information Branch, Ministry for  
 Planning, Perth W.A. November 1998  
 ntw-map18/envIRON/bushplan/bushv2\_55.dgn  
 Cadastral Data supplied by Department  
 of Land Administration, W.A.  
 Wetlands Data supplied by  
 Water and Rivers Commission  
 Native Vegetation Extent for Study Area  
 supplied by Agriculture Western Australia



### bp site 220

- AG VEG 1998 BOUNDARY THEME
- Cadastre
- Bushplan sites refno 1-500 SCP BOUNDARY THEME

B 16/10/22/10/19

REG. STH. BUSHPLAN VALUE

LANDOWN INVESTIGATION?



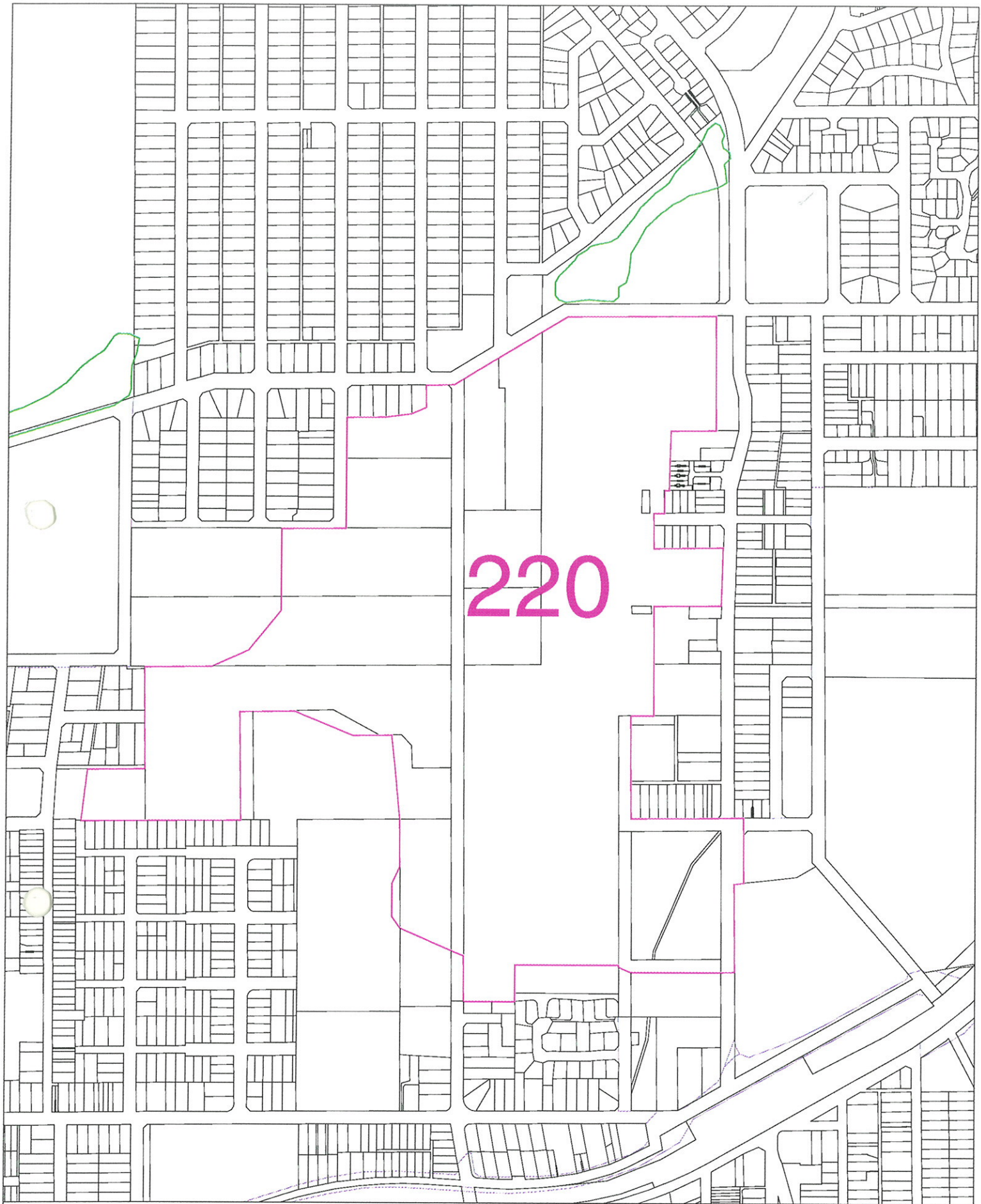
|                   |
|-------------------|
| AL USE ONLY       |
| Andrea Zappacosta |
| ot980526_1        |
| '98               |

L. Annunziata

BJK 6/7

LS 220

Faunal habitat values



220

**BUSHPLAN SITES CORRECTED**



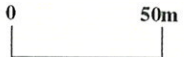
**WESTERN  
AUSTRALIAN  
PLANNING  
COMMISSION**



**CUSTOMER  
FOCUS  
WESTERN AUSTRALIA**



**SCALE 1:2500**



**Metres**



WEST COAST HWY  
SANTA ANA BL

HICKS BL



GOLF COURSE

SANTA ANA BL

STO. ANTON BL



**AREA INFORMATION**

System 6 Area (C or M) or Update Area (Update) *M48*

|   |
|---|
| Conservation Area <i>Lake Claremont</i> |
| 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          |

# LAKE CLAREMONT

~~John M. H.~~

~~Em. gumpi + Agon's flex~~ OW

~~Schaerobdus validus~~ 5 3

~~W/L~~

DEP Files have met plan

## R. A. O. U. TRACKING DATABASE

23/06/96

PARK SIGHTINGS REPORT

Page No.

1

Lake Claremont (M48)

| ORDER: | REF: | BIRD NAME                   |   | NO. SIGHTINGS |
|--------|------|-----------------------------|---|---------------|
| 0018   | 0216 | Blue-billed Duck            | 3 | 2             |
| 0019   | 0217 | Musk Duck                   | 3 | 2             |
| 0022   | 0203 | Black Swan                  |   | 5             |
| 0025   | 0207 | Australian Shelduck         |   | 1             |
| 0001   | 0948 | Mallard                     |   | 3             |
| 0032   | 0208 | Pacific Black Duck          |   | 6             |
| 0033   | 0212 | Australasian Shoveler       | 3 | 3             |
| 0035   | 0211 | Grey Teal                   |   | 6             |
| 0036   | 0210 | Chestnut Teal               |   | 1             |
| 0039   | 0213 | Pink-eared Duck             | 3 | 6             |
| 0040   | 0215 | Hardhead                    | 3 | 2             |
| 0041   | 0061 | Australasian Grebe          |   | 3             |
| 0128   | 0101 | Darter                      |   | 1             |
| 0129   | 0100 | Little Pied Cormorant       |   | 1             |
| 0132   | 0097 | Little Black Cormorant      |   | 2             |
| 0135   | 0106 | Australian Pelican          |   | 1             |
| 0139   | 0188 | White-faced Heron           |   | 3             |
| 0145   | 0187 | Great Egret                 |   | 1             |
| 0150   | 0192 | Nankeen Night Heron         |   | 1             |
| 0165   | 0232 | Black-shouldered Kite       |   | 1             |
| 0204   | 0058 | Purple Swamphen             |   | 6             |
| 0205   | 0056 | Dusky Moorhen               | 3 | 6             |
| 0208   | 0059 | Eurasian Coot               |   | 6             |
| 0011   | 0158 | Common Greenshank           | 2 | 2             |
| 0233   | 0154 | Wood Sandpiper              | 2 | 1             |
| 0249   | 0163 | Sharp-tailed Sandpiper      | 2 | 1             |
| 0251   | 0161 | Curlew Sandpiper            | 2 | 1             |
| 0267   | 0146 | Black-winged Stilt          |   | 3             |
| 0269   | 0148 | Red-necked Avocet           |   | 2             |
| 0282   | 0144 | Black-fronted Dotterel      |   | 3             |
| 0297   | 0125 | Silver Gull                 |   | 6             |
| 0324   | 0957 | Rock Dove                   |   | 1             |
| 0326   | 0988 | Laughing Turtle-Dove        |   | 5             |
| 0327   | 0989 | Spotted Turtle-Dove         |   | 4             |
| 0356A  | 1266 | White-tailed Black-Cockatoo | 1 | 1             |
| 0359   | 0273 | Galah                       |   | 3             |
| 0366   | 0254 | Rainbow Lorikeet            |   | 5             |
| 0386   | 0294 | Australian Ringneck         |   | 5             |
| 0446   | 0322 | Laughing Kookaburra         |   | 2             |
| 0451   | 0326 | Sacred Kingfisher           |   | 2             |
| 0453   | 0329 | Rainbow Bee-eater           |   | 1             |
| 0492   | 0976 | Striated Pardalote          |   | 2             |
| 0537   | 0638 | Red Wattlebird              |   | 6             |

|      |      |                           | Page No. | 2 |
|------|------|---------------------------|----------|---|
| 0561 | 0608 | Singing Honeyeater        | 6        |   |
| 0583 | 0597 | Brown Honeyeater          | 3        |   |
| 0587 | 0631 | New Holland Honeyeater    | 3        | 4 |
| 0588 | 0632 | White-cheeked Honeyeater  | 1        | 4 |
| 0671 | 0415 | Magpie-Lark               | 6        |   |
| 0676 | 0364 | Willie Wagtail            | 6        |   |
| 0678 | 0424 | Black-faced Cuckoo-shrike | 3        |   |
| 0698 | 0705 | Australian Magpie         | 6        |   |
| 0706 | 0930 | Australian Raven          | 6        |   |
| 0763 | 0357 | Welcome Swallow           | 6        |   |
| 0765 | 0359 | Tree Martin               | 6        |   |
| 0768 | 0524 | Clamorous Reed-Warbler    | 3        |   |
| 0772 | 0522 | Little Grassbird          | 2        |   |
| 0781 | 0574 | Silvereye                 | 3        |   |

\*\*\* END OF REPORT \*\*\*

① 1  
 ② 4  
 ③ 6  
 ④ 2

SUMMARY REPORT

|                       |   |    |
|-----------------------|---|----|
| TOTAL BIRDS SIGHTED   | : | 57 |
| TOTAL NUMBER OF CARDS | : | 6  |

\*\*\* END OF SUMMARY \*\*\*

LAKE



M48 Lake Claremont.

City of Claremont Management Plan

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>M48 Lake Claremont.</b><br>City of Claremont Management Plan                               |             |   |
| M48.1 Claremont Town Council in consultation with EPA prepare a management plan for the area. | Implemented | The local authority is implementing a management plan for the area. |

|                                   |                                  |    |      |
|-----------------------------------|----------------------------------|----|------|
| Area M <sup>48</sup> Name         | <u>Lake Claremont</u>            |    |      |
|                                   | <u>(North west part)</u>         |    |      |
| Source                            | <u>Robert Powell (CALM Coma)</u> |    |      |
| Purpose (why was the study done?) |                                  |    |      |
| Government                        |                                  |    |      |
| Corporate                         |                                  |    |      |
| Community Group                   |                                  |    |      |
| Management Plan                   |                                  |    |      |
| Publication Planned               | Yes                              | No | Date |
| Planned Location                  |                                  |    |      |

|       |           |            |
|-------|-----------|------------|
| Soils |           |            |
| Units | described | referenced |

|           |           |            |
|-----------|-----------|------------|
| Landscape |           |            |
| Features  | described | referenced |

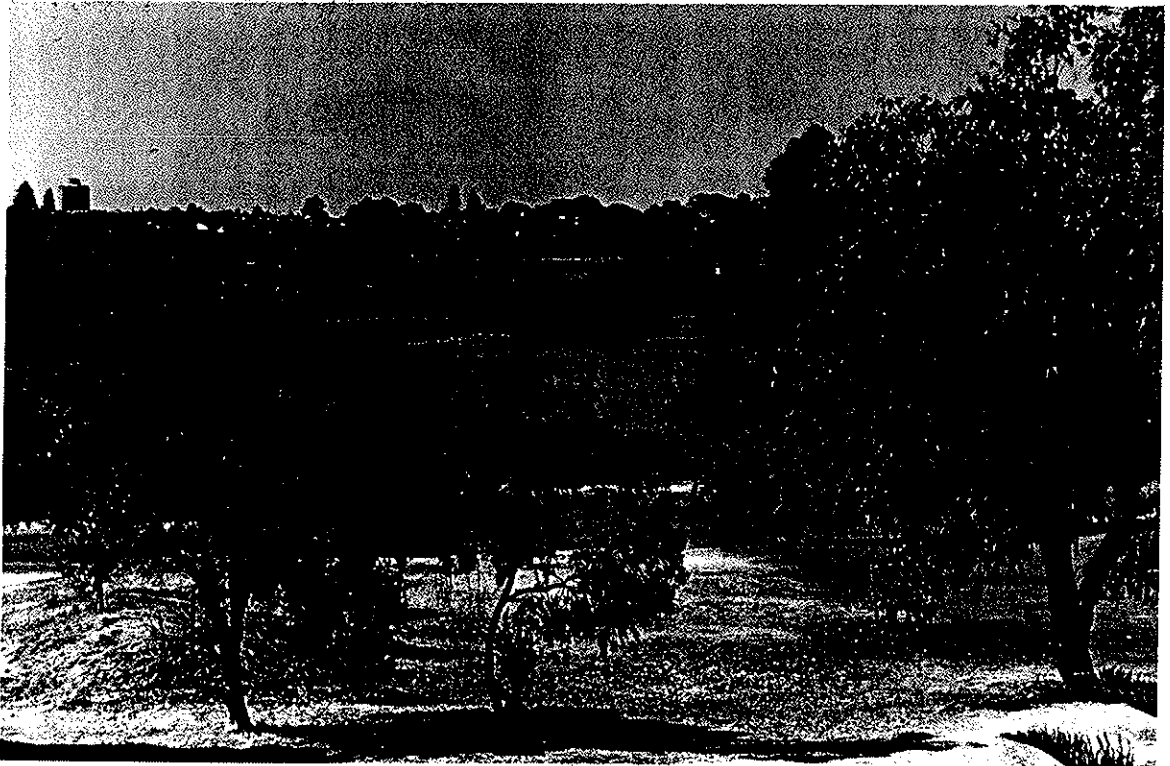
|  |   |                              |  |
|--|---|------------------------------|--|
| Flora  |   |                              |  |
| Vegetation Map                                   |   |                              |  |
| Units  | Site based (no)                                       |                              |  |
| Mapped   |   |                              |  |
| Veg Units  | Comparable Heddle <i>et al</i>                        | Compared Heddle <i>et al</i> | Unit not mapped by Heddle <i>et al</i> |
| Flora list                                       |   |                              |  |
| Timing   | % completion <u>100%</u>                              | Significant Taxa             |  |
| <u>Idios</u><br><u>Summer</u><br><u>Nov 1991</u> | <u>Trees</u> <u>Shrubs</u> <u>Herbs</u> <u>Sedges</u> | Weeds                        | DRF — CALM Priority Other              |
|  | <i>possibly missed orchards</i>                       |                              |  |

|        |              |                  |                     |
|--------|--------------|------------------|---------------------|
| Fauna  |              |                  |                     |
| Timing | % completion | Significant Taxa |                     |
|        | Mammals      | Birds            | Sched1 Sched2 Other |
|        | Reptiles     | Invertebrates    |                     |

|                      |          |                        |
|----------------------|----------|------------------------|
| Vegetation Condition |          |                        |
| Site based           | Mapped   | Units                  |
| Disturbance Factors  |          |                        |
| Phytophthora         | observed | Other                  |
|                      | tested   | Incidental<br>Itemised |

|                            |
|----------------------------|
| Notes                      |
| <u>See Management Plan</u> |
|                            |
|                            |
|                            |
|                            |
|                            |

# LAKE CLAREMONT RESEARCH (1987-88)



**REPORT**

**BY**

**I.R.LANTZKE  
P.W.GABRIEL  
AND  
B.T.HAYNES**

LAND USE AND CAR PARKING

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While this is not the place to examine the methods whereby truly aquatic creatures colonize new waters, it is relevant to record that in the nineteen fifties (at least), Lake Claremont contained a native Goby (fish) specie, and carp (Dr G. Knight pers. comm.), and Mr A. Doepel, (see "Land Use Report") recalls transferring some "carp" from Mongers Lake to Lake Claremont in 1918.

There is insufficient data to permit any calculation of the quantity of phosphorus in the aquatic vertebrates. The fish (omnivores or carnivores) will only cycle the phosphorus within the aquatic pool, but the tortoise (omnivores) will add formerly terrestrial phosphorus to the aquatic pool whenever they eat land fed/grown material, such as dead birds and picknickers' scraps.

#### 4.6.1 Aquatic Invertebrates

Table 19 summarizes the animal observations in both open water and rushes, in September, December, March and June. Presence of a specie during those months is marked with a letter recording the maximum observed animal density per litre.

In all, 31 distinguishably different types of animals were collected in the lake over the study. Only two species (6%) were found in March, and the greatest number of species in one habitat occurred in June (15 species (48%) in rushes; 11 (35%) in open water) and September (15 species in open water; 6 (19%) in rushes), while in December species numbers were still high (19 (32%) open; 13 (42%) rushes).

Only broad generalizations can be made from the results in Table 19 because of significant sampling variations in the data's acquisition. As described in Section 8.2 the sampling method was changed in mid 1988 from container capture to netting. Differences in sampling effort also arose from the number of samples at each site on any occasion. When animal numbers were large, samples were taken at three depths (top; middle; bottom) and all three analysed and recorded, whereas when animals were few and field time limited only single samples were taken, or if multiple depth samples were

TABLE 1

Monthly counts of birds observed in the Lake Claremont  
region between 0630 and 1015 hours  
October 1987 - June 1988

| SPECIES<br>COMMON NAME  | MAJOR<br>HABITAT  | OCT                          |    | NOV |    | DEC |    | JAN |    | MAR |    | APR |   | MAY |    | JUN |   |  |
|-------------------------|---|------------------------------|----|-----|----|-----|----|-----|----|-----|----|-----|---|-----|----|-----|---|--|
|                         |   | No.                          | Y  | No. | Y  | No. | Y  | No. | Y  | No. | Y  | No. | Y | No. | Y  | No. | Y |  |
| Black Swan              |   | 29                           | 8  | 57  | 8  | 89  | 8  | 11  |    |     |    |     |   | 10  |    | 6   |   |  |
| Pacific Black Duck      | Open, shallow<br>to deep water<br>surrounded by<br>dense marginal<br>vegetation | 27                           | 17 | 61  | 10 | 139 | 6  | 123 |    | 8   |    | 5   |   | 90  |    | 17  |   |  |
| Grey Teal               |   | 4                            |    | 3   |    | 27  | 4  | 148 |    |     |    |     |   | 58  |    |     |   |  |
| Blue Bill Duck          |   | 1                            |    | 5   |    | 11  | 5  | 11  |    |     |    |     |   |     |    |     | 2 |  |
| Pink Eared Duck         |   | 5                            | 4  | 6   | 4  | 15  | 7  | 16  |    |     |    |     |   |     |    |     |   |  |
| White Eyed Duck         |   | 1                            |    |     |    | 2   |    |     |    |     |    |     |   |     |    |     |   |  |
| Blue Winged Shoveler    |   | 2                            |    |     |    | 2   |    |     |    |     |    |     |   |     |    |     |   |  |
| Musk Duck               |   | 2                            |    |     |    |     |    |     |    |     |    |     |   |     |    |     |   |  |
| Mountain Duck           |   | 1                            |    |     |    |     | 4  |     | 4  |     |    |     |   |     | 10 |     | 4 |  |
| Domestic Duck*          |   | Open water near<br>south end | 10 |     | 6  |     | 13 |     | 14 |     | 18 |     | 3 |     | 2  |     | 2 |  |
| Australian Little Grebe | Open deep waters<br>near dense mar-<br>ginal vegetation                         |                              |    | 5   |    | 2   |    |     |    |     |    |     |   |     |    |     | 4 |  |
| Hoary Headed Grebe      |   | 1                            |    |     |    | 1   |    |     |    |     |    |     |   |     |    |     |   |  |
| White Egret             | Open shallows<br>near tall<br>woodland  |                              |    |     |    |     |    | 2   |    |     |    |     |   |     |    |     |   |  |
| White-Faced Heron       |   |                              |    |     |    | 1   |    | 2   |    |     |    |     |   | 2   |    |     |   |  |
| Black Winged Stilt      | Open shallows<br>and mudflats<br>protected by<br>dense marginal<br>vegetation   |                              |    | 1   |    | 4   |    | 70  |    | 2   |    | 7   |   | 16  |    |     |   |  |
| Black Fronted Dotterel  |   |                              |    |     |    | 1   |    | 12  |    | 12  |    | 8   |   | 22  |    |     |   |  |
| Wood Sandpiper          |   |                              |    |     |    |     |    |     |    |     | 2  |     |   |     |    |     |   |  |
| Green Shank             |   |                              |    |     |    |     |    |     |    |     | 2  |     |   |     |    |     |   |  |
| Banded Plover           |   |                              |    |     |    |     |    |     |    |     | 2  |     |   |     |    |     |   |  |
| Silver Gull             | Open waters<br>near beaches<br>and low<br>vegetation                            | 188                          |    | 451 |    | 448 |    | 520 |    | 160 |    | 110 |   | 306 |    |     |   |  |
| Caspian Tern            |   | 1                            |    |     |    |     |    |     |    |     |    |     |   |     |    |     | 4 |  |
| Australian Pelican      |   | 1                            |    | 1   |    |     |    |     |    |     |    |     |   |     |    |     |   |  |
| Little Pied Cormorant   | Paperbarks in<br>open water   | 1                            |    | 3   |    | 2   |    |     |    |     |    |     |   |     |    |     | 1 |  |
| Little Black Cormorant  |   | 1                            |    | 3   |    | 3   |    |     |    |     |    |     |   |     |    |     |   |  |
| Black Cormorant         |   | 1                            |    | 1   |    | 1   |    |     |    |     |    |     |   |     |    |     |   |  |
| Eurasian Coot           | Open water near<br>marshland  | 86                           | 3  | 153 | 10 | 147 | 9  | 145 | 6  |     |    |     |   | 2   |    | 50  |   |  |
| Dusky Moorhen           | Dense marginal<br>vegetation and<br>marshland                                   | 3                            |    | 18  | 3  | 10  | 5  | 14  | 4  | 14  |    | 2   |   | 1   |    | 13  |   |  |
| Western Swamphan        |   | 17                           | 5  | 9   | 2  | 16  | 5  | 27  |    | 13  |    | 7   |   | 15  |    | 23  |   |  |
| Buff Banded Rail        |   |                              |    |     |    |     |    | 1#  |    |     |    |     |   |     |    |     |   |  |
| Marsh Crake             |   |                              |    | 1   |    |     |    |     |    |     |    |     |   |     |    |     |   |  |
| Clamorous Reed Warbler  | Low Density<br>marginal   | 20                           |    | 32  |    | 25  |    | 34  |    | 4   |    |     |   | 4   |    | 7   |   |  |
| Little Grassbird        |   | 1                            |    | 5   |    | 2   |    | 4   |    |     |    |     |   | 1   |    | 5   |   |  |



| SPECIES<br>COMMON NAME  | MAJOR<br>HABITAT                                    | OCT |   | NOV  |   | DEC  |   | JAN  |   | MAR |   | APR |   | MAY  |   | JUN |   |
|---|---|-----|---|------|---|------|---|------|---|-----|---|-----|---|------|---|-----|---|
|   |   | No. | Y | No.  | Y | No.  | Y | No.  | Y | No. | Y | No. | Y | No.  | Y | No. | Y |
| Twenty Eight Parrot<br>Red Capped Parrot<br>Rainbow Lorikeet* | Medium to tall<br>trees in open<br>woodland         | 9   |   | 8    |   | 6    |   | 14   |   | 8   |   | 19  |   | 10   |   | 10  |   |
| Owlet Nightjar ?  | Dense low<br>marginal trees                         |     |   | 1    |   | 2    |   | 4    |   |     |   |     |   | 2    |   | 2   |   |
| Brown Falcon<br>Nankeen Kestral<br>Black Shouldered Kite      | Open marsh,<br>grassland, shrubs<br>near tall trees |     |   | 1    |   | 1    |   | 1#   |   |     |   |     |   | 2    |   |     |   |
| Little Eagle  | Open marsh near<br>woodland                         |     |   |      |   |      |   |      |   |     |   |     |   | 1    |   |     |   |
| Senegal Turtle Dove*  | Dense low trees<br>near grassland                   | 21  |   | 40   |   | 29   |   | 56   |   | 30  |   | 3   |   | 12   |   | 4   |   |
| Spotted Turtle Dove*  | Parkland, Golf<br>Course                            | 2   |   | 3    |   | 2    |   | 2    |   | 6   |   |     |   | 4    |   | 6   |   |
| Domestic Pidgeon*   | Open grassed<br>areas few trees                     |     |   | 1    |   |      |   |      |   |     |   | 1   |   |      |   |     |   |
| TOTAL BIRDS/MONTH   |   | 619 |   | 1138 |   | 1259 |   | 1786 |   | 683 |   | 464 |   | 1230 |   | 772 |   |

NOTES: 1. all young (Y) included in total numbers (No.) species.

2. \* - Exotic bird species, introduced by humans  
directly or indirectly to the regions.

3. # - Species only observed during afternoon/evening  
observation.

4. Bird numbers for OCTOBER to DECEMBER 1987, are  
average figures derived from multiple samplings over  
seven days.

Subsequent figures are from single day's samples each  
month.

## APPENDIX FOUR

MAJOR NATIVE AND EXOTIC PLANT SPECIES OF THE LAKE CLAREMONT REGIONWETLAND SPECIES

## EMERGENT

|                   |   |                              |
|-------------------|---|------------------------------|
| Yanget or Bulrush | - | <i>Typha orientalis</i>      |
| Jointed Twig Rush | - | <i>Baumea articulata</i>     |
| Lake Club Rush    | - | <i>Shoenoplectus validus</i> |
| Knotted Club Rush | - | <i>Isolepis nodosa</i>       |

## SUBMERGED

|   |                               |
|---|-------------------------------|
| - | <i>Chara fragilis</i>         |
| - | <i>Potamogeton pectinatus</i> |

## FLOATING

|                  |   |                             |
|------------------|---|-----------------------------|
| Green Algae      | - | <i>Chlorophyte spp.</i>     |
| Blue Green Algae | - | <i>Anacystis aeruginosa</i> |
|                  | - | <i>Anabaena spiroides</i>   |

## MARGINAL VASCULAR VEGETATION

a) Over Storey

|                          |   |                                 |
|--------------------------|---|---------------------------------|
| Freshwater Paperbark     | - | <i>Melaleuca raphiophylla</i>   |
| Flooded Gum              | - | <i>Eucalyptus rudis</i>         |
| Giant Reed (*)           | - | <i>Arundo donax</i>             |
| Castor Oil Tree (*)      | - | <i>Ricinus communis</i>         |
| Pepper Tree (*)          | - | <i>Shinus terebinthifolias</i>  |
| Wattle                   | - | <i>Acacia cyclops</i>           |
| Moonah Paperbark         | - | <i>Melaleuca priessiana</i>     |
| Blood Flower Bottlebrush | - | <i>Calothomnus sanguineus</i>   |
| Moreton Bay Fig (*)      | - | <i>Ficus macrophyllia</i>       |
| Tasmanian Blue Gum (*)   | - | <i>Eucalyptus St Johnii</i>     |
| Sydney Blue Gum (*)      | - | <i>Eucalyptus globulus</i>      |
| Washington Palm (*)      | - | <i>Washingtonia filifera</i>    |
| Sheoak (I)               | - | <i>Allocasuarina fraseriana</i> |
| Weeping Willow (*)       | - | <i>Salix sp.</i>                |

b) Understorey

|                            |   |                                |
|----------------------------|---|--------------------------------|
| Dock (*)                   | - | <i>Rumex spp.</i>              |
| Water Couch Grass (*)      | - | <i>Paspalum paspalodes</i>     |
| Salt Water Couch Grass (*) | - | <i>Paspalum distichum</i>      |
| Kikuyi Grass (*)           | - | <i>Pennisetum clandestinum</i> |
| Fennel (*)                 | - | <i>Foeniculum vulgare</i>      |
| Wireweed (*)               | - | <i>Polygonum spp.</i>          |

## WOODLAND VASCULAR SPECIES

a) Overstorey

|                       |   |                                 |
|-----------------------|---|---------------------------------|
| Tuart                 | - | <i>Eucalyptus gomphocephala</i> |
| Marri                 | - | <i>Eucalyptus calophylla</i>    |
| Jarrah                | - | <i>Eucalyptus marginata</i>     |
| Salmon Gum (*)        | - | <i>Eucalyptus salmonophloia</i> |
| Lemon Scented Gum (*) | - | <i>Eucalyptus woodwardii</i>    |
| Coral Gum (*)         | - | <i>Eucalyptus torquata</i>      |

b) Middle Storey

|                       |   |                           |
|-----------------------|---|---------------------------|
| Rottneest Island Pine | - | <i>Calytris robusta</i>   |
| Western Peppermint    | - | <i>Agonis flexusa</i>     |
| Wattle                | - | <i>Acacia cyclops</i>     |
| Wattle                | - | <i>Acacia saligna</i>     |
| Menzies Banksia       | - | <i>Banksia Menziesii</i>  |
| Swamp Banksia         | - | <i>Banksia littoralis</i> |
| Flame Tree (*)        | - | <i>Erythrina caffra</i>   |

c) Lower Storey

|                   |   |                                |
|-------------------|---|--------------------------------|
| Prickly Moses     | - | <i>Acacia pulchella</i>        |
| Staghorn bush     | - | <i>Daviesia sp.</i>            |
| Zamia Palm        | - | <i>Macrozamia reidleyi</i>     |
| Geraldton Wax (*) | - | <i>Chamaelaucium uncinatum</i> |
| Stink Bush        | - | <i>Jacksonia furcellata</i>    |
|                   | - | <i>Jacksonia sternbergiana</i> |

d) Understorey

|                      |   |  |
|----------------------|---|--|
| Veldt Grass (*)      | - | <i>Ehrharta calycina; E longiflora</i> |
| Hairs Tail Grass (*) | - | <i>Laganis ovatus</i>                  |
| Clover (*)           | - | <i>Oxalis pes-caprae</i>               |
| Summer Grass (*)     | - | <i>Digitaria sanguinalis</i>           |
| Buffalo Grass (*)    | - | <i>Stenotaphrum dimidiatum</i>         |
| Watsonia (*)         | - | <i>Chasmanthe floribunda</i>           |
| Clover (*)           | - | <i>Trifolium spp.</i>                  |

- \* (\*) Exotic  
 (I) Introduced to the habitat

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LAND USE AND CAR PARKING

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| COMMON NAME              | SCIENTIFIC NAME                      | REFERENCE |
|--------------------------|--------------------------------------|-----------|
| Moorhen, Dusky           | <i>Gallinula tenebroza</i>           | 1, 4      |
| Native Hen, Black Tailed | <i>Tribonyx ventralis</i>            | 5         |
| Rail, Buff Banded        | <i>Rallus philippensis</i>           | 1         |
| Reed Warbler, Clamorous  | <i>Acrocephalus stentoreus</i>       | 1, 4      |
| Swamphen, Western        | <i>Porphyrio porphyrio bellus</i>    | 1, 4      |
| LARGE WADING BIRDS       |                                      |           |
| Egret, Great             | <i>Egretta alba</i>                  | 1, 4      |
| Egret, Little            | <i>Egretta garzetta</i>              | 4         |
| Heron, Nankeen Night     | <i>Nycticorax caledonicus</i>        | 4         |
| Heron, Pacific           | <i>Ardea pacifica</i>                | 4         |
| Heron, White Faced       | <i>Ardea novaehollandiae</i>         | 1, 4      |
| Spoonbill, Yellow Billed | <i>Platalea flavipes</i>             | 4         |
| SMALL WADING BIRDS       |                                      |           |
| Avocet, Red Necked       | <i>Recurvirostra novaehollandiae</i> | 4         |
| Dotterel, Black Fronted  | <i>Charadrius melanops</i>           | 1, 4      |
| Dotterel, Red Kneed      | <i>Charadrius cinctus</i>            | 4         |
| Godwit, Black Tailed     | <i>Limosa limosa</i>                 | 5b        |
| Greenshank               | <i>Tringa nebularia</i>              | 1, 4      |
| Plover, Banded           | <i>Vanellus tricolor</i>             | 1         |
| Plover, Red Capped       | <i>Charadrius alexandrinus</i>       | 5         |
| Sandpiper, Wood          | <i>Tringa glareola</i>               | 1         |
| Stilt, Banded            | <i>Cladorhynchus leucocephalus</i>   | 5         |
| Stilt, Black Winged      | <i>Himantopus himantopus</i>         | 1, 4      |
| MARINE AERIAL BIRDS      |                                      |           |
| Osprey                   | <i>Pandion halioetus</i>             | 4         |

TABLE 5  
BIRD LIST FOR THE LAKE CLAREMONT REGION

| COMMON NAME                 | SCIENTIFIC NAME                    | REFERENCE   |
|-----------------------------|------------------------------------|-------------|
| BIRDS OF THE OPEN WATER     |                                    |             |
| Coot, Eurasian              | <i>Fulica atra</i>                 | 1, 4, 5, 5a |
| Cormorant, Black            | <i>Phalacrocorax carbo</i>         | 1           |
| Cormorant, Little Black     | <i>Phalacrocorax sulcirostris</i>  | 1, 4        |
| Cormorant, Little Pied      | <i>Phalacrocorax melanaleucos</i>  | 1, 4        |
| Duck, Blue Billed           | <i>Oxyura australis</i>            | 1, 4        |
| Duck, Domestic (hybrid)     | <i>Anas platyrhynchos</i> X        | 1, 4        |
| Duck, Mountain              | <i>Tadorna tadornoides</i>         | 1, 4, 5, 5a |
| Duck, Musk                  | <i>Biziura lobata</i>              | 1, 4        |
| Duck, Pacific Black         | <i>Anas superciliosa</i>           | 1, 4, 5     |
| Duck, Pink Eared            | <i>Malacorhynchus membranaceus</i> | 1, 4, 5     |
| Duck, White Eyed            | <i>Aythya australis</i>            | 1, 4        |
| Grebe, Australian Little    | <i>Podiceps novaehollandiae</i>    | 1           |
| Grebe, Great Crested        | <i>Podiceps cristatus</i>          | 2           |
| Grebe, Hoary Headed         | <i>Podiceps poliocephalus</i>      | 1, 4        |
| Gull, Silver                | <i>Larus novaehollandiae</i>       | 1, 4        |
| Pelican, Australian         | <i>Pelacanus conspicillatus</i>    | 1, 4        |
| Shoveler, Blue Winged       | <i>Anas rhynchotis</i>             | 1, 4, 5     |
| Swan, Black                 | <i>Cygnus atratus</i>              | 1, 4, 5     |
| Teal, Chestnut              | <i>Anas castanea</i>               | 3           |
| Teal,, Grey                 | <i>Anas gibberifrons</i>           | 1, 4, 5, 5a |
| Tern, Caspian               | <i>Hydroprogne caspia</i>          | 1           |
| BIRDS OF THE RUSHES         |                                    |             |
| Bittern, Little             | <i>Ixobrychus minutus</i>          | 2, 4        |
| Crake, Australian (spotted) | <i>Porzana fluminea</i>            | 5           |
| Crake, Marsh                | <i>Porzana pusilla</i>             | 1           |
| Crake, Spotless             | <i>Porzana tabuensis</i>           | 5           |
| Grassbird, Little           | <i>Megalurus gramineus</i>         | 1           |

| COMMON NAME                   | SCIENTIFIC NAME                     | REFERENCE |
|-------------------------------|-------------------------------------|-----------|
| AERIAL BIRDS                  |                                     |           |
| Bee Eater, Rainbow            | <i>Merops ornatus</i>               | 1, 4      |
| Cuckoo Shrike, Black Faced    | <i>Coracina novaehollandiae</i>     | 1, 4      |
| Eagle, Little                 | <i>Hieraoetus morphnoides</i>       | 1         |
| Falcon, Brown                 | <i>Falco berigora</i>               | 1         |
| Goshawk, Brown                | <i>Accipiter fasciatus</i>          | 4         |
| Kestral, Nankeen              | <i>Falco cenchroides</i>            | 1         |
| Kite, Black                   | <i>Milvus migrans</i>               | 4         |
| Kite, Black Shouldered        | <i>Elanus notatus</i>               | 1         |
| Martin, Tree                  | <i>Cecropis nigricans</i>           | 1         |
| Swallow, Welcome              | <i>Hirundo neoxena</i>              | 1         |
| Swallow, White Backed         | <i>Cheramoeca leucosternum</i>      | 1         |
| Thornbill, Western            | <i>Acanthiza inornata</i>           | 4         |
| TERRESTRIAL BIRDS             |                                     |           |
| Black Cockatoo, White Tailed  | <i>Calyptorhynchus baudinii</i>     | 1         |
| Black Cockatoo, Yellow Tailed | <i>Calyptorhynchus funereus</i>     | 1         |
| Butcherbird, Grey             | <i>Cracticus torquatus</i>          | 1         |
| Butcherbird, Pied             | <i>Cracticus nigropularis</i>       | 1         |
| Corella, Little               | <i>Cacatua sanguinea</i>            | 4         |
| Crow, Australian              | <i>Corvus orra</i>                  | 1         |
| Cuckoo, Pallid                | <i>Cuculus pallidus</i>             | 1         |
| Frogmouth, Tawny              | <i>Podargus strigoides</i>          | 4         |
| Galah                         | <i>Cacatua roseicapilla</i>         | 1         |
| Honeyeater, Brown             | <i>Lichmera indistincta</i>         | 1         |
| Honeyeater, New Holland       | <i>Phylidonyris novaehollandiae</i> | 1         |
| Honeyeater, Singing           | <i>Lichenostomus virescens</i>      | 1         |
| Honeyeater, White Cheeked     | <i>Phylidonyris nigra</i>           | 1         |
| Kingfisher, Sacred            | <i>Halcyon sancta</i>               | 1, 4      |
| Kookaburra, Laughing          | <i>Dacelo novaeguineae</i>          | 1         |
| Lorikeet, Rainbow             | <i>Trichoglossus haematodus</i>     | 1         |
| Magpie, Western               | <i>Gymnorhina dorsalis</i>          | 1         |

| COMMON NAME             | SCIENTIFIC NAME                          | REFERENCE |
|-------------------------|--|-----------|
| Nightjar, Owlet         | <i>Aegotheles cristatus</i>              | 1         |
| Pardelote, Black Headed | <i>Pardelotus melanocephalus</i>         | 4         |
| Pardelote, Striated     | <i>Pardelotus substriatus</i>            | 1         |
| Parrot, Red Capped      | <i>Purpureicephalus spurius</i>          | 1         |
| Parrot, Twenty-eight    | <i>Barnardius zonarius semitorquatos</i> | 1         |
| Pee Wee                 | <i>Grallina cyanoleuca</i>               | 1         |
| Pidgeon, Feral          | <i>Columba livia</i>                     | 1         |
| Quail, King             | <i>Excalfactoria chinensis</i>           | 1         |
| Silvereye, Western      | <i>Zosterops gouldi</i>                  | 1         |
| Turtle-dove, Senegal    | <i>Streptopelia senegalensis</i>         | 1         |
| Turtle-dove, Spotted    | <i>Streptopelia chinensis</i>            | 1         |
| Wagtail, Willie         | <i>Rhipidura leucophrys</i>              | 1         |
| Wattlebird, Little      | <i>Anthochaera chrysoptera</i>           | 1         |
| Wattlebird, Red         | <i>Anthochaera carunculata</i>           | 1         |
| Whistler, Rufous        | <i>Pachycephala rufiventris</i>          | 1         |

#### SOURCES

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3. Morris, K. and Knott, B. (1979)
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- 5a. Royal Australasian Ornithologist Union (1988)
- 5b. Royal Australasian Ornithologist Union (1989)

## APPENDIX FOUR

MAJOR NATIVE AND EXOTIC PLANT SPECIES OF THE LAKE CLAREMONT REGIONWETLAND SPECIES

- -

## EMERGENT

|                   |   |                              |
|-------------------|---|------------------------------|
| Yanget or Bulrush | - | <i>Typha orientalis</i>      |
| Jointed Twig Rush | - | <i>Baumea articulata</i>     |
| Lake Club Rush    | - | <i>Shoenoplectus validus</i> |
| Knotted Club Rush | - | <i>Isolepis nodosa</i>       |

## SUBMERGED

|   |                               |
|---|-------------------------------|
| - | <i>Chara fragilis</i>         |
| - | <i>Potamogeton pectinatus</i> |

## FLOATING

|                  |   |                             |
|------------------|---|-----------------------------|
| Green Algae      | - | <i>Chlorophyte spp.</i>     |
| Blue Green Algae | - | <i>Anacystis aeruginosa</i> |
|                  | - | <i>Anabaena spiroides</i>   |

## MARGINAL VASCULAR VEGETATION

a) Over Storey

|                          |   |                                 |
|--------------------------|---|---------------------------------|
| Freshwater Paperbark     | - | <i>Melaleuca raphiophylla</i>   |
| Flooded Gum              | - | <i>Eucalyptus rudis</i>         |
| Giant Reed (*)           | - | <i>Arundo donax</i>             |
| Castor Oil Tree (*)      | - | <i>Ricinus communis</i>         |
| Pepper Tree (*)          | - | <i>Shinus terebinthifolias</i>  |
| Wattle                   | - | <i>Acacia cyclops</i>           |
| Moonah Paperbark         | - | <i>Melaleuca priessiana</i>     |
| Blood Flower Bottlebrush | - | <i>Calothomnus sanguineus</i>   |
| Moreton Bay Fig (*)      | - | <i>Ficus macrophyllia</i>       |
| Tasmanian Blue Gum (*)   | - | <i>Eucalyptus St Johnii</i>     |
| Sydney Blue Gum (*)      | - | <i>Eucalyptus globulus</i>      |
| Washington Palm (*)      | - | <i>Washingtonia filifera</i>    |
| Sheoak (I)               | - | <i>Allocasuarina fraseriana</i> |
| Weeping Willow (*)       | - | <i>Salix sp.</i>                |

b) Understorey

|                            |   |                                 |
|----------------------------|---|---------------------------------|
| Dock (*)                   | - | <i>Rumex spp.</i>               |
| Water Couch Grass (*)      | - | <i>Paspalum paspalodes</i>      |
| Salt Water Couch Grass (*) | - | <i>Paspalum distichum</i>       |
| Kikūyi Grass (*)           | - | <i>Pennistetum clandestinum</i> |
| Fennel (*)                 | - | <i>Foeniculum vulgare</i>       |
| Wireweed (*)               | - | <i>Polygonum spp.</i>           |

## WOODLAND VASCULAR SPECIES

a) Overstorey

|                       |   |                                 |
|-----------------------|---|---------------------------------|
| Tuart                 | - | <i>Eucalyptus gomphocephala</i> |
| Marri                 | - | <i>Eucalyptus calophylla</i>    |
| Jarra                 | - | <i>Eucalyptus marginata</i>     |
| Salmon Gum (*)        | - | <i>Eucalyptus salmonophloia</i> |
| Lemon Scented Gum (*) | - | <i>Eucalyptus woodwardii</i>    |
| Coral Gum (*)         | - | <i>Eucalyptus torquata</i>      |

b) Middle Storey

|                       |   |                           |
|-----------------------|---|---------------------------|
| Rottneest Island Pine | - | <i>Calytris robusta</i>   |
| Western Peppermint    | - | <i>Agonis flexusa</i>     |
| Wattle                | - | <i>Acacia cyclops</i>     |
| Wattle                | - | <i>Acacia saligna</i>     |
| Menzies Banksia       | - | <i>Banksia Menziesii</i>  |
| Swamp Banksia         | - | <i>Banksia littoralis</i> |
| Flame Tree (*)        | - | <i>Erythrina caffra</i>   |

c) Lower Storey

|                   |   |                                |
|-------------------|---|--------------------------------|
| Prickly Moses     | - | <i>Acacia pulchella</i>        |
| Staghorn bush     | - | <i>Daviesia sp.</i>            |
| Zamia Palm        | - | <i>Macrozamia reidleyi</i>     |
| Geraldton Wax (*) | - | <i>Chamaelaucium uncinatum</i> |
| Stink Bush        | - | <i>Jacksonia furcellata</i>    |
|                   | - | <i>Jacksonia sternbergiana</i> |

d) Understorey

|                      |   |  |
|----------------------|---|--|
| Veldt Grass (*)      | - | <i>Ehrharta calycina; E longiflora</i> |
| Hairs Tail Grass (*) | - | <i>Laganis ovatus</i>                  |
| Clover (*)           | - | <i>Oxalis pes-caprae</i>               |
| Summer Grass (*)     | - | <i>Digitaria sanguinalis</i>           |
| Buffalo Grass (*)    | - | <i>Stenotaphrum dimidiatum</i>         |
| Watsonia (*)         | - | <i>Chasmanthe floribunda</i>           |
| Clover (*)           | - | <i>Trifolium spp.</i>                  |

- \* (\*) Exotic  
 (I) Introduced to the habitat

LAKE CLAREMONT (BUTLER'S SWAMP)

- . water level strongly influenced by rainfall events, related to its function in the main drainage system of Hollywood, Shenton Park;
- . nutrients and other products from old rubbish tip;
- . low summer water levels reflecting increased use of groundwater.

Comments on Conservation Values

- (1) Steep banks of the lake affect its accessibility to wildlife, especially when the water level is low.
- (2) The relative lack of vegetation cover on the island and lack of fringing vegetation limit the habitats available for birds.
- (3) The lake is relatively isolated from wooded areas and other parklands.
- (4) The parkland retains no indigenous vegetation.
- (5) The bird fauna of the lake consists largely of common species, such as Black Swans, Coots, Black Ducks and feral ducks.

8.14.10 REFERENCES

McFarlane, D J (1985), Effects of urbanization on groundwater quality and quantity in Perth, Western Australia. PhD Thesis, University of Western Australia.

Spillman, K (1985), 'Identity prized: a history of Subiaco'. University of Western Australia Press, Nedlands.

8.15 LAKE CLAREMONT (BUTLER'S SWAMP)

BS22

8.15.1 GENERAL INFORMATION

LOCAL AUTHORITY: Town of Claremont  
 MRS ZONE: Parks & Recreation Reserve  
 RESERVE No: owned in fee simple by Town of Claremont  
 PURPOSE: Recreation  
 MANAGEMENT: Town of Claremont  
 SYSTEM 6 RECOMMENDATION: M48  
 WAC CLASS: WATER RESERVE: n/a  
 DRAINAGE: local drainage  
 OTHER: Possible subdivision of playing fields close to the lake - zoned residential

**Full document  
 available  
 on request**

8.15.2 PHYSIOGRAPHY AND GEOLOGICAL SETTING:

The lake is in an interdunal depression in the Spearwood dune system, within the Karrakatta association, close to the interface with the Cottesloe association.

8.15.3 AREAS

|                               |      |    |
|-------------------------------|------|----|
| Approximate total area: ..... | 68   | ha |
| Area of lake .....            | 18.3 | ha |
| Area of rushes .....          | 3.6  | ha |
| Dead trees .....              | 4.4  | ha |

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Nr 13037 152.72

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