

CSI HARVEY ESTUARY

↑ N

↑ 860 Water



Check this

line looks like private land to S

↑ 27528 Recreation

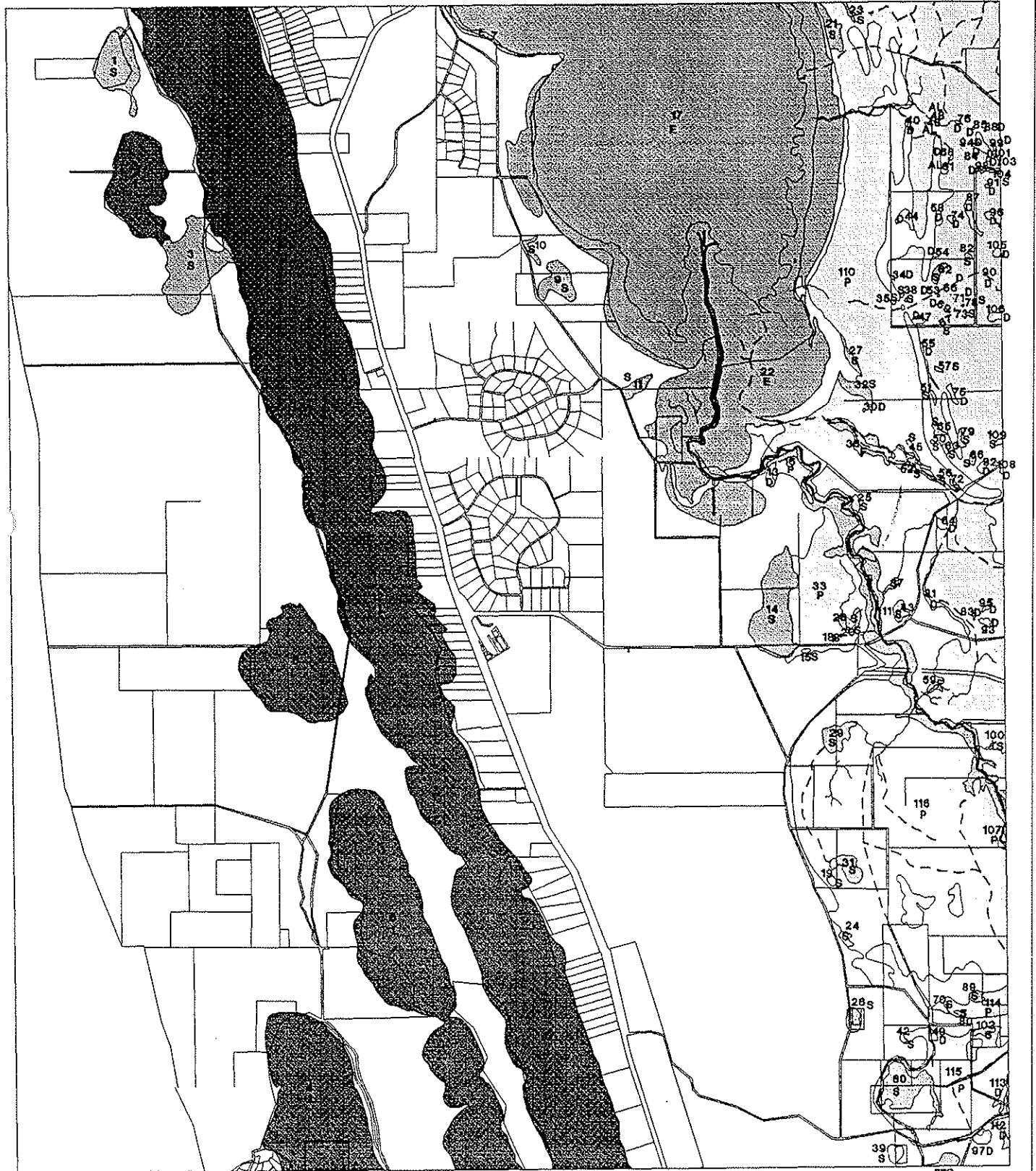
Stony Point







- Estuary
- 25
- 260
- CO

CS1 2032 W SE Aug 1991




WETLANDS OF MAP SHEET 2032 III NE





Basin and flat wetlands

-  lake (permanently inundated) estuary (waterbody)
-  sumpland, floodplain (seasonally inundated) estuary (peripheral)
-  dampland, palusplain (seasonally waterlogged)
-  other basin wetlands

Channel Wetlands

-  River (permanently inundated)
-  Creek (seasonally inundated)
-  Artificial channel

-  Roads
-  Property boundaries
- 12** Wetland Map ID Number

Wetland Type

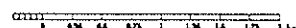
- L** Lake
- S** Sumpland
- D** Dampland
- AL** Artificial Lake
- F** Floodplain
- P** Palusplain
- R** River
- EW** Estuary (Waterbody)
- E** Estuary (Peripheral)
- PS** Paluslope
- NC** Wetland not classified

Wetland Map Identification Numbers

Map Identification Numbers have been assigned to all mapped basin and flat wetland types.

Basin and flat wetlands have also been assigned unique identifiers derived from the wetland's centrepoint. The identifiers are made up of the first four digits of the wetlands easting and the first five digits of the wetlands northing. Wetland Identification Numbers are listed in the map sheet databases.

SCALE 1:65 000



Completely Degraded

26b

25

36

Lake margin (fresh H₂O)

Meatup Point

Estuarine margin (see below for variety)

4. Sampled in f.ct. 4, not mapped as separate unit.

21a

36

13

10a

Mud flats

Juncus kraussii

Bulboastenas coldwellii

Samphires

Mixed Samphires ? *Melaleuca*

? Sedges

Creeklime

Melaleuca cuticularis

Casuarina obesa

Eucalyptus rudis

Dover colour indicates degraded



CS2

MAP 1



CALM LANDS NOT SYSTEM 6 Boundaries

System 6 boundaries below

A 24739

CS2

LAKE

CS1

Map join

indicates degraded

boundary

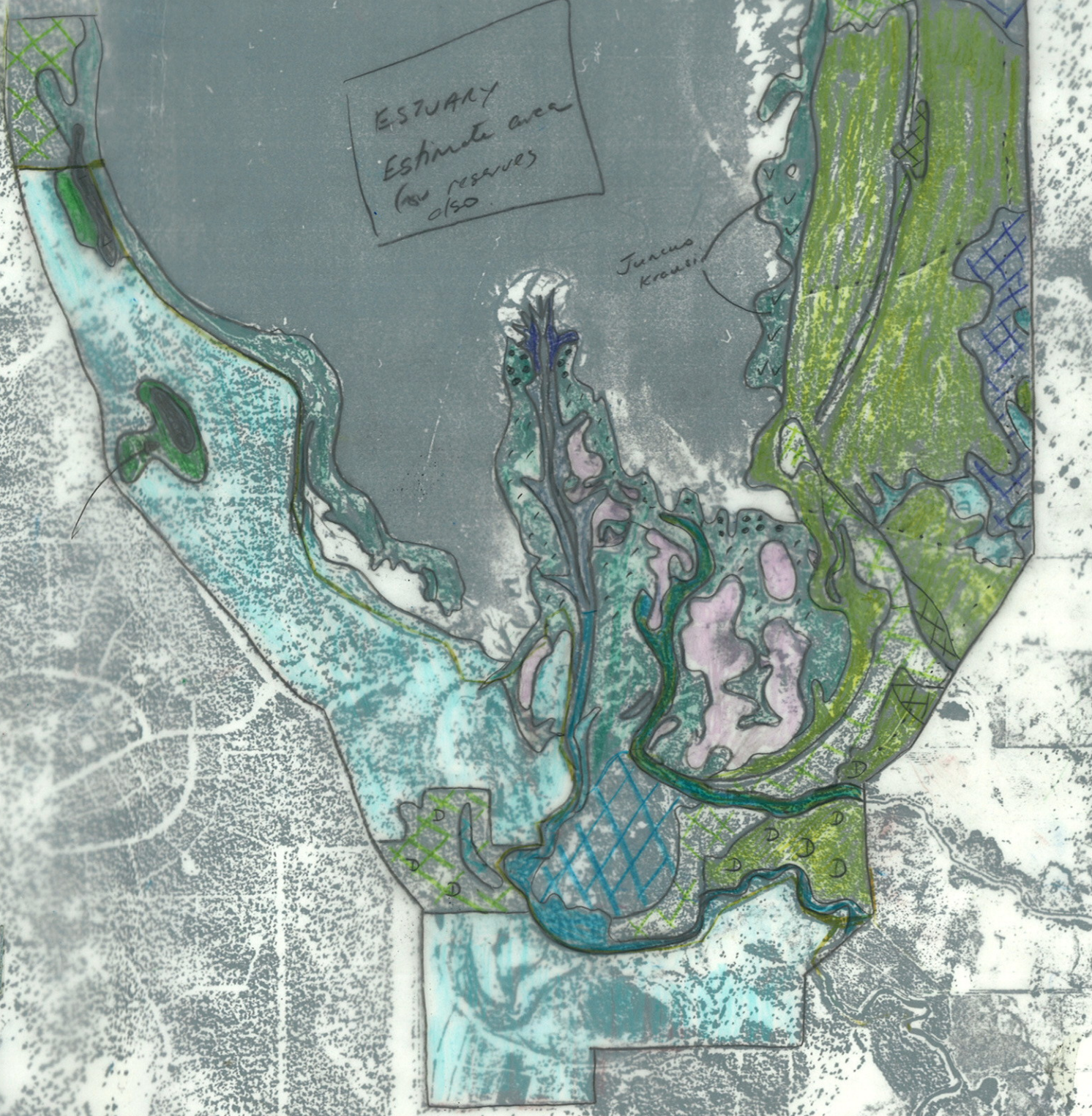
OTHER PHOTO

LEGEND

Map Jan

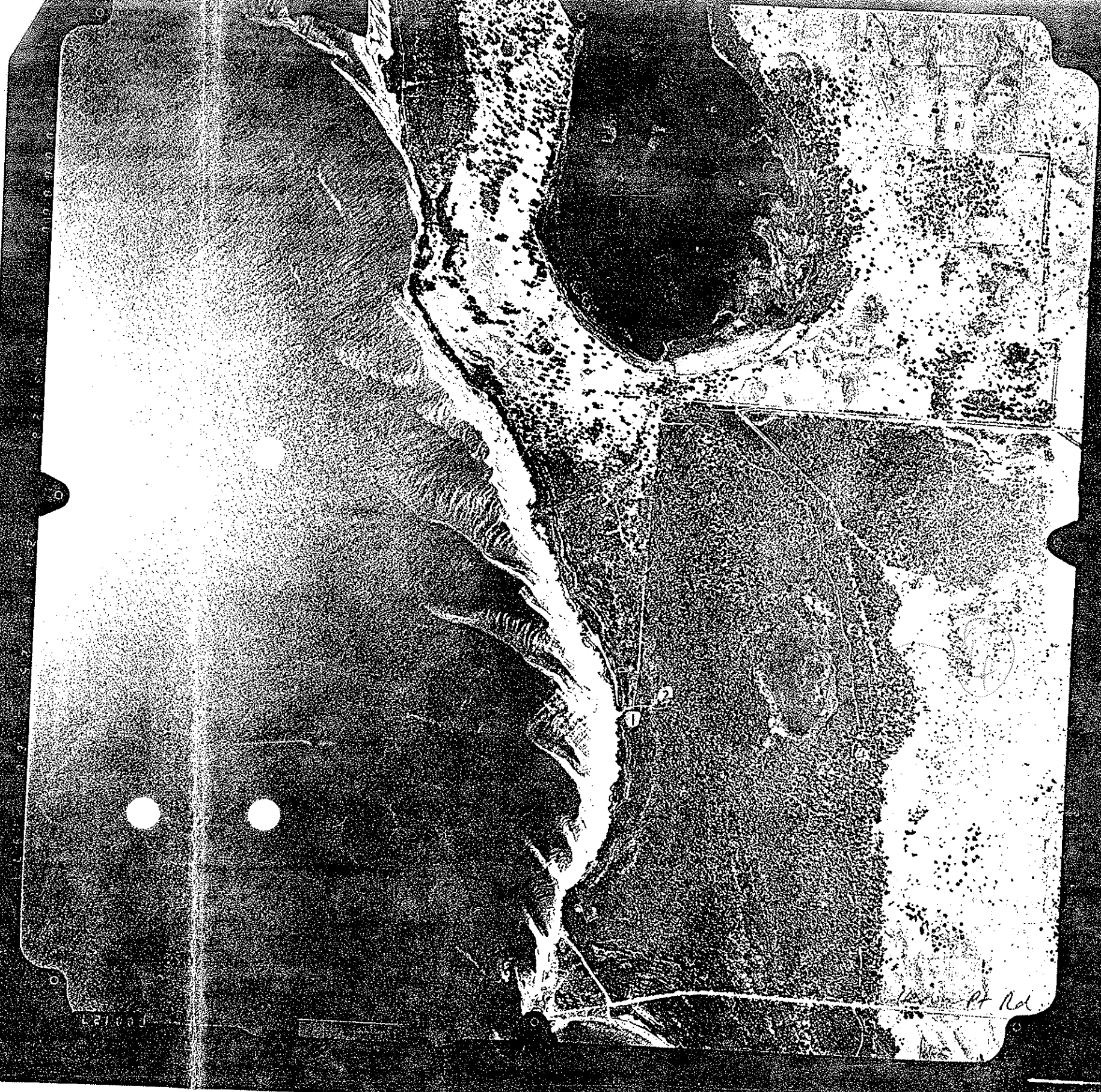
ESTUARY
Estimate area
(see reserves
also)

Juncus
Kraussii





KOOLJERENUP NR ~~87463~~ 7



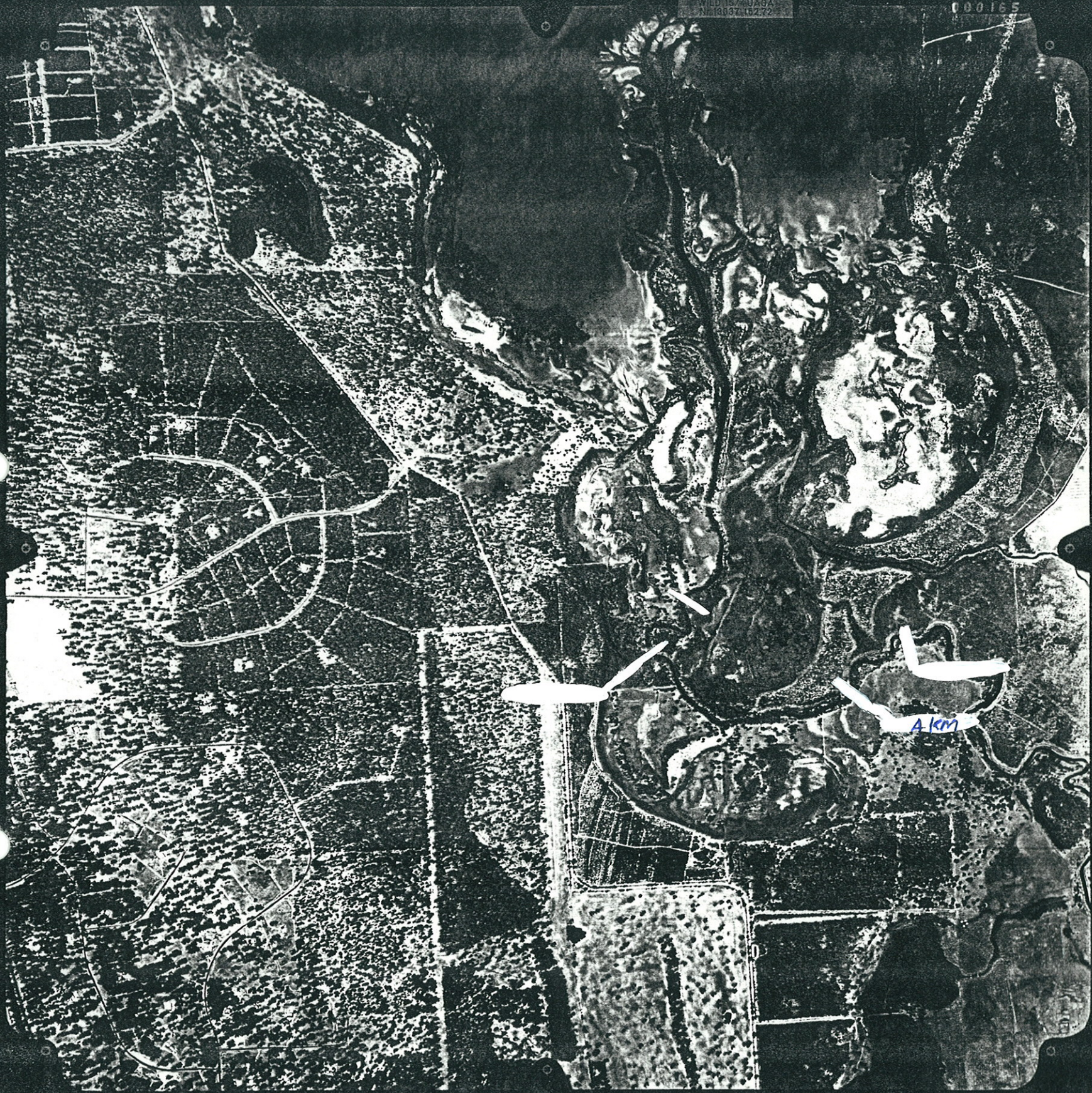
KOOL JERRENUP NAT. RES

SITES 1-4

Sites 5-7 south of Heron Pt
Rd to south of Colman Main Pt

WILD 15700AGA
N#1803715272

000165



System 6 Update - Floristic Community Type Mapping Information DRAFT ONLY

AREA INFORMATION

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

CS1 E

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

↑8600 = CS1 W 27528
 Ministry for Water Resources
 see other sheet
 unvisited DOLA

Conservation Area

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

TOTAL AREA

Bushland Area	320812	hectares
Completely Degraded	0575 ha	

AREA MAPPED FLORISTIC UNITS

CALM N/A

Units	Site (Condition) Code	Bound	Area (ha)
	NOT visited at all - extrapolated from Mealep Point NR. to south. and interpret aerial photo.		
25	MEAL 01	B	16.3
266	MEAL 02	B	14062
	Estuarine edge (not sampled by G at all)		1875

Boundaries determined by use of

aerial photograph	metro Street Directory run 4S 5144	5/1/91
orthophoto	2032 N SE	Aug 1991
vegetation map		
soil map	Urban Geology	1977

AREA INFORMATION

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

CSI W

Conservation Area
Nature Reserve
Reserve No
National Park
Reserve No
Local Government
Reserve No
Other
Proposed Conservation Areas
Local Government
Reserve No A 860
Other Ministry for Water Resources

Conservation Area

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

TOTAL AREA

Bushland Area	29 375	hectares
Completely Degraded	25 ha	

AREA MAPPED FLORISTIC UNITS

Units	Site (Condition) Code	Bound	Area (ha)
	Not visited, extrapolated from Moatup Point NR and interpret aerial photo		
25	MEAL 01	B	19.75
266	MEAL 02	B	4.5
	Estuarine Edge (not sampled by us at all) generally very degraded if sandy		2625

Boundaries determined by use of

aerial photograph	Metro. Street Direct	Run 35 5186	5/1/91
orthophoto	2032 IV SE	Aug 1991	
vegetation map			
soil map	Urban Geol	1977	

AREA INFORMATION

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

CS1-5

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	System 6 + estuary 1622.498 hectares	CALM 1213.561
Completely Degraded	360.562 hectares	27.375
comments:	too frequent fires, Griza estuary 1180.555 ha	-

AREA MAPPED FLORISTIC UNITS

Boundaries: System6 CALM

Units	Site (Condition)	Code A: Koolj	Bound	Area (ha)	Area(ha)
3b	05 (3)		B	80.937	80.937
3b D	within 3b		B	(8)	(8)
4	01 (2)		B	508.5	508.5
4 samples	within 4		B	(6.25)	(6.25)
4 D		B	(18.75)	(18.75)	
10a	06 (2) 07 (2)		B	9	9
13			B	35.312	32.812
21a	02 (2) 03 (1.5) 04 (3)		B	324.436	282.561
21a D	within 21a		B	(23.125)	-

Boundaries determined by use of

aerial photograph
orthophoto 2032 W SE, 111 NE Aug 1991
vegetation map
soil map

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C52 Lakes McLarty and Meelup (extracted from Swan Coastal Plain database, Koolj 1-7, 212 taxa, 9/5/1995).

Department of Environmental Protection System 6 Update: Site Based Flora List C52 Lakes McLarty and Meelup

(extracted from the CALM Swan Coastal Plain database, Koolj 1-7, 212 taxa, 9/5/95)

Amaranthaceae

Ptilotus manglesii

Anthericaceae

Agrostocrinum scabrum

Borya scirpoidea

Caesia micrantha

Caesia micrantha "blue" scps (GJK 10857)

Caesia micrantha "large swamp form" scps (BJK&NG 094)

Chamaescilla corymbosa

Dichopogon capillipes

Laxmannia squarrosa

Sowerbaea laxiflora

Thysanotus arbuscula

Thysanotus multiflorus

Thysanotus sp. scps

Thysanotus sparteus

Thysanotus thyrsoideus

Tricoryne elatior

Apiaceae

Daucus glochidiatus

Eryngium pinnatifidum subsp. *pinnatifidum* scps

Homalosciadium homalocarpum

Hydrocotyle alata

Hydrocotyle callicarpa

Platysace compressa

Schoenolaena juncea

Trachymene pilosa

Xanthosia huegelii

Asteraceae

* *Arctotheca calendula*

Blennospora aff. *drummondii* (golden bracts) scps bjk&ng 20

Brachyscome bellidioides

Hyalosperma cotula

* *Hypochoeris glabra*

Lagenifera huegelii

Podolepis gracilis

Podotheca chrysantha

Quinetia urvillei

Siloxerus humifusus

Casuarinaceae

Allocasuarina fraseriana

Centrolepidaceae

Aphelia cyperoides

Centrolepis aristata

Centrolepis drummondiana

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Colchicaceae

- Burchardia multiflora
- Burchardia umbellata

Cyperaceae

- Baumea acuta
- Baumea juncea
- * Cyperus tenellus
- * Isolepis marginata
- Lepidosperma aff. angustatum scps
- Lepidosperma angustatum
- Lepidosperma eastern terete scps (BJK&NG 232)
- Lepidosperma longitudinale
- Mesomelaena graciliceps
- Mesomelaena tetragona
- Schoenus clandestinus
- Schoenus curvifolius
- Schoenus odontocarpus
- Schoenus rodwayanus
- Schoenus sp. 2 (GJK 5739) scps
- Schoenus sp. aff. breviculmis sthcest
- Schoenus subbarbatus "Royce 2872" scps
- Tetraria octandra

Dasypogonaceae

- Dasypogon bromeliifolius
- Lomandra caespitosa
- Lomandra hermaphrodita
- Lomandra micrantha
- Lomandra preissii
- Lomandra purpurea
- Lomandra sericea
- Lomandra sp. scps

Dilleniaceae

- Hibbertia acerosa
- Hibbertia hypericoides
- Hibbertia racemosa
- Hibbertia vaginata

Droseraceae

- Drosera erythrorhiza
- Drosera erythrorhiza sthcest subsp. squamosa ms
- Drosera gigantea
- Drosera glanduligera
- Drosera menziesii subsp. menziesii
- Drosera occidentalis sthcest subsp. australis ms
- Drosera pallida
- Drosera rosulata
- Drosera stolonifera

Epacridaceae

- Astroloma ciliatum
- Astroloma pallidum
- Conostephium pendulum
- Leucopogon conostephioides

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Leucopogon propinquus
Leucopogon racemulosus

Gentianaceae

* Cicendia filiformis

Goodeniaceae

Dampiera linearis
Goodenia pulchella
Scaevola lanceolata

Haemodoraceae

Anigozanthos manglesii
Conostylis aculeata
Conostylis juncea
Haemodorum simplex
Haemodorum sparsiflorum
Phlebocarya ciliata
Tribonanthes australis

Iridaceae

* Gladiolus angustus
Patersonia occidentalis
* Romulea rosea

Juncaceae

* Juncus bufonius
Juncus caespiticius
* Juncus capitatus
Luzula meridionalis

Juncaginaceae

Triglochin calcitrapum
Triglochin mucronatum

Lamiaceae

Hemiandra pungens

Lauraceae

Cassytha glabella
Cassytha racemosa
Cassytha sp. scps

Lentibulariaceae

Polypompholyx multifida
Utricularia violacea

Lobeliaceae

Lobelia tenuior

Loganiaceae

Mitrasacme paradoxa

Lycopodiaceae

Phylloglossum drummondii

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Mimosaceae

- Acacia incurva
- Acacia pulchella
- Acacia stenoptera

Myrtaceae

- Agonis flexuosa
- Astartea aff. fascicularis sthcs
- Calytrix aurea
- Eucalyptus calophylla
- Eucalyptus marginata
- Hypocalymma angustifolium
- Kunzea ericifolia
- Kunzea micrantha
- Melaleuca preissiana
- Melaleuca raphiophylla
- Melaleuca thymoides
- Melaleuca viminea
- Pericalymma ellipticum
- Regelia ciliata
- Verticordia densiflora

Orchidaceae

- Caladenia flava
- Caladenia marginata
- Caladenia paludosa Hopper & AP Brown scps
- Caladenia sp. scps
- Caladenia varians subsp. varians scps
- Diuris laxiflora
- Eriochilus dilatatus
- Lyperanthus nigricans
- Microtis media warr subsp. media
- Pterostylis vittata
- Thelymitra aff. pauciflora scps
- Thelymitra antennifera
- Thelymitra fuscolutea

Papilionaceae

- Aotus gracillima
- Bossiaea eriocarpa
- Daviesia physodes
- Gompholobium tomentosum
- Hardenbergia comptoniana
- Hovea trisperma var. trisperma
- Jacksonia sternbergiana
- Kennedia prostrata
- * Lotus sp. scps
- Nemcia capitata
- Sphaerolobium medium
- * Trifolium dubium
- Viminaria juncea

Philydraceae

- Philydrella pygmaea

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Phormiaceae

Dianella revoluta

Poaceae

- * *Aira caryophyllea*
- Amphipogon amphipogonoides*
- * *Briza maxima*
- * *Briza minor*
- Danthonia occidentalis*
- Dichelachne crinita*
- * *Polypogon monspeliensis*
- Stipa compressa*
- Stipa flavescens*
- * *Vulpia bromoides*

Polygalaceae

Comesperma virgatum

Proteaceae

Adenanthos meisneri
Adenanthos obovatus
Banksia attenuata
Banksia ilicifolia
Hakea sulcata
Hakea trifurcata
Hakea varia
Persoonia saccata
Petrophile linearis
Petrophile media scps var. *juncifolius* ms
Petrophile seminuda
Synaphea petiolaris

Restionaceae

Hypolaena exsulca
Leptocarpus aristatus
Loxocarya fasciculata
Loxocarya flexuosa
Loxocarya pubescens
Lyginia barbata

Rubiaceae

Opercularia hispidula
Opercularia vaginata

Rutaceae

Boronia spathulata
Eriostemon spicatus

Santalaceae

Leptomeria cunninghamii

Scrophulariaceae

- * *Parentucellia viscosa*

Stackhousiaceae

Stackhousia monogyna

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Stylidiaceae

- Stylidium calcaratum
- Stylidium carnosum
- Stylidium dichotomum
- Stylidium divaricatum
- Stylidium inundatum
- Stylidium mimeticum
- Stylidium perpusillum
- Stylidium piliferum
- Stylidium pulchellum
- Stylidium repens
- Stylidium schoenoides

Thymelaeaceae

- Pimelea rosea

Tremandraceae

- Tetratheca hirsuta "glabrous" scps

Xanthorrhoeaceae

- Xanthorrhoea preissii

Zamiaceae

- Macrozamia riedlei

completely Degraded

26b

25

36

Lake margin (fresh H₂O)

Estuarine margin (see below for variety)

4 Sump/land in f.ct. 4, not mapped as separate unit.

21a

36

13

10a

Mud flats

Juncus kraussii

Bulbostemum caldwelii

Sagittaria

Mixed *Sagittaria*? *Melaleuca*? *Sedges*

Carex

Melaleuca cuticularis

Casuarina obesa

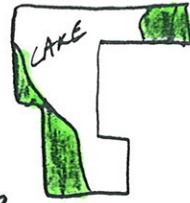
Eucalyptus radis

Over colour indicates degraded



C52 MAP 1

* original in C51 file *



CALM LANDS NOT SYSTEM 6 Boundaries

SYSTEM 6 BOUNDARIES BELOW

C51

LAKE

Map join

ORINS PHOTO BOUNDARY

R. A. O. U. TRACKING DATABASE

23/06/96

PARK SIGHTINGS REPORT

Page No.

1

Harvey Estuary (CSI)

ORDER:	REF:	BIRD NAME	NO.	SIGHTINGS
0019	0217	Musk Duck	3	1
0025	0207	Australian Shelduck		1
0035	0211	Grey Teal		1
0042	0062	Hoary-headed Grebe		1
0128	0101	Darter		1
0129	0100	Little Pied Cormorant		1
0131	0099	Pied Cormorant		1
0132	0097	Little Black Cormorant		1
0133	0096	Great Cormorant		1
0135	0106	Australian Pelican		1
0139	0188	White-faced Heron		1
0145	0187	Great Egret		1
0160	0182	Yellow-billed Spoonbill		1
0170	0228	Whistling Kite	4	1
0174	0219	Swamp Harrier		1
0181	0225	Little Eagle	4	1
0267	0146	Black-winged Stilt		1
0269	0148	Red-necked Avocet		1
0297	0125	Silver Gull		1
0303	0112	Caspian Tern		1
0305	0115	Crested Tern		1
0313	0118	Fairy Tern		1
0330	0034	Common Bronzewing		1
0386	0294	Australian Ringneck		1
0397	0307	Elegant Parrot		1
0471	0532	Splendid Fairy-wren	3	1
0500	0488	White-browed Scrubwren	3	1
0517	0463	Western Gerygone		1
0524	0476	Inland Thornbill	3	1
0531	0486	Yellow-rumped Thornbill	3	1
0537	0638	Red Wattlebird		1
0587	0631	New Holland Honeyeater	4	1
0671	0415	Magpie-Lark		1
0673	0361	Grey Fantail		1
0676	0364	Willie Wagtail		1
0698	0705	Australian Magpie		1
0706	0930	Australian Raven		1
0763	0357	Welcome Swallow		1
0765	0359	Tree Martin		1
0781	0574	Silvereye		1

*** END OF REPORT ***

3
4

SUMMARY REPORT

TOTAL BIRDS SIGHTED	:	40
TOTAL NUMBER OF CARDS	:	1

*** END OF SUMMARY ***