

Table A11. List of plants recorded in the Surveys

Plant Form: T - tree; S - Shrub; Ss - Small Shrub; F - Forb; G - grass; Se - sedge; V - Vine; Mff - macrophyte free floating; Ms - macrophyte submerged; Me - macrophyte emergent)

Plant condition (flowering, including fruits/seeds; senescence, etc)

Family	Taxon	Common Name	Plant Form	Plant condition
Apiaceae				
	<i>Conium maculatum</i>	Hemlock	F	F
	<i>Daucus glochidiatus</i>	Native Carrot	F	F
	<i>Foeniculum vulgare</i>	Fennel	F	F
	<i>Hydrocotyle laxiflora</i>	Stinking Pennywort	F	F
Aspleniaceae				
	<i>Asplenium flabellifolium</i>	Necklace Fern	F	-
Asteraceae				
	<i>Arctotheca calendula</i>	Capeweed	F	F
	<i>Cardus nutans</i>	Nodding Thistle	F	F
	<i>Cardus pycnocephalus</i>	Slender Thistle	F	F
	<i>Cardus tenuiflorus</i>	Winged Slender Thistle	F	F
	<i>Carthamus lanatus</i>	Saffron Thistle	F	F
	<i>Cassinia arcuata</i>	Chinese Shrub	F	F
	<i>Centaurea calcitrapa</i>	Star Thistle	F	F
	<i>Centaurea melitensis</i>	Maltese Cockspur	F	F
	<i>Centaurea solstitialis</i>	St. Barnaby's Thistle	F	F
	<i>Chondrilla juncea</i>	Skeleton Weed	F	F
	<i>Chrysocephalum apiculatum</i>	Yellow Buttons	F	F
	<i>Chrysocephalum semipapposum</i>	Clustered Everlasting	F	F
	<i>Circius arvensis</i>	Perennial Thistle	F	F
	<i>Circius vulgare</i>	Spear Thistle	F	F
	<i>Conyza bonariensis</i>	Fleabane	F	F
	<i>Cotula australis</i>	Common Cotula	F	F
	<i>Cotula coronopifolia</i>	Water Buttons	F	F
	<i>Gnaphalium luteoalbum</i>	Jersey Cudweed	F	F
	<i>Lactuca serriola</i>	Prickly Lettuce	F	F
	<i>Leptorhynchos squamatus</i>	Scaly Buttons	F	F
	<i>Onopordum acanthium</i>	Scotch Thistle	F	F
	<i>Senecio madagascariensis</i>	Fireweed	F	F
	<i>Senecio quadridentatus</i>	Cotton Fire-weed	F	F
	<i>Silybum marianum</i>	Variiegated Thistle	F	F
	<i>Sonchus oleraceus</i>	Common Sowthistle	F	F
	<i>Taraxacum officinale</i>	Dandelion	F	F
	<i>Vittadinia cuneata</i>	Fuzzweed	F	F
	<i>Vittadinia muelleri</i>	Fuzzweed	F	F
Azollaceae				
	<i>Azolla filiculoides</i>	Azolla	F	MF
Blechnaceae				
	<i>Blechnum nudum</i>	Fishbone Water Fern	F	-
Boraginaceae				
	<i>Echium plantagineum</i>	Patterson's Curse	F	F

Table A11 (cont.). List of plants recorded in the Surveys

Family	Taxon	Common Name	Plant Form	Plant condition
Brassicaceae				
	<i>Hirschfeldia incana</i>	Buchan Weed	F	F
	<i>Lepidium africanum</i>	Common Peppergrass	F	F
	<i>Sisymbrium officinale</i>	Hedge Mustard	F	F
Campanulaceae				
	<i>Wahlenbergia communis</i>	Tufted Bluebell	F	F
	<i>Wahlenbergia stricta</i>	Tall Bluebell	F	F
Caryophyllaceae				
	<i>Petrorhagia nateuilli</i>		F	F
Clusiaceae				
	<i>Hypericum gramineum</i>	Small St John's Wort	F	F
	<i>Hypericum perforatum</i>	St John's Wort	F	F
Convolvulaceae				
	<i>Convolvulus erubescens</i>	Australian Bindweed	F	F
	<i>Dichondra repens</i>	Kidney Weed	F	F
Crassulaceae				
	<i>Crassula helmsii</i>	Swamp Crassula	F	-
Cupressaceae				
	<i>Cupressus arizonica</i>	Cupressus	T	F
Cyperaceae				
	<i>Carex appresa</i>	Sedge	Se	F
	<i>Carex incomitata</i>	Tall Sedge	Se	F
	<i>Carex inversa</i>	Knob sedge	Se	F
	<i>Cyperus eragrostis</i>	Umbrella Sedge	Se	F
	<i>Eleocharis atricha</i>	Spike Rush	Se	F
	<i>Eleocharis plana</i>	Spike Rush	Se	F
Dennstaedtiaceae				
	<i>Pteridium esculentum</i>	Common Bracken	F	F
Dilleniaceae				
	<i>Hibbertia calycina</i>	Lesser Guinea Flower	F	F
	<i>Hibbertia obtusifolia</i>	Grey Guinea Flower	F	F
	<i>Hibbertia riparia</i>	Guinea Flower	F	F
Euphorbiaceae				
	<i>Chamaesyce drummondii</i>	Caustic Weed	F	F
	<i>Chamaesyce maculata</i>	Eyebane	F	F
	<i>Chamaesyce prostrata</i>	Red Caustic Weed	F	F
Fabaceae				
	<i>Acacia dealbata</i>	Silver Wattle	T/S	F
	<i>Acacia decurrens</i>	Black Wattle	T/S	F
	<i>Acacia mearnsii</i>	Green Wattle	T/S	F
	<i>Acacia pravissima</i>	Wedge-leaf Wattle	T/S	F
	<i>Acacia pycnantha</i>	Golden Wattle	T/S	F
	<i>Acacia rubida</i>	Red-leaved Wattle	T/S	F
	<i>Cystis scoparius</i>	English Broom	Ss	F
	<i>Daviesia mimosoides</i>		Ss	F
	<i>Desmodium uncinatum</i>	Silver-leaf Desmodium	F	F

Table A11 (cont.). List of plants recorded in the Surveys

Family	Taxon	Common Name	Plant Form	Plant condition
	<i>Desmodium varians</i>	Slender Tick-trefoil	F	F
	<i>Dillwynia sericea</i>	Showy Parrot Pea	Ss	F
	<i>Pultenaea procumbens</i>	Egg and Bacon	Ss	F
	<i>Trifolium arvense</i>	Horsefoot Clover	F	F
	<i>Trifolium campestre</i>	Hop Clover	F	F
	<i>Trifolium repens</i>	White Clover	F	F
	<i>Trifolium tomentosum</i>	Woolly Clover	F	F
Geraniaceae				
	<i>Geranium molle</i> var. <i>molle</i>	Cranesbill Geranium	F	F
	<i>Geranium solanderi</i>	Native Geranium	F	F
Juncaceae				
	<i>Juncus articulatus</i>	Rush	Se	F
	<i>Juncus usitatus</i>	Common Rush	Se	
	<i>Juncus vaginatus</i>	Rush	Se	
Lamiaceae				
	<i>Lamium amplexicaule</i>	Dead Nettle	F	F
	<i>Marrubium vulgare</i>	Horehound	F	F
	<i>Salvia verbenaca</i>	Wild Sage	F	F
Liliaceae				
	<i>Dianella longifolia</i> var. <i>longifolia</i>	Flax Lily	F	F
	<i>Dianella revoluta</i>	Flax Lily	F	F
Lomandraceae				
	<i>Lomandra filiformis</i> subsp. <i>coriacea</i>	Wattle Mat-rush	F	F
	<i>Lomandra filiformis</i> subsp. <i>filiformis</i>	Wattle Mat-rush	F	F
Loranthaceae				
	<i>Amyema</i> spp.	Mistletoe	V	F
Malvaceae				
	<i>Malva parviflora</i>	Small-flowered Mallow	F	F
Myrtaceae				
	<i>Callistemon sieberi</i>	River Bottlebrush	T	F
	<i>Eucalyptus blakelyi</i>	Blakely's Red Gum	T	F
	<i>Eucalyptus bridgesiana</i>	Apple Box	T	F
	<i>Eucalyptus dives</i>	Broad-leaf Peppermint	T	F
	<i>Eucalyptus goniocalyx</i>	Box Apple	T	F
	<i>Eucalyptus macrorhyncha</i>	Red Stringybark	T	F
	<i>Eucalyptus mannifera</i>	Brittle Gum	T	F
	<i>Eucalyptus melliodora</i>	Yellow Box	T	F
	<i>Eucalyptus nortonii</i>	Mealy Bundy	T	F
	<i>Eucalyptus polyanthemos</i>	Red Box	T	F
	<i>Eucalyptus rossii</i>	Scribbly Gum	T	F
	<i>Eucalyptus rubida</i>	Candlebark	T	F
	<i>Kunzea ericoides</i>	Burgan	T	F
	<i>Leptospermum continentale</i>	Prickly Tea Tree	T	F
	<i>Leptospermum obovatum</i>	Creek Tea-tree	T	F
Ophioglossaceae				
	<i>Ophioglossum lusitanicum</i>	Adder's Tongue	F	F

Table A11 (cont.). List of plants recorded in the Surveys

Family	Taxon	Common Name	Plant Form	Plant condition
Pinaceae				
	<i>Pinus radiata</i>	Radiata Pine	T	F
Pittosporaceae				
	<i>Bursaria spinosa</i>		Ss	F
Plantaginaceae				
	<i>Plantago lanceolata</i>	Lamb's Tongue	F	F
	<i>Plantago major</i>	Greater Plantain	F	F
Poaceae				
	<i>Aira elegantissima</i>	Delicate Hair-grass	G	F
	<i>Agrostis capillaris</i>	Browntop Bentgrass	G	F
	<i>Austrodanthonia carphoides</i>	Wallaby Grass	G	F
	<i>Austrodanthonia laevis</i>	Wallaby Grass	G	F
	<i>Austrodanthonia racemosa ssp. Racemosa</i>	Slender Wallaby Grass	G	F
	<i>Austrostipa bigeniculata</i>	Tall Spear Grass	G	F
	<i>Austrostipa scabra var. falcata</i>	Slender Spear Grass	G	F
	<i>Avena fatua</i>	Wild Oats	G	F
	<i>Avena barbata</i>	Wild Oats	G	F
	<i>Bothriochloa macra</i>	Redleg Grass	G	F
	<i>Briza maxima</i>	Quaking Grass	G	F
	<i>Bromus catharticus</i>	Prairie Grass	G	F
	<i>Bromus molliformis</i>	Soft Brome	G	F
	<i>Chloris gayana</i>	Rhodes Grass	G	F
	<i>Cynodon dactylon</i>	Couch	G	F
	<i>Dactylis glomerata</i>	Cocksfoot	G	F
	<i>Eleusine indica</i>	Crow's Foot Grass	G	F
	<i>Eleusine tristachya</i>	Small Goosegrass	G	F
	<i>Eragrostis brownii</i>	Love Grass	G	F
	<i>Eragrostis curvula</i>	African Love Grass	G	F
	<i>Holcus lanatus</i>	Yorkshire Fog	G	F
	<i>Hordeum glaucum</i>	Barley Grass	G	F
	<i>Hordeum hystrix</i>	Barley Grass	G	F
	<i>Hordeum leporinun</i>	Barley Grass	G	F
	<i>Lolium perenne</i>	Perennial Ryegrass	G	F
	<i>Lolium rigidum</i>	Wimmera Ryegrass	G	F
	<i>Nassella neesiana</i>	Chilean Needgrass	G	F
	<i>Nassella trichotoma</i>	Serrated Tussock	G	-
	<i>Paspalum dilatatum</i>	Caterpillar Grass	G	F
	<i>Phalaris aquatica</i>	Phalaris	G	F
	<i>Phalaris minor</i>	Lesser Canary Grass	G	F
	<i>Poa annua</i>	Winter grass	G	F
	<i>Poa labillardieri var. labillardieri</i>	Tussock	G	F

Table A11 (cont.). List of plants recorded in the Surveys

Family	Taxon	Common Name	Plant Form	Plant condition
	<i>Poa sieberiana</i>	Poa Tussock/Snowgrass	G	F
	<i>Themeda australis</i>	Kangaroo Grass	G	F
	<i>Vulpia bromoides</i>	Squirrel-tail Fescue	G	F
Polygonaceae				
	<i>Acetosella vulgaris</i>	Sheep Sorrel	F	F
	<i>Persicaria decipiens</i>	Knotweed	F	F
	<i>Persicaria prostrata</i>	Prostrate Knotweed	F	F
	<i>Polygonum arenastrum</i>	Wireweed	F	F
	<i>Rumex brownii</i>	Swamp Dock	F	F
	<i>Rumex crispus</i>	Curly Dock	F	F
Primulaceae				
	<i>Anagallis arvensis subsp. arvensis</i>	Scarlet Pimpernel	F	F
Proteaceae				
	<i>Lambertia formosa</i>	Mountain Devil	Ss	F
Rhamnaceae				
	<i>Pomaderris andromedifolia</i>		Ss	F
	<i>Pomaderris angustifolia</i>		Ss	F
Rosaceae				
	<i>Acaena ovina</i>	Sheep's Burr	F	F
	<i>Acaena novae-zelandiae</i>	Bidgee Widgee	F	F
	<i>Aphanus arvensis</i>	Parsley Piert	F	F
	<i>Malus spp.</i>	Apple	F	F
	<i>Prunus spp.</i>	Plum	F	F
	<i>Rosa rubiginosa</i>	Sweet Briar	F	F
	<i>Rubus fruticosus sp. aggregate</i>	Blackberry	F	F
	<i>Sanguisorba minor ssp. muricata</i>	Sheep's Burnet	F	F
Rubiaceae				
	<i>Asperula conferta</i>	Common Woodruff	F	F
	<i>Galium aparine</i>	Cleavers, Bedstraw	F	F
	<i>Opercularia hispida</i>	Hairy Stinkweed	F	F
	<i>Richardia humistrata</i>		F	F
Salicaceae				
	<i>Populus sp.</i>	Poplar	T	-
	<i>Salix sp.</i>	Willow	T	-
Sapindaceae				
	<i>Dodonaea viscosa ssp. angustifolia</i>	Hop Bush	Ss	F
Scrophulariaceae				
	<i>Verbascum thapsus</i>	Great Mullein	F	F
	<i>Verbascum virgatum</i>	Twiggy Mullein	F	F
	<i>Veronica arvensis</i>	Speedwell	F	F
	<i>Veronica anagallis-aquatica</i>		F	F

Table A11 (cont.). List of plants recorded in the Surveys

Family	Taxon	Common Name	Plant Form	Plant condition
Simaroubaceae				
	<i>Ailanthus altissima</i>	Tree of Heaven	T	-
Sinopteridaceae				
	<i>Cheilanthes austrotenuifolia</i>	Rock Fern	F	-
Solanaceae				
	<i>Lycium ferocissimum</i>	African Boxthorn	Ss	F
	<i>Solanum linnaeanum</i>	Apple of Sodom	F	F
	<i>Solanum nigrum</i>	Purple Nightshade	F	F
Typhaceae				
	<i>Typha orientalis</i>	Broad-leaved Cumbungi	Se	F
Ulmaceae				
	<i>Ulmus parviflora</i>	Chinese Elm	T	-
	<i>Ulmus procera</i>	Chinese Elm	T	-
Verbenaceae				
	<i>Verbena bonariensis</i>	Purpletop	F	F
Violaceae				
	<i>Viola betonicifolia</i>	Showy Violet	F	F

Appendix 3 - Surveys of proposed Drainage Lines and Riparian Corridor

Table A12. Results of Vegetation Transects along Drainage lines and Basins

Cover/Abundance (for each species for belt transect): 1 = < 5% cover; 2 = 6-25% cover; 3 = 26-50% cover; 4 = 51-75% cover; 5 = 76-100% cover

Family and Scientific Name	Common Name	DL1	DL2	DL3	DL4	DL5	DL6	DL7	DL8	DL9	DL10	DL11	DL12	DL13	DL14	DL15	DL16
Non-native Grasses																	
<i>Agrostis capillaris</i>	Browntop Bentgrass	1	1	1	1	1						1					
<i>Avena fatua</i>	Wild Oat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Bothriochloa macra</i>	Redleg Grass										1	1	1	1	1	1	1
<i>Bromus catharticus</i>	Prairie Grass	1	1									1	1	1	1	1	1
<i>Bromus molliformis</i>	Soft Brome	1									1	1	1	1	1	1	1
<i>Eleusine tristachya</i>	Small Goosegrass	1	1	1	1	1	1				1						
<i>Eragrostis brownii</i>	Love Grass	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Eragrostis curvula</i>	African Love Grass	1	1		1												1
<i>Holcus lanatus</i>	Yorkshire Fog	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Hordeum glaucum</i>	Barley Grass	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Hordeum hystrix</i>	Barley Grass			1						1	1						
<i>Hordeum leporinum</i>	Barley Grass			1										1		1	1
<i>Lolium perenne</i>	Perennial Ryegrass	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Paspalum dilatatum</i>	Caterpillar Grass	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Phalaris aquatica</i>	Phalaris	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Phalaris minor</i>	Phalaris	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Poa annua</i>	Winter grass	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Poa labillardieri</i> var. <i>labillardieri</i>	Tussock	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Poa sieberiana</i>	Poa tussock/Snowgrass	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Native Grasses																	
<i>Austrodanthonia carphoides</i>	Ringed Wallaby Grass			1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Austrostipa scabra</i> var. <i>falcata</i>	Slender Spear Grass	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sedges																	
<i>Carex appressa</i>	Sedge			1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Carex incomitata</i>	Tall Sedge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table A12 (cont.). Results of Vegetation Transects along Drainage Lines and Basins

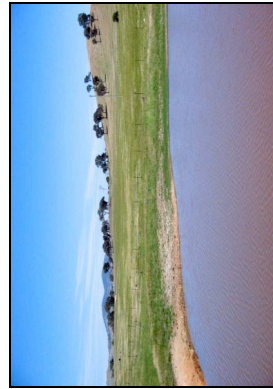
Family and Scientific Name	Common Name	DL1	DL2	DL3	DL4	DL5	DL6	DL7	DL8	DL9	DL10	DL11	DL12	DL13	DL14	DL15	DL16
<i>Carex inversa</i>	Knob Sedge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Cyperus eragrostis</i>	Umbrella Sedge	1	1			1	1	1					1				1
<i>Eleocharis atricha</i>	Spike Rush				1	1	1	1									
<i>Eleocharis plana</i>	Spike Rush	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Juncus articulatus</i>	Sedge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Juncus usitatus</i>	Common Rush	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Juncus vaginatus</i>		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Forbs																	
<i>Arctotheca calendula</i>	Capeweed	1	1										1				1
<i>Acaena ovina</i>	Sheep's Burr	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Cardus nutans</i>	Nodding Thistle				1	1	1	1	1	1	1	1					1
<i>Cardus pycnocephalus</i>	Slender Thistle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Cardus tenuiflorus</i>	Winged Slender Thistle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Carthamus lanatus</i>	Saffron Thistle																
<i>Centaurea calcitrapa</i>	Star Thistle			1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Centaurea melitensis</i>	Maltese Cockspur							1	1	1	1	1	1	1	1	1	1
<i>Centaurea solstitialis</i>	St. Barnaby's Thistle							1	1	1	1	1	1	1	1	1	1
<i>Chondrilla juncea</i>	Skeleton Weed							1	1	1	1	1	1	1	1	1	1
<i>Chrysocephalum apiculatum</i>	Yellow Buttons	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Cirsium vulgare</i>	Spear Thistle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Conyza bonariensis</i>	Fleabane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Gnaphalium luteoalbum</i>	Jersey Cudweed			1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Onopordum acanthium</i>	Scotch Thistle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Silybum marianum</i>	Variiegated Thistle			1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Sonchus oleraceus</i>	Common Sowthistle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Taraxacum officinale</i>	Dandelion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Vittadinia cuneata</i>	Fuzzweed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table A12 (cont.). Results of Vegetation Transects along Drainage Lines and Basins

Family and Scientific Name	Common Name	DL1	DL2	DL3	DL4	DL5	DL6	DL7	DL8	DL9	DL10	DL11	DL12	DL13	DL14	DL15	DL16
<i>Vittadinia muelleri</i>	Fuzzweed					1										1	1
<i>Hirschfeldia incana</i>	Buchan Weed	1								1							1
<i>Wahlenbergia communis</i>	Tufted Bluebell			1	1	1	1						1	1	1	1	1
<i>Wahlenbergia stricta</i>	Tall Bluebell				1	1	1	1						1	1	1	1
<i>Hypericum gramineum</i>	Small St. John's Wort										1	1	1	1	1	1	1
<i>Hypericum perforatum</i>	St John's Wort	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Convolvulus erubescens</i>	Australian Bindweed	1														1	1
<i>Chamaesyce maculata</i>	Eyebane	1	1	1	1	1	1										
<i>Chamaesyce prostrata</i>	Red Caustic Weed	1	1	1	1	1	1										
<i>Trifolium arvense</i>	Horsefoot Clover	1	1	1	1	1	1	1									
<i>Trifolium campestre</i>	Hop Clover	1	1	1	1	1	1	1			1	1	1	1	1	1	1
<i>Trifolium repens</i>	White Clover	1	1	1	1	1	1	1	1								
<i>Lamium amplexicaule</i>	Dead Nettle	1	1	1	1	1	1	1	1								
<i>Marrubium vulgare</i>	Horehound										1	1	1	1	1	1	1
<i>Salvia verbenaca</i>	Wild Sage	1	1	1	1	1	1										
<i>Dianella revoluta</i>	Flax Lily	1	1	1	1	1	1	1	1								
<i>Plantago lanceolata</i>	Plantain	1	1	1	1	1	1										
<i>Plantago major</i>	Plantain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Acetosella vulgaris</i>	Sheep Sorrel	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Polygonum arenastrum</i>	Wireweed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Persicaria decipiens</i>	Knotweed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Persicaria prostrata</i>	Prostrate Knotweed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Rumex brownii</i>	Swamp Dock	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Rumex crispus</i>	Curiy Dock	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Acaena ovina</i>	Sheep's Burr	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Sanguisorba minor ssp. muricata</i>	Sheep's Burnet	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table A12 (cont.). Results of Vegetation Transects along Drainage Lines and Basins

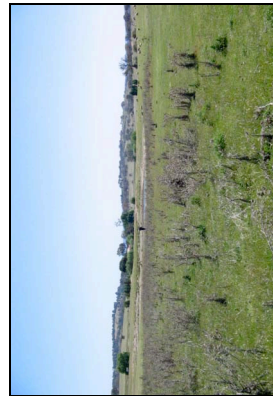
Family and Scientific Name	Common Name	DL1	DL2	DL3	DL4	DL5	DL6	DL7	DL8	DL9	DL10	DL11	DL12	DL13	DL14	DL15	DL16	
<i>Asperula conferta</i>	Common Woodruff	1	1	1	1	1	1											
<i>Opercularia hispida</i>	Hairy Stinkweed				1	1	1						1	1				
<i>Richardia humistrata</i>					1	1	1											
<i>Verbascum thapsus</i>	Great Mullein	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Verbascum virgatum</i>	Great Mullein	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Veronica anvensis</i>	Speedwell	1	1	1	1	1	1	1										
<i>Solanum nigrum</i>	Purple Nightshade	1	1	1	1	1	1	1										
<i>Veronica anvensis</i>	Speedwell	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Verbena bonariensis</i>	Purpletop	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Trees/Shrubs																		
<i>Populus sp.</i>	Poplar						1											
<i>Rosa rubiginosa</i>	Sweet Briar						1			1								
<i>Salix sp.</i>	Willow				1													
<i>Eucalyptus melliodora</i>	Yellow Box	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Eucalyptus polyanthemus</i>	Red Box						1	1	1	1	1	1	1	1	1	1	1	1



Dam adjacent to Transect DL14 looking south towards Reservoir Hill



Drainage line habitat looking east from Transect DL15

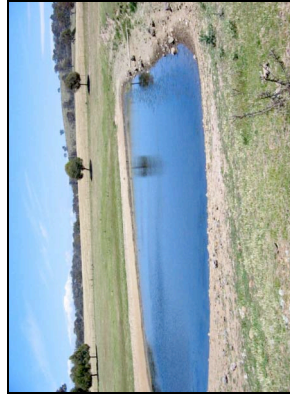


Weed infested drainage line habitat- looking north from Transect DL12



View towards east from Transect DL7

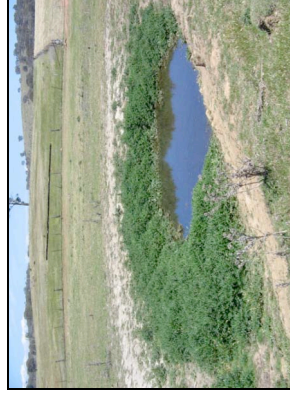
Plate 17. Photographs showing vegetation and habitat along Drainage lines and basins



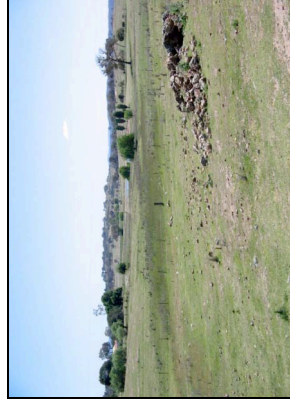
General habitat looking north east from Transect DL10



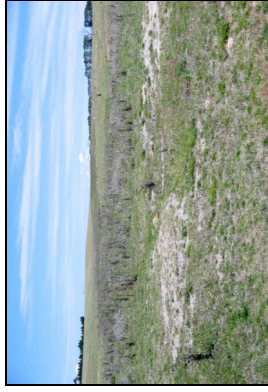
Small Dam at Transect DL 5



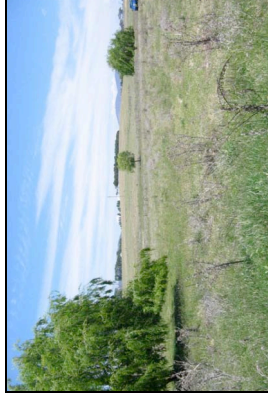
Weed infested small Dam at Transect DL 5



Drainage line with rocky outcrops close to Transect DL 9



Drainage line habitat near Transect DL 16



Upstream areas adjacent to Transect DL 3



View of drainage lines approaching Transect DL 2



Prostrate forbs dominate compacted drainage lines adjacent to Transect DL 2



Sedges and rushes in drainage line adjacent to Transect DL3



A view of drainage line and dam habitat looking east from Transect DL10



Willow infested drainage line habitat looking north from Transect DL6



View towards north east from Transect DL3

Plate 17 (cont.). Photographs showing vegetation and habitat along Drainage lines and basins

**Appendix 4 -
Transect Surveys of Water Cycle Infrastructure Corridor -
Old Cooma Road**

Table A13. Results of Vegetation Transects along Old Cooma Road

Cover/Abundance (for each species for belt transect): 1 = < 5% cover; 2 = 6-25% cover; 3 = 26-50% cover; 4 = 51-75% cover; 5 = 76-100% cover

Family and Scientific Name	OC1	OC2	OC3	OC4	OC5	OC6	OC7	OC8	OC9	OC10	OC11	OC12	OC13	OC14	OC15
Non-native Grasses															
<i>Aira elegantissima</i>				1	1				1		1				
Delicate Hair-grass															
<i>Agrostis capillaris</i>															
Browntop Bentgrass															
<i>Avena fatua</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wild Oat															
<i>Avena barbata</i>	1	1													
Wild Oat															
<i>Bothriochloa macra</i>				1	1	1	1								
Redleg Grass															
<i>Bromus catharticus</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Prairie Grass															
<i>Bromus molliformis</i>	1	1	1												
Soft Brome															
<i>Eleusine tristachya</i>															
Small Goosegrass															
<i>Eragrostis brownii</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Love Grass															
<i>Eragrostis curvula</i>	1	1	1	1											
African Love Grass															
<i>Holcus lanatus</i>	1	1	1	1											
Yorkshire Fog															
<i>Hordeum glaucum</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Barley Grass															
<i>Hordeum hystrix</i>	1	1	1												
Barley Grass															
<i>Hordeum leporinum</i>	1														
Barley Grass															
<i>Lolium perenne</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Perennial Ryegrass															
<i>Nassella trichotoma</i>				1	1	1	1	1	1	1	1	1	1	1	1
Serrated Tussock															
<i>Paspalum dilatatum</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Caterpillar Grass															
<i>Phalaris aquatica</i>	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1
Phalaris															
<i>Phalaris minor</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Phalaris															
<i>Poa annua</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Winter grass															
<i>Poa labillardieri</i> var. <i>labillardieri</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tussock															
Native Grasses															
<i>Austrodanthonia carphoides</i>				1	1	1	1	1	1	1	1	1	1	1	1
Ringed Wallaby Grass															
<i>Austrostipa scabra</i> var. <i>falcata</i>	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1
Slender Spear Grass															
<i>Themeda australis</i>				1											
Kangaroo Grass															

Table A13 (cont.). Results of Vegetation Transects along Old Cooma Road

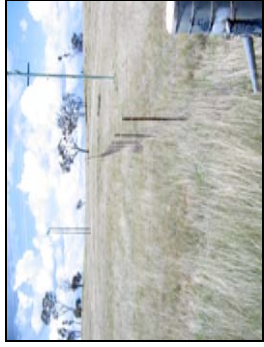
Family and Scientific Name	Common Name	OC1	OC2	OC3	OC4	OC5	OC6	OC7	OC8	OC9	OC10	OC11	OC12	OC13	OC14	OC15
Sedges																
<i>Juncus usitatus</i>	Common Rush	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Forbs																
<i>Foeniculum vulgare</i>	Fennel	1			1	1	1	1								
<i>Cardus tenuiflorus</i>	Winged Slender Thistle	1	1	1	1	1	1	1					1	1		
<i>Chrysocephalum apiculatum</i>	Yellow Buttons	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Cirsium vulgare</i>	Spear Thistle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Conyza bonariensis</i>	Fleabane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Lactuca seriola</i>	Prickly Lettuce	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Sonchus oleraceus</i>	Common Sowthistle	1	1											1	1	1
<i>Taraxacum officinale</i>	Dandelion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Vitadina cuneata</i>	Fuzzweed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Hirschfeldia incana</i>	Buchan Weed													1	1	1
<i>Wahlenbergia communis</i>	Tufted Bluebell	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Wahlenbergia stricta</i>	Tall Bluebell	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Hypericum perforatum</i>	St John's Wort	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Convolvulus erubescence</i>	Australian Bindweed													1	1	1
<i>Chamaesyce prostrata</i>	Red Caustic Weed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Pultanea procumbens</i>	Egg and Bacon													1	1	1
<i>Trifolium campestre</i>	Hop Clover															
<i>Dianella revoluta</i>	Flax Lily	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Amyema spp.</i>														1		
<i>Plantago lanceolata</i>	Lamb's Tongue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Acetosella vulgaris</i>	Sheep Sorrel	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Polygonum arenastrum</i>	Wireweed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table A13 (cont.). Results of Vegetation Transects along Old Cooma Road

Family and Scientific Name	Common Name	OC1	OC2	OC3	OC4	OC5	OC6	OC7	OC8	OC9	OC10	OC11	OC12	OC13	OC14	OC15
<i>Persicaria prostrata</i>	Prostrate Knotweed									1	1	1	1	1	1	1
<i>Rumex brownii</i>	Swamp Dock	1	1	1	1	1	1	1	1	1	1	1	1			
<i>Acaena ovina</i>	Sheep's Burr	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Sanguisorba minor ssp. Muricata</i>	Sheep's Burnet	1								1	1	1	1	1		
<i>Dodonaea viscosa ssp. Angustifolia</i>	Hop Bush	*							1	1	1	1				
<i>Verbascum thapsus</i>	Great Mullein	1		1					1	1	1	1	1	1	1	1
<i>Verbascum virgatum</i>	Great Mullein									1	1	1	1	1	1	1
<i>Verbena bonariensis</i>	Purpletop	1	1	1	1	1							1			
Trees/Shrubs																
<i>Lycium ferocissimum</i>	African Boxthorn			1												
<i>Rosa rubiginosa</i>	Sweet Briar			*												
<i>Prunus spp.</i>	Plum															1
<i>Acacia decurrens</i>	Black Wattle					1	1		1	1						
<i>Acacia mearnsii</i>	Green Wattle	1		1		1	1		1	1						
<i>Acacia pravissima</i>	Wedge-leaf Wattle							1	1							
<i>Cystis scoparius</i>	English Broom					1	1		1	1						
<i>Eucalyptus dives</i>	Broad-leaved Peppermint							1								
<i>Eucalyptus melliodora</i>	Yellow Box	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Eucalyptus polyanthemos</i>	Red Box					1	1	1		1	1					
<i>Kunzea ericoides</i>	Burgan									1	1	1	1	1	1	1



Eucalyptus melliodora tree close to fence line in Transect OC 1 looking west



A view of habitat looking north east from Transect OC 2



General view of habitat- looking north from Transect OC 1



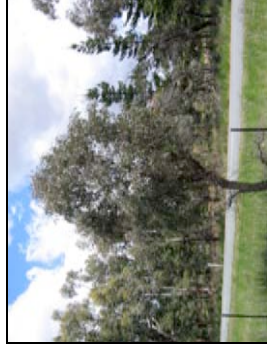
Clusters of trees along Old Cooma Road, adjacent to Transects OC 2 and OC 3



General habitat looking north from east end of Transect OC 2



Low value trees along Old Cooma Road adjacent to Transects OC 3 and OC 4



Juvenile gum tree close to fence line adjacent to Transect OC 5



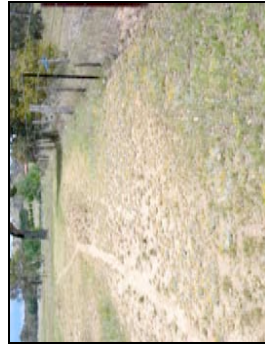
Eucalyptus melliodora trees along roadside



A view of habitat looking north adjacent to Transects OC 6 and OC 7



A view of habitat looking north adjacent to Transects OC 8 and OC 9



A view of degraded habitat along fence line adjacent to Transects OC 7- OC 10



Forb among grass- *Trifolium* sp.

Plate 18. Photographs showing vegetation and habitat along Old Cooma Road Corridor



A dominant grass- *Bromus* sp. common in the degraded paddocks



Forb among grass- *Chrysocephalum apiculatum* found among grass



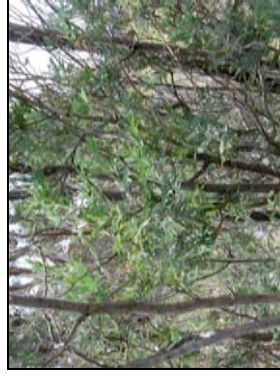
Ryegrass- *Lolium perenne* dominates sections of degraded pasture



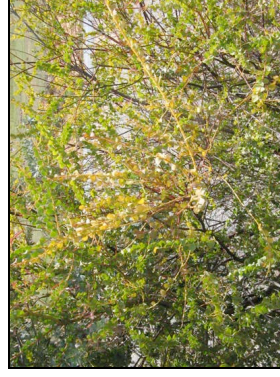
Forb among grass- Australian Bindweed (*Convolvulus erubescens*)



Scotch Broom- *Cystis scoparius* along roadside adjacent to Transects OC 7 - OC 10



A cluster of *Acacia decurrens* (Black Wattle) adjacent to Transects OC 4 and OC 5



Acacia pravissima (Winged-leaf Wattle) on roadside adjacent to Transects OC 8 and OC 9



Winged Slender Thistle *Cardus tenuiflorus* common in the area

Plate 18 (cont.). Photographs showing vegetation and habitat along Old Cooma Road Corridor

**Appendix 5 -
Transect Surveys of Water Cycle Infrastructure Corridor -
Googong Dam Road**

Table A14. Results of Vegetation Transects along Googong Dam Road

Cover/Abundance (for each species for belt transect): 1 = < 5% cover; 2 = 6-25% cover; 3 = 26-50% cover; 4 = 51-75% cover; 5 = 76-100% cover

Family and Scientific Name	Common Name	GR1	GR2	GR3	GR4	GR5	GR6	GR7	GR8	GR9	GR10	GR11
Non-native Grasses												
<i>Agrostis capillaris</i>	Browntop Bentgrass	1	1	1	1	1	1	1	1	1	1	1
<i>Avena fatua</i>	Wild Oat	1	1	1	1	1	1	1	1	1	1	1
<i>Avena barbata</i>	Wild Oat	1	1	1	1	1	1	1	1	1	1	1
<i>Bothriochloa macra</i>	Redleg Grass	1	1	1	1	1	1	1	1	1	1	1
<i>Bromus molliformis</i>	Soft Brome	1	1	1	1	1	1	1	1	1	1	1
<i>Eragrostis brownii</i>	Love Grass	1	1	1	1	1	1	1	1	1	1	1
<i>Eragrostis curvula</i>	African Love Grass	1	1	1	1	1	1	1	1	1	1	1
<i>Hordeum glaucum</i>	Barley Grass	1	1	1	1	1	1	1	1	1	1	1
<i>Hordeum hystrix</i>	Barley Grass	1	1	1	1	1	1	1	1	1	1	1
<i>Lolium perenne</i>	Perennial Ryegrass	1	1	1	1	1	1	1	1	1	1	1
<i>Nassella neesiana</i>	Chilean Needgrass	1	1	1	1	1	1	1	1	1	1	1
<i>Nassella trichotoma</i>	Serrated Tussock	1	1	1	1	1	1	1	1	1	1	1
<i>Paspalum dilatatum</i>	Caterpillar Grass	1	1	1	1	1	1	1	1	1	1	1
<i>Phalaris aquatica</i>	Phalaris	1	1	1	1	1	1	1	1	1	1	1
<i>Poa annua</i>	Winter grass	1	1	1	1	1	1	1	1	1	1	1
<i>Poa labillardieri</i> var. <i>labillardieri</i>	Tussock	1	1	1	1	1	1	1	1	1	1	1
<i>Poa seiberiana</i>	Poa Tussock	1	1	1	1	1	1	1	1	1	1	1
Native Grasses												
<i>Austrostipa scabra</i> var. <i>falcata</i>	Slender Spear Grass	1	1	1	1	1	1	1	1	1	1	1
<i>Themeda australis</i>	Kangaroo Grass	1	1	1	1	1	1	1	1	1	1	1
Sedges												
<i>Cyperus eragrostis</i>	Umbrella Sedge	1	1	1	1	1	1	1	1	1	1	1
<i>Juncus usitatus</i>	Common Rush	1	1	1	1	1	1	1	1	1	1	1
<i>Juncus vaginatus</i>	Rush	1	1	1	1	1	1	1	1	1	1	1

Table A14 (cont.). Results of Vegetation Transects along Googong Dam Road

Family and Scientific Name	Common Name	GR1	GR2	GR3	GR4	GR5	GR6	GR7	GR8	GR9	GR10	GR11
Forbs												
<i>Foeniculum vulgare</i>	Fennel	1	1	1	1	1	1	1	1			
<i>Arctotheca calendula</i>	Capeweed	1	1			1		1		1		
<i>Chrysocephalum apiculatum</i>	Yellow Buttons	1	1	1	1	1	1	1	1	1	1	1
<i>Cirsium vulgare</i>	Spear Thistle	1	1			1	1	1	1	1		1
<i>Conyza bonariensis</i>	Fleabane	1	1	1					1	1	1	1
<i>Lactuca seriola</i>	Prickly Lettuce	1		1				1	1			1
<i>Onopordum acanthium</i>	Scotch Thistle		1		1			1			1	1
<i>Senecio quadridentatus</i>	Cotton Fire-weed											1
<i>Sonchus oleraceus</i>	Common Sowthistle	1	1	1	1	1	1	1	1	1	1	1
<i>Taraxacum officinale</i>	Dandelion	1	1	1	1	1	1	1	1	1	1	1
<i>Vittadinia cuneata</i>	Fuzzweed		1	1						1	1	1
<i>Hirschfeldia incana</i>	Buchan Weed		1					1	1			1
<i>Wahlenbergia stricta</i>	Tall Bluebell	1	1	1	1	1	1	1	1	1	1	1
<i>Hypericum perforatum</i>	St John's Wort	1	1	1	1	1	1	1	1	1		1
<i>Hibbertia calycina</i>	Lesser Guinea Flower	1										
<i>Chamaesyce prostrata</i>	Red Caustic Weed				1	1	1	1	1	1	1	1
<i>Desmodium varians</i>	Slender Tick-trefoil							1				1
<i>Pultenaea procumbens</i>	Egg and Bacon Pea	1										
<i>Trifolium arvense</i>	Horsefoot Clover	1	1	1	1	1	1	1	1	1	1	1
<i>Trifolium campestre</i>	Hop Clover	1	1	1	1	1	1	1	1	1	1	1
<i>Trifolium tomentosum</i>	Woolly Clover					1	1	1	1	1	1	1
<i>Marrubium vulgare</i>	Horehound			1	1	1	1	1	1	1	1	1
<i>Salvia verbenaca</i>	Wild Sage								1	1		1
<i>Dianella revoluta</i>	Flax Lily					1	1	1	1	1	1	1
<i>Amyema spp.</i>			1	1	1	1	1	1	1	1	1	1

Table A14 (cont.). Results of Vegetation Transects along Googong Dam Road

Family and Scientific Name	Common Name	GR1	GR2	GR3	GR4	GR5	GR6	GR7	GR8	GR9	GR10	GR11
<i>Oxalis pes-caprae</i>	Soursob	1	1			1	1	1	1		1	1
<i>Oxalis purpurea</i>	Wood Sorrel	1	1	1		1	1	1	1	1	1	1
<i>Plantago lanceolata</i>	Lamb's Tongue	1	1	1	1	1	1	1	1	1	1	1
<i>Acetosella vulgaris</i>	Sheep Sorrel	1	1	1	1	1	1	1	1	1	1	1
<i>Polygonum arenastrum</i>	Wireweed	1	1		1		1	1	1	1	1	1
<i>Persicaria decipiens</i>	Knotweed			1	1	1	1	1	1	1	1	1
<i>Persicaria prostrata</i>	Prostrate Knotweed										1	1
<i>Rumex crispus</i>	Curly Dock	1	1	1	1	1	1	1	1	1	1	1
<i>Sanguisorba minor</i> ssp. <i>Muricata</i>	Sheep's Burnet	1									1	1
<i>Verbascum thapsus</i>	Great Mullein	1	1	1	1	1	1	1	1	1	1	1
<i>Verbascum virgatum</i>	Great Mullein											1
<i>Veronica anvensis</i>	Speedwell	1	1	1	1	1	1	1	1	1	1	1
<i>Verbena bonariensis</i>	Purpletop	1	1	1	1	1	1	1	1	1	1	1
Trees/Shrubs												
<i>Acacia dealbata</i>	Silver Wattle	1	1	1	1	1	1	1	1	1	1	1
<i>Acacia mearnsii</i>	Green Wattle			1	1	1	1	1	1	1	1	1
<i>Acacia pycnantha</i>	Golden Wattle			1	1	1	1	1	1	1	1	1
<i>Acacia rubida</i>	Red-leaved Wattle			1	1	1	1	1	1	1	1	1
<i>Daviesia mimosoides</i>			1	1								
<i>Eucalyptus bridgesiana</i>	Apple Box		1						1	1	1	1
<i>Eucalyptus dives</i>	Broad-leaved Peppermint	1	1	1								
<i>Eucalyptus goniocalyx</i>	Box Apple		1	1								1
<i>Eucalyptus melliodora</i>	Yellow Box	1	1	1	1	1	1	1	1	1	1	1
<i>Eucalyptus polyanthemus</i>	Red Box	1	1								1	1
<i>Eucalyptus rubida</i>	Candlebark						1					
<i>Kunzea ericoides</i>	Burgan			1			1	1	1	1	1	1



Habitat looking north, Transect GR3



Habitat looking north at Transect GR3



Gum trees adjacent to Transects GR4



Habitat looking north from Transect GR2



Scattered trees near Transect GR5



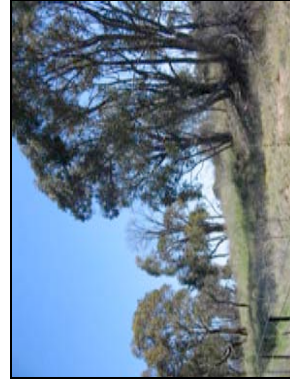
Habitat adjacent Transect GR5-east



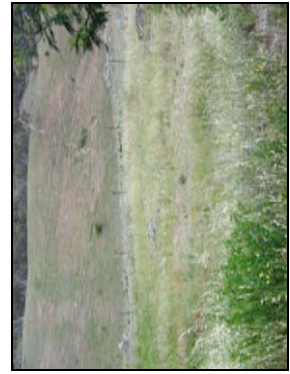
Habitat adjacent Transect GR5-south



Green Wattle (*Acacia mearnsii*) bushes along roadside



Habitat looking south west, Transect GR 9



Roadside vegetation, grass-dominant areas near Transect GR 10



Sparse roadside vegetation, near Transect GR9



Adjacent to Transects GR9

Plate 19. Photographs showing vegetation and habitat along Googong Dam Road Corridor



Pultenaea bushes near Transects GR1



Chilean Needle Grass (*Nassella neesiana*) adjacent Transect GR2



Daviesia mimosoides bushes near Transect GR4



Burgan (*Kunzea ericooides*) along roadway, near Transect GR10

Plate 19 (cont.). Photographs showing vegetation and habitat along Googong Dam Road Corridor

**Appendix 6 -
Transect Surveys of Water Cycle Infrastructure - Site for
potable water reservoirs (Reservoir Hill)**

Table A15. Results of Vegetation Transects on Reservoir Hill

Cover/Abundance (for each species for belt transect): 1 = < 5% cover; 2 = 6-25% cover; 3 = 26-50% cover; 4 = 51-75% cover; 5 = 76-100% cover

Transects RH1 – RH4 were walk-through surveys, recording species and abundance 5 m either side at the Reservoir Hill Site;

Transects RH_{M1}, RH_{M2} and RH_{M3} were random meanders recording species (denoted by *) at the Reservoir Hill Site

Family and Scientific Name	Common Name	RH1	RH2	RH3	RH4	RH _{M1}	RH _{M2}	RH _{M3}
Non-native Grasses								
<i>Aira elegantissima</i>	Delicate Hair-grass	1		1	1	*		
<i>Agrostis capillaris</i>	Browntop Bentgrass	1	1	1	1	*	*	*
<i>Avena fatua</i>	Wild Oat	1	1	1	1	*	*	*
<i>Bothriochloa macra</i>	Redleg Grass	1		1	1	*	*	*
<i>Bromus catharticus</i>	Prairie Grass	1	1	1	1	*	*	*
<i>Eleusine tristachya</i>	Small Goosegrass	1		1	1	*	*	*
<i>Eragrostis brownii</i>	Love Grass	1	1	1	1	*	*	*
<i>Eragrostis curvula</i>	African Love Grass	1	1	1	1	*	*	*
<i>Holcus lanatus</i>	Yorkshire Fog	1	1	1	1	*	*	*
<i>Hordeum glaucum</i>	Barley Grass		1	1	1	*	*	*
<i>Hordeum hystrix</i>	Barley Grass	1	1	1	1	*	*	*
<i>Lolium perenne</i>	Perennial Ryegrass	1	1	1	1	*	*	*
<i>Phalaris aquatica</i>	Phalaris	1	1	1	1	*	*	*
<i>Poa annua</i>	Winter grass	1	1	1	1	**	**	**
<i>Poa seiberiana</i>	Poa Tussock	1	1	1	1	*	*	*
Native Grasses								
<i>Austrodanthonia carphoides</i>	Ringed Wallaby Grass	1	1	1	1	*	*	*
<i>Austrodanthonia racemosa ssp.</i>	Slender Wallaby Grass	1	1			*	*	*
<i>Austrostipa scabra var. falcata</i>	Slender Spear Grass	1	1	1	1	*	*	*
Sedges								
<i>Juncus usitatus</i>	Common Rush	1	1	1	1	*	*	*
Forbs								
<i>Centaurea solstitialis</i>	St. Barnaby's Thistle		1			*	*	*
<i>Chrysocephalum apiculatum</i>	Yellow Buttons	1	1	1	1	*	*	*
<i>Cirsium vulgare</i>	Spear Thistle	1	1			*	*	*
<i>Onopordum acanthium</i>	Scotch Thistle					*	*	*
<i>Taraxacum officinale</i>	Dandelion	1	1	1	1	*	*	*
<i>Wahlenbergia stricta</i>	Tall Bluebell	1	1	1	1	*	*	*
<i>Chamaesyce prostrata</i>	Red Caustic Weed					*	*	*
<i>Marrubium vulgare</i>	Horehound			1	1	*	*	*
<i>Dianella revoluta</i>	Flax Lily					*	*	*
<i>Plantago lanceolata</i>	Lamb's Tongue	1	1	1		*	*	*
<i>Acetosella vulgaris</i>	Sheep Sorrel	1	1	1	1	*	*	**
<i>Persicaria prostrata</i>	Knotweed				1	*	*	*
<i>Rumex brownii</i>	Curly Dock		1	1	1	*	*	**
<i>Acaena ovina</i>	Sheep's Burr		1	1	1	*	*	*
<i>Sanguisorba minor ssp. muricata</i>						*	*	*
<i>Verbascum thapsus</i>	Great Mullein	1	1	1	1	*	*	*
<i>Verbena bonariensis</i>	Purpletop	1		1	1	*	*	*

Table A15 (cont.). Results of Vegetation Transects on Reservoir Hill

Family and Scientific Name	Common Name	RH1	RH2	RH3	RH4	RH _{M1}	RH _{M2}	RH _{M3}
Trees/Shrubs						*	*	*
<i>Eucalyptus bridgesiana</i>	Apple Box		1			*	*	*
<i>Eucalyptus melliodora</i>	Yellow Box	1	1	1	1	*	*	*
<i>Eucalyptus polyanthemos</i>	Red Box	1	1			*	*	*



View towards east along RH_{M1} showing degraded paddocks and landscape with rock outcrops



Another view towards east showing heavily grazed degraded paddocks with sporadic trees



View towards east along RH_{M2} showing the landscape



View towards north (RH_{M2}) showing dam at the bottom of the hill and landscape



View towards north showing heavily grazed degraded paddocks



Occasional Eucalyptus trees occur on the landscape



View towards east along RH_{M1} showing habitat and degraded paddocks



Barley Grass infested areas on south-eastern side of hill (RH_{M1})



View towards east from Old Cooma Road along Transect RH 2 showing degraded paddocks and landscape

Plate 20. Photographs showing vegetation and habitat of Reservoir Hill

**Appendix 7 -
Transect Surveys of Water Cycle Infrastructure -
Water Recycling Plant, Sewage Pumping Station Sites and
Rising Mains Corridor**

Table A16. Results of Vegetation Transects at Water Recycling Plant, Sewage Pumping Station Sites and rising mains corridor

Cover/Abundance (for each species for belt transect): 1 = < 5% cover; 2 = 6-25% cover; 3 = 26-50% cover; 4 = 51-75% cover; 5 = 76-100% cover

Transects RW1-RW7 were walk-through surveys, recording species and abundance 5 m either side at the Water Recycling Plant Site. Transects SPS_{RM1}, SPS_{RM2}, SPS_{RM3} and RM were walk-through surveys, recording species and abundance 5 m either side of SPS Sites and rising mains corridor

Family and Scientific Name	Common Name	RW1	RW2	RW3	RW4	RW5	RW6	RW7	SPS _{RM1}	SPS _{RM2}	SPS _{RM3}	RM
Non-native Grasses												
<i>Agrostis capillaris</i>	Browntop Bentgrass			1	1	1	1	1	1	1	1	*
<i>Avena fatua</i>	Wild Oat	1	1	1	1	1	1	1	1			*
<i>Bromus catharticus</i>	Prairie Grass	1	1	1	1	2	1	1	1			*
<i>Eleusine tristachya</i>	Small Goosegrass	1	1	1	1	1	1	1	1	1	1	*
<i>Eragrostis brownii</i>	Love Grass	1	1	1	1	1	1	1				*
<i>Eragrostis curvula</i>	African Love Grass	1	1	1	1	1	1	1				
<i>Holcus lanatus</i>	Yorkshire Fog	1	1	1	1	1	1	1	1			*
<i>Hordeum glaucum</i>	Barley Grass	1	1	1	1	1	1	1	1	1	1	*
<i>Hordeum leporinum</i>	Barley Grass								1	1	1	*
<i>Lolium perenne</i>	Perennial Ryegrass	1	1	1	1	1	1	2	1			*
<i>Nassella trichotoma</i>	Serrated Tussock	1	1	1	1	1	2	2				
<i>Phalaris aquatica</i>	Phalaris	1	1	1				1				
<i>Poa annua</i>	Winter grass	1	1		1	1						
<i>Poa seiberiana</i>	Poa Tussock			1	1	1	1	1	1	1	1	*
Native Grasses												
<i>Austrodanthonia carphoides</i>	Ringed Wallaby Grass	1	1	1	1	1	1	1				
<i>Austrostipa scabra var. falcata</i>	Slender Spear Grass	1	1	1	1	1	1	2	1	1	1	*
Sedges												
<i>Juncus usitatus</i>	Common Rush	1	1	1	1	1	1	1	1	1	1	*
Forbs												
<i>Chrysocephalum apiculatum</i>	Yellow Buttons	1	1	1	1	1	1	1	1	1	1	*

Table A16 (cont.). Results of Vegetation Transects at Water Recycling Plant, Sewage Pumping station Sites and rising mains corridor

Family and Scientific Name	Common Name	RW1	RW2	RW3	RW4	RW5	RW6	RW7	SPS _{RM1}	SPS _{RM2}	SPS _{RM3}	RM
<i>Cirsium vulgare</i>	Spear Thistle	1	1	1	1	1	1	1	1	1	1	*
<i>Conyza bonariensis</i>	Fleabane	1	1		1	1	1	1				*
<i>Taraxacum officinale</i>	Dandelion	1	1	1	1	1	1	1	1	1	1	*
<i>Vittadinia cuneata</i>	Fuzzweed	1	1	1		1	1	1	1	1	1	*
<i>Wahlenbergia communis</i>	Tufted Bluebell	1	1	1	1	1	1	1	1	1	1	*
<i>Hypericum perforatum</i>	St John's Wort	1	1	1	1	1	1	1	1	1	1	*
<i>Chamaesyce prostrata</i>	Red Caustic Weed	1	1	1	1	1	1	1	1	1	1	*
<i>Trifolium campestre</i>	Hop Clover	1										*
<i>Trifolium tomentosum</i>	Woolly Clover	1	11	1				1	1	1	1	*
<i>Dianella revoluta</i>	Flax Lily	1							1			*
<i>Plantago lanceolata</i>	Lamb's Tongue	1	1	1	1	1	1	1	1	1	1	*
<i>Acetosella vulgaris</i>	Sheep Sorrel	1	1	1	1	1	1	1	1	1	1	*
<i>Persicaria prostrata</i>	Prostrate Knotweed							1	1	1	1	*
<i>Rumex brownii</i>	Swamp Dock	1	1	1	1	1	1	1	1	1	1	*
<i>Acaena ovina</i>	Sheep's Burr	1	1	1	1	1	1	1	1	1	1	*
<i>Sanguisorba minor ssp. muricata</i>	Sheep's Burnet	1										*
<i>Verbascum thapsus</i>	Great Mullein	1	1	1	1	1	1	1	1	1	1	*
<i>Verbena bonariensis</i>	Purpletop	1	1	1	1	1	1	1	1	1	1	*
Trees/Shrubs												
<i>Rosa rubiginosa</i>	Sweet Briar											
<i>Eucalyptus bridgesiana</i>	Apple Box						1					*
<i>Eucalyptus dives</i>	Broad-leaved Peppermint											*
<i>Eucalyptus melliodora</i>	Yellow Box	1	1	1	1	1	1	1	1	1	1	*
<i>Eucalyptus polyanthemus</i>	Red Box				1	1	1	1	1	1	1	*
<i>Kunzea ericoides</i>	Burgan	1					1	1	1	1	1	*



RWP Site - Transect RW3



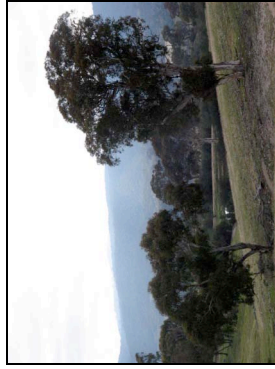
RWP Site - Transect RW3



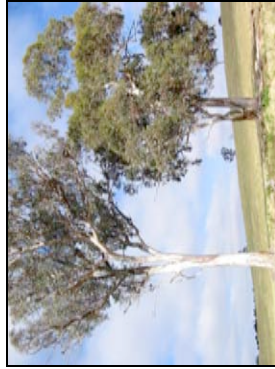
RWP Site - Transect RW3



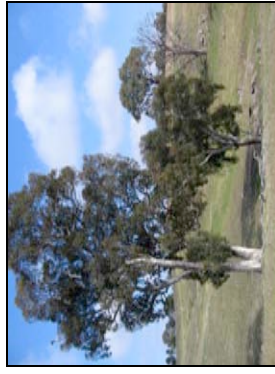
SPS Site - Transect RW3



RWP Site - Transect RW3



RWP Site - Transect RW3



RWP Site - Transect RW4



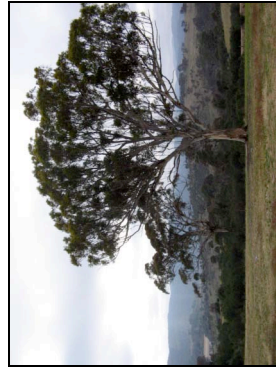
RWP Site - Transect RW4



RWP Site - Transect RW2



RWP Site - Transect RW3



RWP Site - Transect RW3



RWP Site - Transect RW3

Plate 21. Photographs showing vegetation and habitat of proposed Water Recycling Plant, Sewage Pumping Stations and rising mains corridor

**Appendix 8 -
Surveys of Water Cycle Infrastructure – Googong Water
Treatment Plant Site & Corridor**

Table A17. Results of Vegetation Transects Googong Water Treatment Plant Site & Corridor

Cover/Abundance (for each species for belt transect): 1 = < 5% cover; 2 = 6-25% cover; 3 = 26-50% cover; 4 = 51-75% cover; 5 = 76-100% cover

Family and Scientific Name	Common Name	WTP1	WTP2	WTP3	WTP4	WTP5	WTP6	WTP7
Non-native Grasses								
<i>Avena barbata</i>	Wild Oat				1	1	1	1
<i>Avena fatua</i>	Wild Oat	1				1		
<i>Bromus catharticus</i>	Prairie Grass				1			1
<i>Bromus molliformis</i>	Soft Brome				1	1	1	1
<i>Chloris gayana</i>	Rhodes Grass	1	1					
<i>Dactylis glomerata</i>	Cocksfoot	1						
<i>Eleusine tristachya</i>	Goosegrass				1			1
<i>Eragrostis curvula</i>	African Love Grass				1		1	1
<i>Holcus lanatus</i>	Yorkshire Fog				1		1	1
<i>Hordeum glaucum</i>	Barley Grass					1	1	1
<i>Lolium perenne</i>	Perennial Ryegrass	1	1	1	1	1	1	2
<i>Nassella trichotoma</i>	Serrated Tussock	1	1	1	1	1	2	2
<i>Paspalum dilatatum</i>	Paspalum					1	1	1
<i>Phalaris aquatica</i>	Phalaris	1	1	1			1	1
<i>Phalaris minor</i>	Phalaris				1			1
<i>Poa annua</i>	Winter grass	1	1		1	1		
<i>Poa seiberiana</i>	Poa Tussock	1	1	1	1	1	1	
Native Grasses								
<i>Austrodanthonia carphoides</i>	Ringed Wallaby Grass	1	1	1	1	1	1	1
<i>Austrodanthonia racemosa</i> ssp. <i>racemosa</i>	Slender Wallaby Grass	1	1					1
<i>Austrostipa scabra</i> var. <i>falcata</i>	Slender Spear Grass	1	1	1	1	1	1	1
<i>Themeda australis</i>	Kangaroo Grass	1						1
Sedges								
<i>Juncus usitatus</i>	Common Rush			1			1	1
<i>Juncus vaginatus</i>	Rush	1				1		
Forbs								
<i>Chrysocephalum apiculatum</i>	Yellow Buttons	1	1	1	1	1	1	1
<i>Cirsium vulgare</i>	Spear Thistle	1	1	1	1	1	1	1
<i>Conyza bonariensis</i>	Fleabane	1	1			1	1	1
<i>Lactuca seriola</i>	Prickly Lettuce						1	1
<i>Senecio quadridentatus</i>	Cotton Fire-weed					1	1	
<i>Sonchus oleraceus</i>	Common Sowthistle	1		1	1	1	1	1
<i>Taraxacum officinale</i>	Dandelion	1			1	1	1	1
<i>Vittadinia cuneata</i>	Fuzzweed				1	1	1	1
<i>Vittadinia muelleri</i>	Fuzzweed					1	1	1
<i>Hirschfeldia incana</i>	Buchan Weed				1	1	1	1
<i>Lepidium africanum</i>	Common peppergrass				1	1	1	1
<i>Wahlenbergia communis</i>	Tufted Bluebell	1	1		1	1	1	1
<i>Wahlenbergia stricta</i>	Tall Bluebell					1		1

Table A17 (cont.). Results of Vegetation Transects Googong Water Treatment Plant Site & Corridor

Family and Scientific Name	Common Name	WTP1	WTP2	WTP3	WTP4	WTP5	WTP6	WTP7
<i>Hypercium perforatum</i>	St John's Wort				1	1	1	1
<i>Convolvulus erubescence</i>	Australian Bindweed	1					1	1
<i>Chamaesyce prostrata</i>	Red Caustic Weed	1				1	1	1
<i>Trifolium arvense</i>	Horsefoot Clover					1	1	1
<i>Trifolium campestre</i>	Hop Clover					1	1	1
<i>Trifolium tomentosum</i>	Woolly Clover	1				1	1	1
<i>Geranium molle</i>	Cranesbill Geranium						1	
<i>Geranium solanderi</i>	Native Geranium	1					1	
<i>Marrubium vulgare</i>	Horehound							1
<i>Salvia verbenaca</i>	Wild Sage					1	1	
<i>Dianella revoluta</i>	Flax Lily	1				1		1
<i>Malva parviflora</i>	Small-flowered Mallow							1
<i>Plantago lanceolata</i>	Lamb's Tongue		1	1	1	1	1	1
<i>Acetosella vulgaris</i>	Sheep Sorrel				1		1	1
<i>Polygonum arenastrum</i>	Wireweed	1	1		1			
<i>Persicaria prostrata</i>	Prostrate Knotweed							1
<i>Rumex brownii</i>	Swamp Dock	1	1	1	1	1	1	1
<i>Acaena ovina</i>	Sheep's Burr		1	1	1	1		1
<i>Solanum linnaeanum</i>	Apple of Sodom	1	1					
<i>Solanum nigrum</i>	Purple Nightshade	1	1					
<i>Sanguisorba minor ssp. muricata</i>	Sheep's Burnet	1		1				1
<i>Verbascum thapsus</i>	Great Mullein	1	1	1	1			
<i>Verbena bonariensis</i>	Purpletop	1	1	1	1	1		
Trees/Shrubs								
<i>Acacia dealbata</i>	Silver Wattle	1	1	1	1	1	1	1
<i>Acacia mearnsii</i>	Green Wattle	1	1	1	1	1	1	1
<i>Acacia pycnantha</i>	Golden Wattle	1	1	1		1		
<i>Acacia rubida</i>	Red-leaved Wattle	1	1	1				
<i>Eucalyptus bridgesiana</i>	Apple Box	1	1	1	1			1
<i>Eucalyptus blakelyi</i>	Blakely's Red Gum	1		1				
<i>Eucalyptus dives</i>	Broad-leaved Peppermint	1	1	1	1			
<i>Eucalyptus goniocalyx</i>	Brittle Gum			1	1	1		
<i>Eucalyptus mannifera</i>	Box Apple	1	1	1	1			
<i>Eucalyptus melliodora</i>	Yellow Box	1	1	1	1	1	1	1
<i>Eucalyptus polyanthemos</i>	Red Box	1	1	1	1	1	1	1
<i>Kunzea ericoides</i>	Burgan	1	1	1	1	1	1	1



View towards north-west from Transect WTP1 showing woodland/forest



View towards south-west from Transect WTP2 showing woodland/forest



View towards west from Transect WTP1 showing plantings



Stormwater pond adjacent to Transect WTP1 at the back of WTP Site



View showing the highly disturbed environment at the back of the WTP Site



Occasional Eucalyptus trees occur on the landscape with an understorey of Burgan, adjacent to Transect WTP3



View towards east - Googong Dam from Transect WTP3



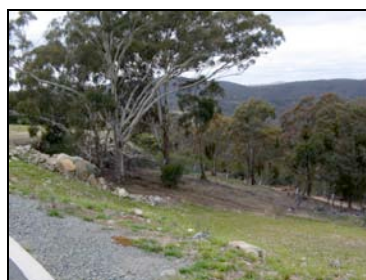
An area between Transect WTP3 and WTP4, showing Acacia plantings and rehabilitated landscape



View towards south-east from Transect WTP3 showing distal Woodland/forest



View towards south from Transect WTP5



View towards north-east from Transect 5



Highly disturbed and sparse vegetation at Transect WTP5

Plate 22. Photographs of vegetation and habitat of the Googong Water Treatment Plant (WTP) Site



Sparse vegetation at Transect WTP5



View towards south from Transect WTP5



Sparse vegetation on one side of
Transect WTP5



Sparse vegetation at Transect WTP6



At the junction with Googong Dam Road;
Adjacent to Transect WTP7



At the junction with Googong Dam Road;
Adjacent to Transect WTP7

Plate 22 (cont.). Photographs of vegetation and habitat of the Googong Water Treatment Plant (WTP) Site

Appendix 9 - Surveys of Neighbourhood 1A

Table A18. Results of Vegetation Transects at Neighbourhood 1A

Cover/Abundance (for each species for belt transect): 1 = < 5% cover; 2 = 6-25% cover; 3 = 26-50% cover; 4 = 51-75% cover; 5 = 76-100% cover

Family and Scientific Name	Common Name	NHL1	NHL2	NHL3	NHL4	NHL5	NHL6	NHL7	NHL8	NHL9	NHL10	NHL11	NHL12	NHL13
Non-native Grasses														
<i>Agrostis capillaris</i>	Browntop Bent	1	1				1	1	1	1	1	1	1	1
<i>Avena fatua</i>	Wild Oats	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Bothriochloa macra</i>	Redleg Grass			1	1	1	1	1			1	1	1	1
<i>Bromus catharticus</i>	Prairie Grass	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Bromus hordeaceus ssp. hordeaceus</i>	Soft Brome	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Eragrostis brownii</i>	Love Grass	1	1				1	1			1	1	1	1
<i>Eragrostis curvula</i>	African Love Grass	1	1				1	1						
<i>Holcus lanatus</i>	Yorkshire Fog	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Hordeum glaucum</i>	Barley Grass							1	1	1				
<i>Hordeum leporinum</i>	Barley Grass	1	1	1				1	1		1	1	1	1
<i>Lolium perenne</i>	Perennial Ryegrass	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Nassella trichotoma</i>	Serrated Tussock	1	1	1	1	1	1	1			1	1	1	1
<i>Paspalum dilatatum</i>	Caterpillar Grass							1	1	1	1	1	1	1
<i>Phalaris aquatica</i>	Phalaris						1	1	1	1	1	1	1	1
<i>Poa annua</i>	Winter grass	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Poa labillardieri var. labillardieri</i>	Tussock	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Poa sieberiana</i>	Poa tussock/Snowgrass	1	1	1	1	1	1	1	1	1	1	1	1	1
Native Grasses														
<i>Austrodanthonia caespitosa</i>	Ringed Wallaby Grass			1	1	1	1	1	1	1	1	1	1	1
<i>Austrostipa scabra var. falcata</i>	Slender Spear Grass	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Themeda australis</i>	Kangaroo Grass													1
Sedges														
<i>Juncus usitatus</i>	Common Rush	1	1	1	1	1	1	1	1	1	1	1	1	1

Table A18 (cont.). Results of Vegetation Transects at Neighbourhood 1A

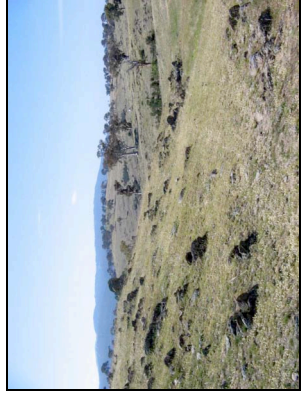
Family and Scientific Name	Common Name	NHL1	NHL2	NHL3	NHL4	NHL5	NHL6	NHL7	NHL8	NHL9	NHL10	NHL11	NHL12	NHL13
Forbs														
<i>Arctotheca calendula</i>	Capeweed		1	1	1							1	1	1
<i>Acaena ovina</i>	Sheep's Burr	1	1			1					1	1	1	1
<i>Cardus nutans</i>	Nodding Thistle	1	1											
<i>Cardus pycnocephalus</i>	Slender Thistle						1					1	1	1
<i>Cardus tenuiflorus</i>	Winged Slender Thistle				1	1	1					1	1	1
<i>Carthamus lanatus</i>	Saffron Thistle										1	1	1	1
<i>Centaurea calcitrapa</i>	Star Thistle						1	1				1	1	1
<i>Centaurea melitensis</i>	Maltese Cockspur									1	1	1	1	1
<i>Centaurea solstitialis</i>	St. Barnaby's Thistle				1	1			1	1	1	1	1	1
<i>Chrysocephalum apiculatum</i>	Yellow Buttons	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Cirsium arvense</i>	Perennial Thistle								1					1
<i>Cirsium vulgare</i>	Spear Thistle	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Conyza bonariensis</i>	Fleabane	1	1		1	1	1	1	1	1	1	1	1	1
<i>Taraxacum officinale</i>	Dandelion	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Vittadinia cuneata</i>	Fuzzweed	1		1		1			1	1	1	1	1	1
<i>Wahlenbergia communis</i>	Tufted Bluebell	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Hypericum perforatum</i>	St John's Wort	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Chamaesyce prostrata</i>	Red Caustic Weed	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Trifolium campestre</i>	Hop Clover						1	1	1	1	1	1	1	1
<i>Trifolium tomentosum</i>	Woolly Clover								1	1	1	1	1	1
<i>Dianella revoluta</i>	Flax Lily				1	1		1		1	1	1	1	1
<i>Plantago lanceolata</i>	Lamb's Tongue	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Acetosella vulgaris</i>	Sheep Sorrel	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Polygonum arenastrum</i>	Wireweed	1	1	1	1	1	1	1	1	1	1	1	1	1

Table A18 (cont.). Results of Vegetation Transects at Neighbourhood 1A

Family and Scientific Name	Common Name	NHL1	NHL2	NHL3	NHL4	NHL5	NHL6	NHL7	NHL8	NHL9	NHL10	NHL11	NHL12	NHL13
<i>Persicaria prostrata</i>	Prostrate Knotweed									1	1	1	1	1
<i>Rumex brownii</i>	Swamp Dock	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Sanguisorba minor ssp. muricata</i>	Sheep's Burnet	1	1	1	1					1				1
<i>Verbascum thapsus</i>	Great Mullein	1				1	1							
<i>Verbena bonariensis</i>	Purpletop	1			1	1	1	1						
Trees/Shrubs														
<i>Cupressus arizonica</i>	Cupressus													1
<i>Eucalyptus mannifera</i>	Box Apple				1									
<i>Eucalyptus bridgesiana</i>	Apple Box				1									
<i>Eucalyptus melliodora</i>	Yellow Box			1	1	1		1	1					
<i>Eucalyptus polyanthemus</i>	Red Box			1	1				1					
<i>Kunzea ericoides</i>	Burgan			1	1	1	1	1	1	1	1			
<i>Malus sp.</i>														1
<i>Pinus radiata</i>	Radiata Pine													1
<i>Populus</i>	Poplars													1
<i>Prunus sp.</i>														1
<i>Rosa rubiginosa</i>	Sweet Briar					1	1	1	1	1	1	1	1	1
<i>Salix sp.</i>	Willow													1s
<i>Ulmus sp.</i>	Chinese Elm													1



Habitat looking west adjacent to NHL4



Rocky outcrops towards south-east of NHL3



Degraded pasture and native grass, NHL3



Highly degraded pasture, location NHL2



Habitat looking south towards location NHL4



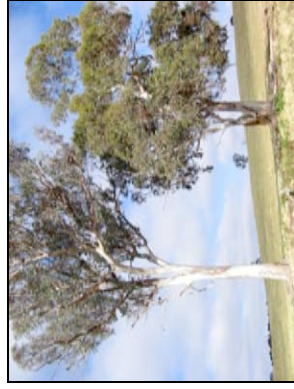
View of habitat looking south towards NHL4



Habitat- looking south along the way to NHL3



View towards west from location NHL3



View looking north-east from location NHL4



Habitat adjacent to location NHL12



Some depressions along drainage lines



Area between locations NHL2 and NHL3

Plate 23. Photographs showing vegetation and general habitat at various locations of Neighbourhood 1A

Appendix 10 - Surveys of Googong Creek