WATERWAY MANAGEMENT PLAN

LANDHOLDER DETAILS:

- Client: All Advantage Consulting
- Property Address: 14-70 Wills Street, Warragul
- Further Notes: To be read in conjunction with Landscape Plan, construction & design drawings

RESPONSIBLE AUTHORITIES:

- Baw Baw Shire Council
- West Gippsland Catchment Management Authority

LANDHOLDER RESPONSIBILTIES:

The landholder will be responsible for implementing all actions detailed in this plan including environmental weed control, landscaping/revegetation and on-going maintenance for 24 months to ensure the protection of the waterway.

DESCRIPTION OF LAND

The property is currently being used for low-intensity stock grazing with two large industrial blocks on the northern boundary adjoining Wills Street. The intended future use for the property is a business park development.

Hazel Creek flows 500m south-west to east within the property. The creek enters the south-west end from under the Princes Hwy and exits the property at the eastern boundary. Hazel Creek is a tributary of the Latrobe River Catchment which eventually flows into the Gippsland Lakes system.

There is an unnamed seasonal waterway entering the property from the north flowing into Hazel Creek within the property. There is also another unnamed waterway entering the property from the southern boundary flowing into Hazel Creek.

The property is a highly modified landscape. The land for the industrial blocks has been raised to mitigate risk of flood. The grazed area down to the creek banks have been cleared of all native remnant vegetation, primarily composing now of typical pasture grass species and Rush species *Juncus spp*. that have populated the wet ground. Hazel Creek has also been significantly modified having recently been cleaned out with an excavator to improve water flow. The creek now has no vegetation on the banks and very little within the creek bed. The developed land will require Hazel Creek to be moved so that it follows the southern boundary before entering a proposed constructed wetland in the south-east corner of the property.

Figure 1: Aerial map highlighting 14-70 Wills Street, Warragul and Hazel Creek flowing west to east in property.

FLORA AND FAUNA

The property has been assessed for the *Giant Gippsland Earthworm* and *Warragul Burrowing Crayfish*. A draft report was prepared in 2019 by Dr. Beverley Van Praagh from Invert-Eco Consulting. It outlined populations on site that will be affected by the redevelopment of the site. Several recommendations have been presented and have been considered in this Waterway Management Plan.

The property does not currently have any vegetation of significance, though once the realigned Hazel Creek and wetland system has been constructed, revegetation using plant species typical of EVC 126 Swampy Riparian Complex and EVC 29 Damp Forest of the Strzelecki Ranges bioregion will be considered in-line with the Waterway Management Plan Guidelines developed by West Gippsland Catchment Management Authority and Baw Baw Shire Council.

Figure 2: EVC Mapping of 14-70 Wills Street, Warragul

Pest Plant Management

The Princes Hwy roadside reserve adjoins the site along the southern boundary and does feature a range of woody weeds that if not controlled, poses a risk of population spread into the realigned Hazel Creek waterway reserve overtime.

The primary concern is a population of *Salix spp.* Willow species growing on the banks of Hazel Creek between the highway and the property boundary fence. Willow is an environmental weed of significance and if left untreated, will spread downstream and alter the watercourse overtime.

It is recommended the Willow, whilst not within the property, is still controlled during the redevelopment and Hazel Creek realignment works.

Control is best achieved by applying straight glyphosate 360 herbicide to the cambium layer of the stem 6-12 months prior to removing the biomass of tree. Cut stumps are to be left in-situ to maintain stream bank integrity. Drill and fill, or frill and paint, are proven control techniques. Killing the tree prior to removal of biomass reduces the threat of downstream spread of still living vegetative matter moving off-site during the tree removal process. Willow are well known for population spread by vegetative matter (limbs to small stems) moving downstream and reshooting.

Other exotic trees exist on the Princes Hwy roadside reserve which can be controlled using the same techniques as above to reduce spread in the proposed realigned Hazel Creek waterway reserve.

Rubus spp. Blackberry was not observed but likely growing on the Princes Highway roadside reserve. Prior to works starting, it is recommended that a blackberry control sweep is undertaken to reduce any risks of future spread.

Following earthworks, ground disturbance provides ideal conditions for weed seeds to germinate. It is important to conduct targeted weed control activities post-ground disturbance.

Figure 3: Map highlighting area of Willows outside of property on Hazel Creek that require control.

Warragul Burrowing Crayfish Management

The site has been mapped for *WBC* populations with the locations of habitat identified as being impacted by the development of the property.

Best management practices will be acquired from the following documents:

- *Warragul Burrowing Crayfish Habitat Protection and Disturbance Mitigation for Planned Wetlands and Retardation Basins*, Report May 2015, by Dr. Beverley Van Praagh
- *Waterway Management Plan Guidelines*, September 2017, WGCMA & Baw Baw Shire Council
- *Constructed Waterway Design Manual*, December 2019, Melbourne Water

Five management options will be implemented to best manage the population during habitat loss and disturbance. These include:

1. **Design the realigned Hazel Creek waterway reserve with crayfish friendly design features**
    a. Design wetlands and retardation basins to include a complex shape that increase the surface area around the periphery so that a greater area of suitable *WBC* habitat is available.
    b. Include raised peninsulas of less saturated areas in design, that may provide habitat or refuge for crayfish during times of high-water retention within the system
    c. Design shaping and gradient of edges to provide suitable *WBC* habitat
2. **Undertake a translocation rescue and release program**
    a. Develop a *Warragul Burrowing Crayfish Translocation Management Plan* prior to undertaking program.
    b. Construct the realigned Hazel Creek waterway reserve during the summer season to reduce impact on soil profile. Follow up landscaping works in autumn. This will prepare the area for the translocation program.
    c. Have someone on site during excavations of known crayfish population areas to rescue and translocate crayfish, releasing the crayfish into the Primary and Secondary Buffer Zones in the realigned Hazel Creek waterway reserve.
3. **Create suitable crayfish habitat in realigned Hazel Creek waterway reserve for recruitment and/or translocation**
    a. Create mosaics in the Primary and Secondary Buffer Zones, using a range of ground coverings including jute mesh (product type yet to be finalised), thick and thin jute matting, mulch, and bare ground. Where areas are identified as bare ground, install *WBC* interpretive signage.
    b. Add small ponds along the realigned Hazel Creek.
    c. Add riffle rocks to the realigned Hazel Creek.
    d. Construct the realigned Hazel Creek to have a benched profile, rather than a defined channel.
4. **Revegetate the realigned Hazel Creek waterway reserve in accordance with best management practices**
    a. Use species typical of EVC 126 Swampy Riparian Complex and EVC 29 Damp Forest.
    b. Use species suggested in Melbourne Water's Constructed Waterway Design Manual.
    c. Plant out mosaics accordingly in the Primary and Secondary Buffer Zones, using a range of ground coverings including jute mesh, jute matting, mulch and bare ground.
    d. Use fine bush mulch in the Secondary Buffer Zone above flood levels, rather than coarse large particle sized mulch.

5. **Undertake best management practices for maintenance of the realigned Hazel Creek waterway reserve**
    a. Avoid fertiliser use for the Path Zone mown grass reserve.
    b. Adopt an integrated approach to weed control by sensitively apply herbicides where necessary to control environmental weeds and maintain amenity, hand weeding and grubbing with hand tools.

Figure 4: Jute mesh will be trialled in the Primary and Secondary Buffer Zones to assist in creating opportunities for crayfish habitat. The benched area immediately above the regular flow channel zone will feature a mosaic of jute mesh types, thin and thick jute matting and small areas of bare earth. Jute mesh will also be utilised in some areas around the wetland to trial for *WBC* management.

SITE PHOTOS

Figure 5: PhotoPoint map

Figure 6: PhotoPoint 1 – looking at the proposed area for the constructed wetland site

Figure 7: PhotoPoint 2 – looking at the low-lying area and unnamed seasonal drain in the property.

Figure 8: PhotoPoint 3 – looking east at a drainage channel that flows into Hazel Creek.

Figure 9: PhotoPoint 4 – Hazel Creek. The vegetation in the background is on the Princes Hwy roadside reserve, outside of this property. There are environmental weeds growing on the roadside reserve outside of the property boundary and will be controlled to remove downstream risk.

Figure 10: PhotoPoint 5 – Hazel Creek looking downstream.

PROPOSED HAZEL CREEK REALIGNMENT & CONSTRUCTED WETLAND LANDSCAPING

The waterway reserve requires revegetation to achieve improved catchment and biodiversity values. To assist in planning, implementing, and maintaining the reserve, six distinct management zones have been identified:

- **Wetland Zone**

The Wetland Zone is in the south-east corner of the property. The proposed Hazel Creek realignment will flow into the wetland, then exit into the existing creek line in the adjoining property.

The wetland will feature planting areas typical of a constructed wetland in accordance with Melbourne Water's Constructed Wetland Guidelines. Planting areas to include:

I. Submerged Marsh (0.35 – 0.7m below NTWL) – 1 plant per m^2
II. Deep Marsh (0.15 – 0.35m below NTWL) – 2 plants per m^2
III. Shallow Marsh (0.1 – 0.15m below NTWL) – 2 plants per m^2
IV. Ephemeral Marsh (0.35m above NTWL) – 6 plants per m^2 into jute mat

Littoral planting zone will cover the intermediate area between Ephemeral Marsh and Terrestrial zones. Planting density is 6 plants per m^2 into jute matting. This zone may be subject to occasional seasonal inundation. Some areas will be identified for jute mesh to trial habitat creation for crayfish.

The Terrestrial planting zone has no risk of flooding and is mulched and planted at a density of 4 plants per m^2. A mown grass area with semi advanced trees will be considered for amenity.

A gas-line easement features along the southern boundary and will remain a grassed area. Access for maintenance will be achieved from the neighbouring property.

- **Sediment Pond / WSUD Zone**

A sediment pond will be constructed to collect stormwater, sediment and litter, preventing it from entering the downstream catchment. This will be a permanent open water inlet trapping litter and sediment for Water Sensitive Urban Design treatment. The Ephemeral Marsh will be planted to protect banks and provide a natural barrier to the open water. Access for maintenance and a sediment drying pad will be required and available space planted accordingly using Terrestrial zone species. A recreation zone is also considered for amenity.

- **Lower Bank – Channel Zone**

This zone is the regular flow channel of Hazel Creek.

The bank and toe of the 3.0m wide channel will be planted using species typical of a Shallow and Deep Marsh zone for a constructed wetland. Within the channel, various aquatic species typical of Submerged Marsh zone for a constructed wetland will be considered. The 1.5m banks of the regular flow channel will be jute matted and planted at a density of 6 plants per m^2 utilising species typical of an Ephemeral Marsh zone of a constructed wetland. Coir logs may also be considered along the bank toe to mitigate soil erosion.

Species once established will be able to withhold periods of high flow events and inundation. Jute matting is important to mitigate erosion, reduce soil movement and assist in plant establishment.

- **Primary Buffer Zone**

This zone is the 5m wide benched area on both sides of the regular flow channel. The benching will be subject to occasional inundation.

To assist in creating *Warragul Burrowing Crayfish* habitat, this buffer zone will feature a mosaic of jute mesh, jute matting and bare earth trail plots. Jute mesh will allow for soil stabilisation and assist in plant establishment, but not entirely cover the ground encouraging *WBC* and other burrowing crayfish habitat. This zone if constructed prior to the rest of the site's earthworks can provide suitable habitat for relocating *WBC* during construction of the development north of Hazel Creek.

Planting density will be 6 plants per m^2 utilising species typical of the Ephemeral Marsh and Littoral zones of a constructed wetland. Bare earth plots will feature plants at 4 plants per m^2.

The landscape design will focus on a dense ground layer of vegetation including large-tufted graminoids, grasses, lilies, rushes and groundcovers, with a scattering of understorey and tall canopy species throughout.

- **Secondary Buffer Zone**

This zone is either side of the channel and provides a buffer between the Primary Buffer Zone and the Path Zone. This area will comprise of a mixture of ground materials including jute mesh, jute matting and bare earth trial plots extending 7m up the bank, then the remainder of the bank will be mulched using a suitable bush mulch.

This zone will be revegetated utilising species from EVC 126 Swampy Riparian Complex and EVC 29 Damp Forest, Strzelecki Ranges. Planting density in the jute matting is 6 plants per m^2, and 4 plants per m^2 in the mulch. Bare earth plots will feature plants at 4 plants per m^2.

The landscape design will focus on a dense ground layer of vegetation including large-tufted graminoids, grasses, lilies, rushes and groundcovers, with a scattering of understorey and tall canopy species throughout.

- **Path Zone**

This area is a 2m mown grass buffer between the Secondary Buffer Zone and concrete shared pathway in the roadside reserve.

There will not be a mown area on the Princes Hwy side of Hazel Creek. This area will be mulched and planted utilising species from EVC 126 Swampy Riparian Complex and EVC 29 Damp Forest, Strzelecki Ranges.

DESIGN FEATURES

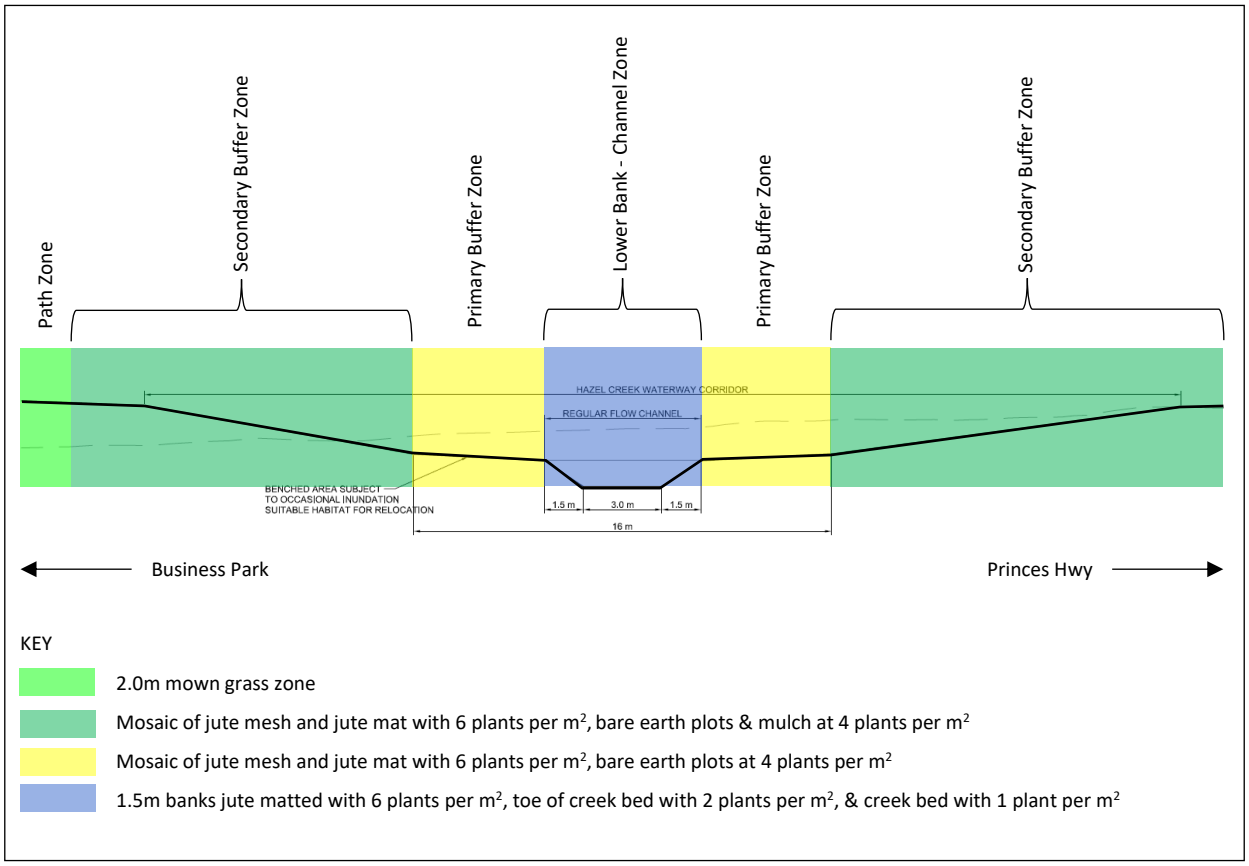

Figure 11: Typical cross-section of the realigned Hazel Creek noting the different zones to be planted.

WATERWAY MANAGEMENT ACTIVITIES

Plan Code	Management Zone	Description	Assets	Establishment Maintenance	Frequency	Handover Benchmark	Ongoing Maintenance	Frequency
	Wetland Zone	Shallow and deep marsh wetland areas typically subject to water depths between NTWL to 600mm. Hazel Creek flows into the wetland system, unlikely to dry out during summer months. Open water pools/water bodies 0.6 to 2.0m deep below NTWL.	• Wetland planting around shallow marsh, ephemeral and littoral zones using jute matting and density of 6 plants per m^2 • Wetland planting in shallow marsh, deep marsh zones, and submerged marsh zones at 2 plants per m^2 • Terrestrial garden beds in mulch with planting density of 4 plants per m^2 • Open water/deep pools • Inlets/outlet structures, bypass channels, spillways, rockwork, weirs and drop structures • Gas-line easement	• Weed control and removal of litter to <1% • Plant replacement/infill planting to achieve densities • Sediment removal: refer to Stormwater Management Plan requirements • Ensure inlet/outlet structures are free of debris and vegetation so pond levels remain • Maintain grass over gas-line easement	12 visits annually	• Removal of weeds and litter to <1% • 95% coverage of all planting zones • No evidence of erosion • Inlet/outlet zones functioning • Refer to site specific Stormwater Management Plan requirements	• Weed control • Litter removal • Monitor plant health • Monitor inlet/outlet zones • Monitor pond levels • Sediment dewatering and removal: Refer to Stormwater Management Plan • Grass slashing over gas-line easement	6 visits annually
	Sediment Pond/WSUD Zone	Permanent open water inlet zone of the constructed wetland. This is a WSUD treatment for the business park where sediment and litter is trapped and periodically removed as part of routine maintenance.	• Drainage structure, culverts, pits, and pipes • Gross pollutant trap, inlet structures • Gravel access maintenance track and sediment dewatering area • Signage, gate and fencing • Wetland planting around shallow marsh, ephemeral and littoral zones using jute matting and density of 6 plants per m^2 • Terrestrial garden beds in mulch with planting density of 4 plants per m^2	• Weed control and removal of litter to <1% • Plant replacement/infill planting to achieve densities • Sediment removal: refer to Stormwater Management Plan requirements • Ensure inlet/outlet structures are free of debris and vegetation so pond levels remain	12 visits annually	• Removal of weeds and litter to <1% • 95% coverage of all planting zones • No evidence of erosion • Inlet/outlet zones functioning • Refer to site specific Stormwater Management Plan requirements	• Weed control • Litter removal • Monitor plant health • Monitor inlet/outlet zones • Monitor pond levels • Sediment dewatering and removal: Refer to Stormwater Management Plan	6 visits annually

	Lower Bank – Channel Zone	Hazel Creek is a regular flow channel and is subject to frequent inundation after local rainfall. The width of the regular flow channel is 6m, including creek bed of 3.0m and banks of 1.5m either side.	• The banks will be jute matted and planted at a density of 6 plants per m^2 • The margin of the creek bed planted at 2 plants per m^2 • The creek bed planted at 1 plant per m^2. • Rockwork • Online ponds with rock riffles	• Weed control and removal of litter to <1% • Plant replacement/infill planting to achieve densities • Monitor erosion	12 visits annually	• Removal of weeds and litter to <1% • 95% coverage of all planting zones • No evidence of erosion • Targets for naturally occurring Typha and Phragmites have been met	• Weed control • Litter removal • Monitor plant health • Monitor Typha and Phragmites population, control where necessary	6 visits annually
	Primary Buffer Zone	This is a benched area subject to occasional inundation and is 5m wide either side of the Lower Bank – Channel Zone.	• This benched zone will be considered for *Warragul Burrowing Crayfish* habitat and feature jute mesh ground covering and planted at a density of 6 plants per m^2.	• Weed control and removal of litter to <1% • Plant replacement/infill planting to achieve densities • Monitor *WBC* and other burrowing crayfish species activity	12 visits annually	• Removal of weeds and litter to <1% • 80% coverage of all planting zones • Removal of any tree guards	• Weed control • Litter removal • Monitor plant health • Monitor *WBC* and other burrowing crayfish species activity	6 visits annually
	Secondary Buffer Zone	This area forms the remaining bank either side of the Hazel Creek waterway corridor above the Primary Buffer Zone.	• Features 7m wide jute matting starting at boundary of Primary Buffer Zone heading up the bank and planted at a density of 6 plants per m^2 • Remaining area (top of bank) will be mulched and planted at 4 plants per m^2	• Weed control and removal of litter to <1% • Plant replacement/infill planting to achieve densities • Ensure mulch coverage is adequate and top up as needed	12 visits annually	• Removal of weeds and litter to <1% • 80% coverage of all planting zones • Removal of any tree guards • Top up mulch if required	• Weed control • Litter removal • Monitor plant health • Top up mulch borders where required	6 visits annually
	Path Zone	This area is intended for passive recreation and provides a mown buffer along the concrete pathway. The grass reserve will be of suitable grass seed mix sown and maintained regularly for amenity.	• Mown grass area	• Weed control and removal of litter to <1% • Mow grass regularly to maintain a height of 100mm • Maintain spray edge bordering the Secondary Buffer Zone	16 visits annually	• Removal of broadleaf/herbaceous weeds in grass areas <5% • 95% grass coverage • Removal of litter <1%	• Weed control • Litter removal • Mow grass on a regular maintenance program • Maintain spray edge bordering the Secondary Buffer Zone	Monthly

PLANT SCHEDULES

Wetland & Sediment Pond

Botanical Name	Common Name	Pot Format
Terrestrial/Littoral Zone – 4 plants per m^2		
Tall canopy		
Acacia melanoxylon	Blackwood	200cm^3
Eucalyptus strzeleckii	Strzelecki Gum	200cm^3
Eucalyptus ovata	Swamp Gum	200cm^3
Eucalyptus viminalis	Manna Gum	200cm^3
Eucalyptus obliqua	Messmate	200cm^3
Understorey		
Acacia dealbata	Silver Wattle	200cm^3
Acacia verticillata	Prickly Moses	200cm^3
Bursaria spinosa	Sweet Bursaria	200cm^3
Cassina aculeata	Common Cassinia	200cm^3
Coprosma quadrifida	Prickly Currant-bush	200cm^3
Goodenia ovata	Hop Goodenia	200cm^3
Leptospermum continentale	Prickly Teatree	200cm^3
Leptospermum lanigerum	Woolly Teatree	200cm^3
Melaleuca ericifolia	Swamp Paperbark	200cm^3
Melaleuca squarrosa	Scented Paperbark	200cm^3
Olearia lirata	Snowy Daisy-bush	200cm^3
Ozothamnus ferrugineus	Tree Everlasting	200cm^3
Pomaderris aspera	Hazel Pomaderris	200cm^3
Prostanthera lasianthos	Victorian Mint-bush	200cm^3
Groundcovers/grasses/sedges/lilies/climbers		
Aceana novea-zelandiae	Bidgee-widgee	200cm^3
Carex appressa	Tall Sedge	200cm^3
Clematis aristata	Mountain Clematis	200cm^3
Dichondra repens	Kidney Weed	200cm^3
Dianella tasmanica	Tasman Flax-lily	200cm^3
Gahnia sieberiana	Red-fruit Saw-sedge	200cm^3
Lomandra longifolia	Spiny-headed Mat-rush	200cm^3
Poa ensiformis	Purple-sheath Tussock-grass	200cm^3
Poa labillardieri	Common Tussock-grass	200cm^3
Microlaena stipoides	Weeping Grass	200cm^3
Viola hederacea	Native Violet	200cm^3
Ephemeral Marsh – 6 per m^2		
Carex appressa	Tall Sedge	90cm^3
Carex fascicularis	Tassel Sedge	90cm^3
Carex tereticaulis	Hollow Sedge	90cm^3
Cyperus lucidus	Leafy Flat-sedge	90cm^3
Juncus amibilis	Hollow Rush	90cm^3
Juncus australis	Austral Rush	90cm^3
Juncus flavidus	Yellow Rush	90cm^3
Juncus gregiflorus	Green Rush	90cm^3
Juncus pallidus	Pale Rush	90cm^3
Juncus pauciflorus	Loose Flower Rush	90cm^3
Juncus procerus	Tall Rush	90cm^3
Juncus subsecundus	Finger Rush	90cm^3
Shallow Marsh – 2 per m^2		
Alisma plantago-aquatica	Water Plantain	550cm^3

Baloskion tetraphyllum	Tassel Cord-rush	550cm^3
Bolboschoenus caldwellii	Salt Club-rush	550cm^3
Bolboschoenus medianus	Marsh Club-rush	550cm^3
Crassula helmsii	Swamp Stonecrop	550cm^3
Eleocharis acuta	Common Spike Rush	550cm^3
Lycopus australis	Australian Gypsywort	550cm^3
Lythrum salicaria	Purple Loose-strife	550cm^3
Neopaxia australasica	White Purslane	550cm^3
Persicaria decipiens	Slender Knotweed	550cm^3
Persicaria praetermissa	Spotted Knotweed	550cm^3
Ranunculus inundatus	River Buttercup	550cm^3
Deep Marsh – 2 per m^2		
Baumea articulata	Jointed Twig - Sedge	550cm^3
Cladium procerum	Leafy Twig-rush	550cm^3
Myriophyllum crispatum	Water-milfoil	550cm^3
Myriophyllum simulans	Amphibious Milfoil	550cm^3
Eleocharis sphacelata	Tall Spike Rush	550cm^3
Schoenoplectus tabernaemontani	River Club-rush	550cm^3
Triglochin procera	Water Ribbons	550cm^3
Submerged Marsh – 1 per m^2		
Potamogeton crispus	Curly-leaf Pondweed	550cm^3
Potamogeton ochreatus	Blunt Pondweed	550cm^3
Vallisneria australis	Eel Grass	550cm^3

Pot Notes:

90cm^3	Hiko cell
200cm^3	Forestry tube
550cm^3	Aquatic pot

Lower Bank Channel

Botanical Name	Common Name	Pot Format
Ephemeral Marsh – 6 per m^2		
Aceana novea-zelandiae	Bidgee-widgee	90cm^3
Carex appressa	Tall Sedge	90cm^3
Carex fascicularis	Tassel Sedge	90cm^3
Cyperus lucidus	Leafy Flat-sedge	90cm^3
Juncus amibilis	Hollow Rush	90cm^3
Juncus australis	Austral Rush	90cm^3
Juncus flavidus	Yellow Rush	90cm^3
Juncus gregiflorus	Green Rush	90cm^3
Juncus pallidus	Pale Rush	90cm^3
Juncus procerus	Tall Rush	90cm^3
Juncus subsecundus	Finger Rush	90cm^3
Poa ensiformis	Purple-sheath Tussock-grass	90cm^3
Poa labillardieri	Common Tussock-grass	90cm^3
Shallow Marsh – 2 per m^2		
Alisma plantago-aquatica	Water Plantain	550cm^3
Crassula helmsii	Swamp Stonecrop	550cm^3
Eleocharis acuta	Common Spike Rush	550cm^3
Lycopus australis	Australian Gypsywort	550cm^3
Lythrum salicaria	Purple Loose-strife	550cm^3
Persicaria decipiens	Slender Knotweed	550cm^3
Persicaria praetermissa	Spotted Knotweed	550cm^3
Deep Marsh – 2 per m^2		
Baumea articulata	Jointed Twig - Sedge	550cm^3
Schoenoplectus tabernaemontani	River Club-rush	550cm^3
Triglochin procera	Water Ribbons	550cm^3
Submerged Marsh – 1 per m^2		
Vallisneria australis	Eel Grass	550cm^3

Pot Notes:

90cm^3	Hiko cell
550cm^3	Aquatic pot

Primary Buffer Zone

Botanical Name	Common Name	Pot Format
Ephemeral Marsh – 6 per m^2		
Aceana novea-zelandiae	Bidgee-widgee	$90cm^3$
Carex appressa	Tall Sedge	$90cm^3$
Dichondra repens	Kidney Weed	$90cm^3$
Juncus australis	Austral Rush	$90cm^3$
Juncus flavidus	Yellow Rush	$90cm^3$
Juncus gregiflorus	Green Rush	$90cm^3$
Juncus subsecundus	Finger Rush	$90cm^3$
Lomandra longifolia	Spiny-headed Mat-rush	$90cm^3$
Lycopus australis	Australian Gypsywort	$90cm^3$
Lythrum salicaria	Purple Loose-strife	$90cm^3$
Poa ensiformis	Purple-sheath Tussock-grass	$90cm^3$
Poa labillardieri	Common Tussock-grass	$90cm^3$
Persicaria decipiens	Slender Knotweed	$90cm^3$

Pot Notes:
$90cm^3$ Hiko cell

Secondary Buffer Zone

Botanical Name	Common Name	Pot Format	Quantity
Terrestrial/Littoral Zone – 4 plants per m^2			
Tall canopy			
Acacia melanoxylon	Blackwood	200cm^3	
Eucalyptus strzeleckii	Strzelecki Gum	200cm^3	
Eucalyptus ovata	Swamp Gum	200cm^3	
Eucalyptus viminalis	Manna Gum	200cm^3	
Eucalyptus obliqua	Messmate	200cm^3	
Understorey			
Acacia dealbata	Silver Wattle	200cm^3	
Acacia verticillata	Prickly Moses	200cm^3	
Bursaria spinosa	Sweet Bursaria	200cm^3	
Cassina aculeata	Common Cassinia	200cm^3	
Coprosma quadrifida	Prickly Currant-bush	200cm^3	
Goodenia ovata	Hop Goodenia	200cm^3	
Leptospermum continentale	Prickly Teatree	200cm^3	
Leptospermum lanigerum	Woolly Teatree	200cm^3	
Melaleuca ericifolia	Swamp Paperbark	200cm^3	
Melaleuca squarrosa	Scented Paperbark	200cm^3	
Olearia lirata	Snowy Daisy-bush	200cm^3	
Ozothamnus ferrugineus	Tree Everlasting	200cm^3	
Pomaderris aspera	Hazel Pomaderris	200cm^3	
Prostanthera lasianthos	Victorian Mint-bush	200cm^3	
Groundcovers/grasses/sedges/lilies/climbers			
Aceana novea-zelandiae	Bidgee-widgee	200cm^3	
Carex appressa	Tall Sedge	200cm^3	
Clematis aristata	Mountain Clematis	200cm^3	
Dichondra repens	Kidney Weed	200cm^3	
Dianella tasmanica	Tasman Flax-lily	200cm^3	
Gahnia sieberiana	Red-fruit Saw-sedge	200cm^3	
Juncus australis	Austral Rush	200cm^3	
Juncus gregiflorus	Green Rush	200cm^3	
Juncus pauciflorus	Loose Flower Rush	200cm^3	
Lomandra longifolia	Spiny-headed Mat-rush	200cm^3	
Poa ensiformis	Purple-sheath Tussock-grass	200cm^3	
Poa labillardieri	Common Tussock-grass	200cm^3	
Microlaena stipoides	Weeping Grass	200cm^3	
Viola hederacea	Native Violet	200cm^3	

Pot Notes:

90cm^3	Hiko cell
200cm^3	Forestry tube
550cm^3	Aquatic pot