

# Constructed Wetlands



Bluedale is a specialist grower of wetland plants native to the all regions of NSW. The plants profiled on the following pages are commonly used in most natural and artificial wetland applications. We also grow local provenance native wetland plants by request. We would be pleased to provide free advice on species suitable for your project. Site visits can also be arranged.

**Contact: Ph 02 6586 0100 or Fax 02 6586 0200 [www.bluedale.com.au](http://www.bluedale.com.au)**

**Constructed Wetland** projects fall into 2 main categories, each requiring a different approach.

1. **Restoration of an existing natural wetland.** Plants are re-established after disturbance by development and/or other activities. In these cases often a species list has been prepared based on a botanical site survey to identify endemic species. Bluedale can undertake a site visit to identify plants and assist with plant species selection for both fresh water and saline—brackish water wetlands.
2. **A constructed wetland to catch and treat storm water** from developments or as a final stage filter for the treatment of sewerage grey water at municipal sewerage treatment plants. This 2nd category of constructed wetland requires the expertise of hydraulic engineers to design the system to suit the required location. Bluedale can provide contacts with a company who can do this for you.

**Planting:** Bluedale recommends Viro-tubes be the smallest size growing container used, however should there be budget constraints and Viro-cells need to be used, then planting must be into shallow water, a maximum of 100mm deep and maintained until plants have quadrupled in size, any deeper during this period and plants may drown. A note of caution, wading water birds feeding in shallow water often dislodge the small Viro-cells, be sure to protect the young plants during establishment.

**Viro-tubes can be planted into 300mm to 400mm of water**, their larger size and rhizomes allow them to survive in deeper water without drowning. Remember this Golden Rule; plant with at least 1/3 of the leaf area above the water line. Water levels will need to be maintained until established.

[Always Remember The Golden Rule;](#)

**Plant with a minimum of 1/3 of the foliage above the high water line.**

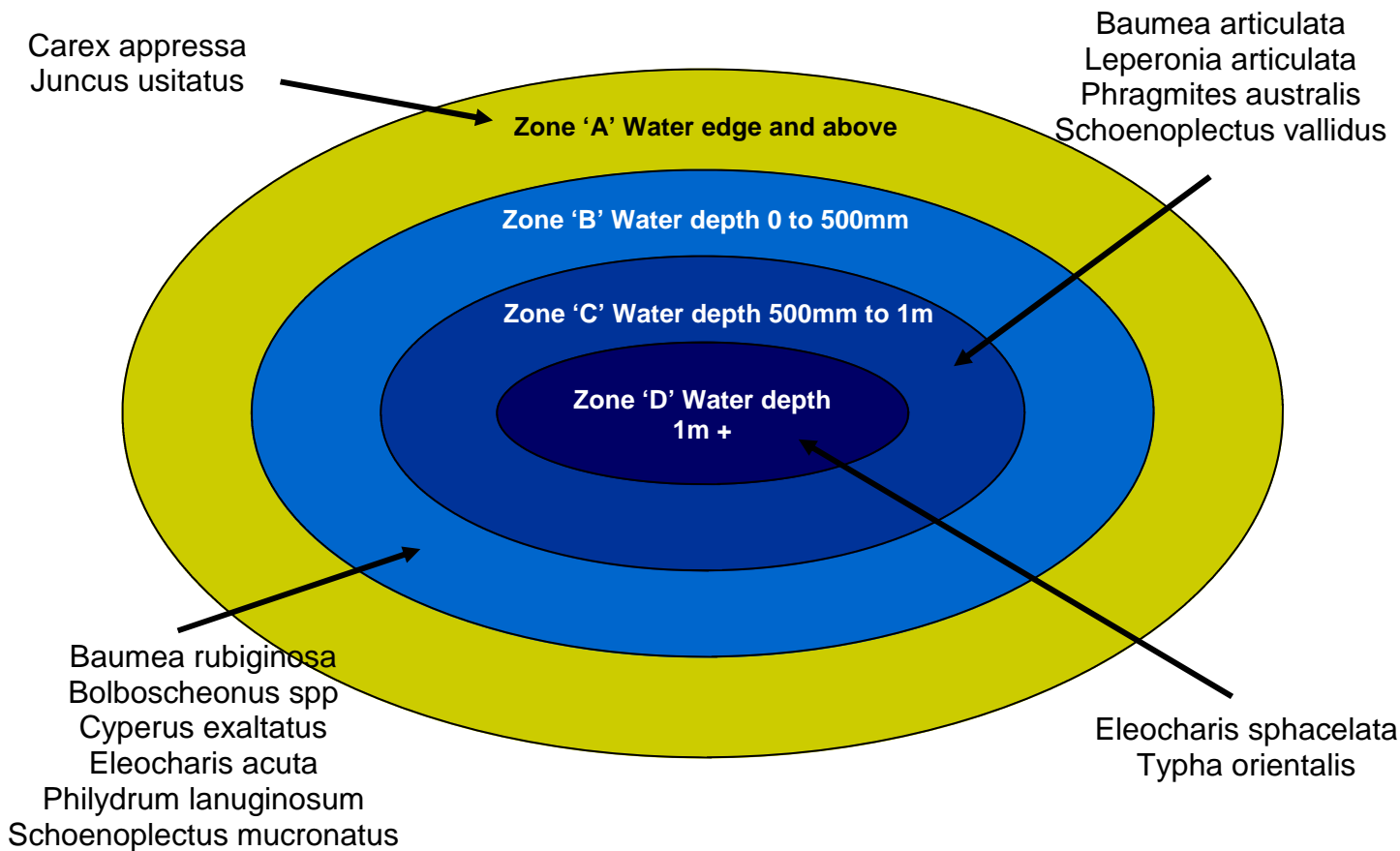
## Guidelines for successful wetland planting.

1. **ORDER THE PLANTS IN ADVANCE.** Bluedale regularly carry stock of the most commonly used wetland plants. We do however recommend advance ordering for even smaller projects. This will ensure no delays in supply.
2. Ensure all weeds on the site have been removed prior to planting. Use Glyphosate.
3. Ensure water level control mechanism's are in place, either a pump or purpose built weir.
4. If planting into dry ground (i.e. no water in wetland basin) have your irrigation methods in place prior to the commencement of planting, as wetland plants need to be kept moist.
5. If the water in the basin is cloudy the use of Aluminum sulfate or Gypsum as per manufactures directions, to clear and settle the dispersed clays will help the plants to establish by allowing light through for photosynthesis.
6. Have measures in place to protect plants from wading water birds. Either netting or wire cages. Bluedale can put you in touch with a supplier of bird cages to protect plants.

## Maintenance of Constructed Wetlands.

1. Ensure that water levels are monitored and maintained during establishment period.
2. Seasonal drying of the wetland will mimic a natural system and allow for easy maintenance.
3. Use bird protection measures when establishing young plants. Remove when established.
4. Replace any failed plants, if needed.
5. Remove any non desirable plants or weeds throughout the maintenance period.

# Fresh Water Plant Habitat Zones



# Saline/Brackish Water Plant Habitat Zones

