

FLORA

AQUATIC PLANTS

The main species used for this purpose are Common Reed (*Phragmites australis*) and Tall Spike-rush (*Eleocharis sphacelata*). Swamp Paperbark trees such as *Melaleuca ericifolia* and *M. squarrosa* which have been planted on the waters edge also take up and store pollutants and excessive nutrients.



Juncus kraussii (Sea Rush)

NATIVE VEGETATION

All of the vegetation that has been used in the landscaping of the six hectare wetland are local native species that occur naturally in northern Tasmanian wetlands. Over 10,000 native trees, shrubs and grasses have been planted with the main emphasis being placed on providing habitat for local native wildlife.

CLOCKWISE *Melaleuca ericifolia* (Swamp Paper Bark), *Acacia mearnsii* (Black Wattle), *Gahnia grandis* (Saw Sedge), *Melaleuca squamea* (Swamp Honey-myrtle)

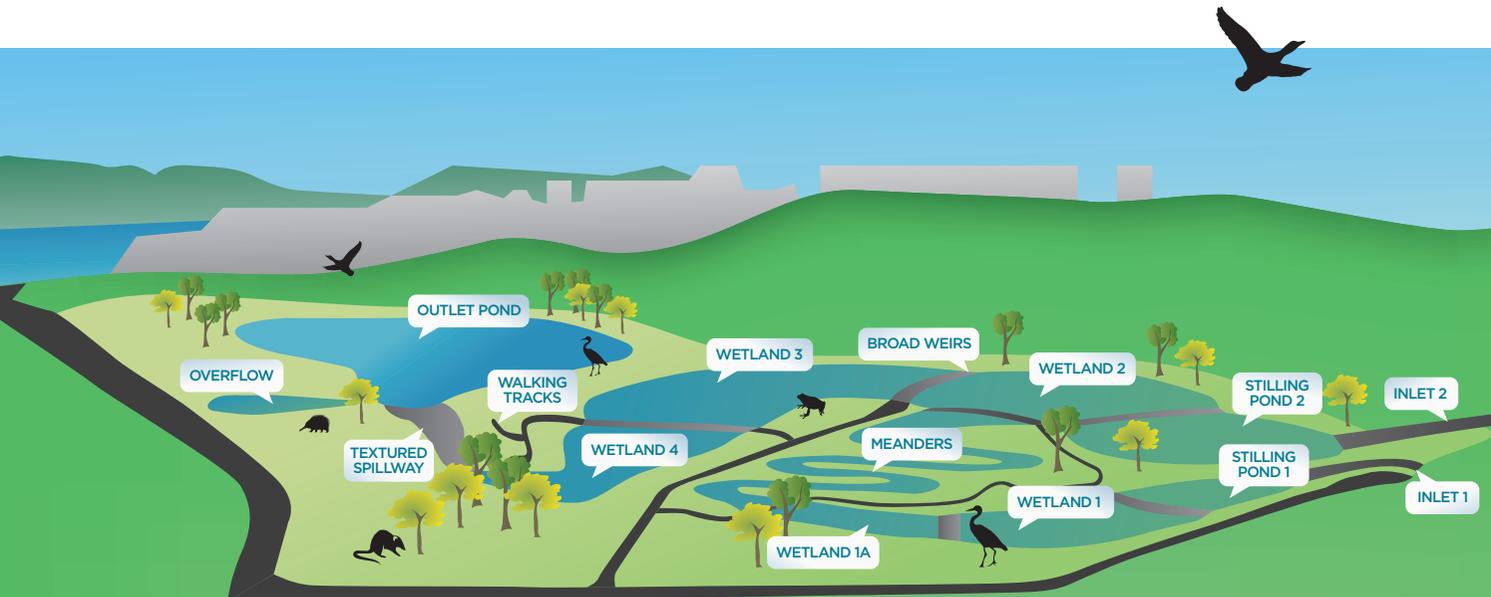


WETLANDS

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BELL BAY ALUMINIUM
PACIFIC ALUMINIUM

The Bell Bay smelter wetlands were designed primarily as a filter system for run-off water from the smelter site before entering the Tamar River environs.



The wetlands were constructed between January to June 1996.

FILTER SYSTEM

The filtering system consists of thousands of aquatic and semi-aquatic plants, planted across the smaller ponds and the main outlet pond. Species have been selected according to their known performance in artificial wetlands as rhizomatous filters. Basically this relates to the extensive underwater root systems (rhizomes) ability to take up and store materials.

STILLING PONDS

The deep stilling ponds intercept first-flush stormwater run-off from the operating site. They allow for sediments to be deposited from the water by dissipating energy from the channel flow.

BROAD WEIRS

The broad weirs were constructed from local stone, and enhance solids entrainment, minimise erosion and offer valuable substrate for colonising invertebrates. They also control depth and velocity of flow.

FAUNA

BIRDS

20 species of birds were recorded during the early construction and planting of the wetlands.



Ardea novaehollandiae (White Faced Heron)



Tadorna tadornoides (Australian Shelduck)

MAMMALS

Many mammal's tracks, such as quoll, echidna, potoroo and bandicoot, have been sighted around the wetlands.



Tachyglossus aculeatus (Short-Beaked Echidna)



TOP *Perameles gunnii* (Eastern Barred Bandicoot), *Litoria raniformis* (Growling Grass Frog)

AMPHIBIANS

A number of frog species have been recorded in the wetlands. Of particular importance is the *Litoria reniformis* which is considered by many naturalists to be declining across its range in Northern Tasmania.



REPTILES

Blue Tongue Lizard and Skink species have also made their home here.