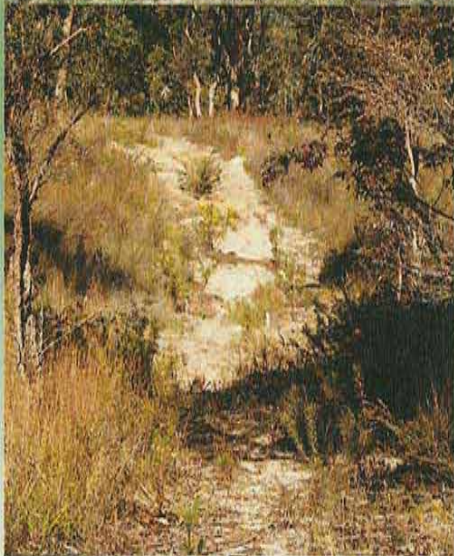


Caring for Blue Mountains Swamps



In recognition of their limited distribution, their uniqueness, and their vulnerability to ongoing threats Blue Mountains swamps are afforded special protection under a variety of legislative instruments. They were specifically listed as a vulnerable ecological community under the NSW Threatened Species Act (1995) in 2007 and also fall under the broader community definitions of “Temperate Highland Peat Swamps on Sandstone” that were listed as an endangered ecological community in 2004 under the Commonwealth Environment Protection and Biodiversity Conservation Act (1999). They are also protected as “Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps” and “Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion” which were listed as threatened ecological communities under the NSW Threatened Species Conservation Act (1995) in 2006.

However, this does not mean that they are immune from degradation and/or destruction. Traditionally swamps have been viewed as wastelands and many have been extensively modified through drainage and filling. Other swamps lie within the urban areas of the Blue Mountains or at the urban/bushland interface. This position within the landscape means that runoff from the urban areas, which is typically directed to natural drainage lines, often enters swamp systems at far greater volumes and velocities than would naturally occur.

The amelioration of the impacts of stormwater run-off, closure of informal walking tracks within sensitive swamp vegetation and the treatment of system transforming weeds is a major focus of remediation efforts. This involves an integrated approach from land managers including Blue Mountains City Council, Hawkesbury-Nepean Catchment Management Authority and the National Parks and Wildlife

Please stay out of the swamp and keep to the walking track



WHY?



- This area is a rare **Upland Swamp**.
- Swamp vegetation is very **sensitive** to disturbance.
- It supports **Endangered Species** found nowhere else including the **Giant Dragonfly** and **Blue Mountains Water Skink**.





Engineering for improved swamp form and function

Channeling and piping in swamp systems alters the capacity of swamps to stay wetted. Water enters and leaves the swamps at far quicker rates when flows are concentrated into channels. This process can cause swamp substrates to become dry and ultimately change the diversity and extent of swamp flora. The aim of remediation of channels and piping is to retain as much water above and within swamp systems. Retaining water above the swamp allows for greater infiltration of water into the ground providing gentler sub-surface flows. This is achieved by spreading water with coir logs to prevent concentrated flows and by construction of water-holding sediment fences. Remediation of in-swamp degradation of deeply incised channels and pipes is achieved by packing channels with natural products such as coir logs and sterilized straw bales and/or building check dams to hold water within the system. Stabilisation of banks can also be achieved using these “soft engineering” techniques. The advantages of using “natural” products is that they can be left in situ and will eventually become part of the organic substrates. Improved swamp hydration can be monitored using moisture probes and monitoring the condition of swamp vegetation.



Track Closures

Many swamps within the Blue Mountains have been used by both walkers and recreational off-road vehicle enthusiasts. Many contain an informal network of degraded tracks. Unfortunately these uses are incompatible with having healthy and intact swamp systems. Both vehicular and walking tracks cause degradation within swamps for a variety of reasons. Unsealed tracks erode delivering sediment to down slope areas and in time become incised. Incision of both walking and vehicular tracks causes water to concentrate causing further incision and mobilization of sediments. Walkers and vehicles introduce weed seeds and provide easy access for pest species to enter swamps. Tracks are closed using a variety of techniques including packing of incised channels, brushmatting, jute lining and coir log spreaders.

