

randwick environmental park

managing our native flora & fauna

The major threats to the preservation of native bushland, including Eastern Suburbs Banksia Scrub, are; clearing, fragmentation, weed invasion, increased nutrients, storm water runoff, infrequent and too frequent fire regimes, grazing by rabbits, rubbish and garden waste dumping, inappropriate plantings and vandalism.

The **resilience**, or ability to regenerate after disturbance, of Eastern Suburbs Banksia Scrub is relatively high compared to other Australian ecological communities. The seeds of the plant species that evolved to live on the sand, are able to survive sand movement and burying for many years. In Eastern Suburbs Banksia Scrub remnants where the vegetation has been removed but the 'A' soil horizon is still intact, then regeneration of the Eastern Suburbs Banksia Scrub is possible. This is because of the continued presence of the necessary soil micro-organisms and the soil **'seed bank'**.

At Randwick Environmental Park the vegetation is fairly open. However without the beneficial effect of fire over the past 20 to 30 years, the larger plant species *Kunzea ambigua* and *Melaleuca armillaris* have begun to dominate in many zones. This reduces **species richness**, the variety of species in a given area, as they shade out smaller or less vigorous species and prevent seed germination.

conserving eastern suburbs banksia scrub

Eastern Suburbs Banksia Scrub was very easy to clear for suburban expansion and in the last 100 years the majority has been removed. From an original area of 5,300 hectares, only 146 hectares (3%) remain, much of these in small, isolated remnants.

Only 33 hectares of Eastern Suburbs Banksia Scrub are located within conservation reserves; Botany Bay National Park, Sydney Harbour National Park and 4 hectares in Randwick Environmental Park.

Consequently this plant community, together with the soil, its micro-organisms and the seeds in the soil, has been declared an **'endangered ecological community'** under NSW's Threatened Species Conservation Act (TSC Act) and the Commonwealth's Environment Protection & Biodiversity Conservation Act (EPBC Act).

The remaining remnant patches are often small and damaged with only some of the representative plant species present in each one. This does not reduce their conservation value, rather, it reinforces the need for conservation of every last remnant; if each remnant was cleared because it did not contain every plant species, then no Eastern Suburbs Banksia Scrub remnants would remain and the ecological community would be **extinct**.

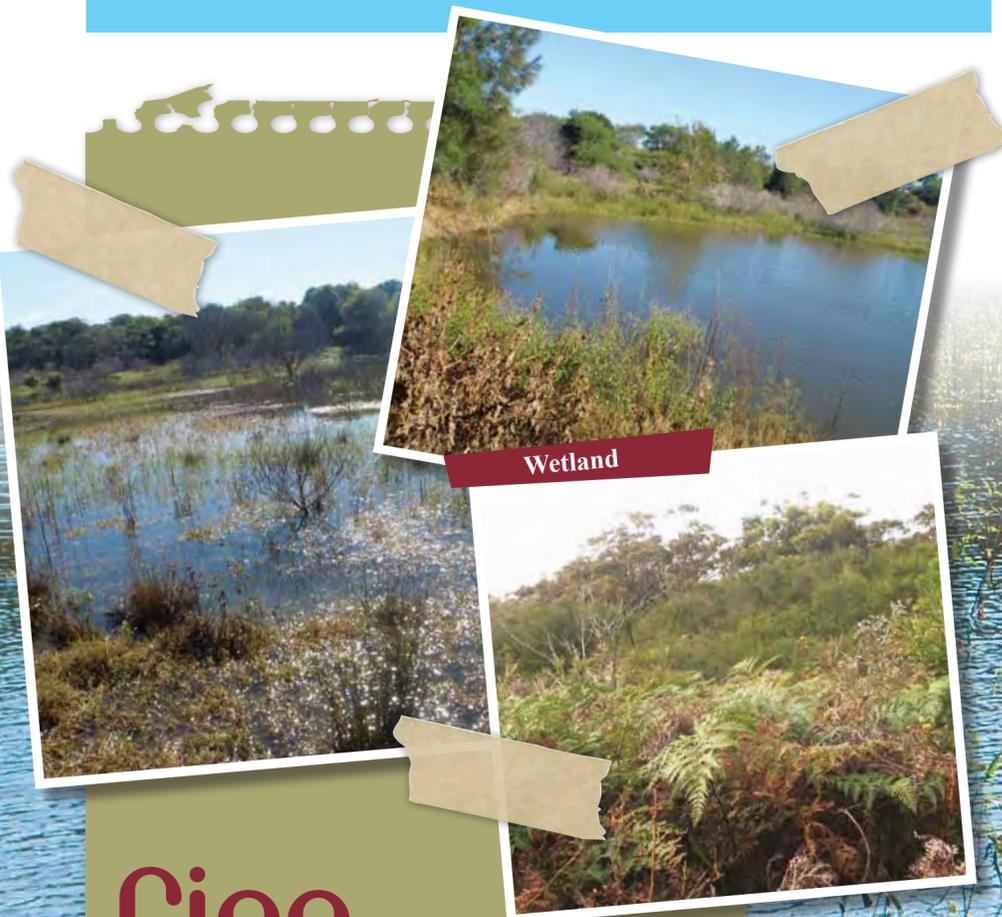
The Dept of Environment, Climate Change and Water (DECCW) has published a Recovery Plan for the Conservation of Eastern Suburbs Banksia Scrub which must be implemented by all landowners who own an area of Eastern Suburbs Banksia Scrub. DECCW has also published the 'Best Practices Guidelines for the Management of Eastern Suburbs Banksia Scrub'. Randwick City Council manages its six remnants of Eastern Suburbs Banksia Scrub in accordance with these documents.

The objectives of the Best Practices guidelines include the reduction of **threatening processes**. The major threatening processes which affect Randwick Environmental Park today are;

- weed invasion,
- the dumping of rubbish and garden waste,
- the introduction of the exotic parasitic fungi, *Phytophthora cinnamomi* and,
- predation of native fauna by foxes,
- Trampling and clearing.

Council's bush regeneration activities are designed to reduce and eliminate these threatening processes. As this is the first active conservation work undertaken in Randwick Environmental Park, it will take a few years before there is a noticeable improvement in the condition of the bushland. Council has already undertaken survey work to identify the flora and fauna of the reserve and this will continually be updated as items are discovered.

In the last hundred years considerable excavation and land-filling has been undertaken on the perimeter of Randwick Environmental Park. Over the next few years this landfill will be cleared of weeds and stabilised with local native plants.

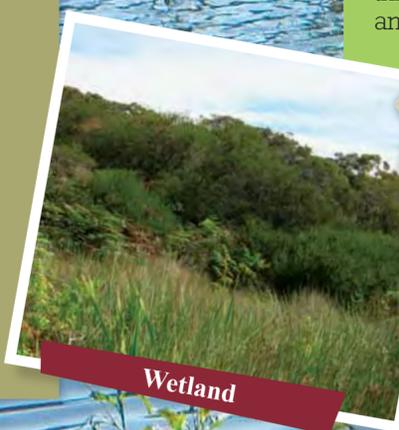


Wetland

Fire

Prior to European settlement, bush fire would have been a natural occurrence in the Sydney region bushland and many local native plants have evolved to depend on the occasional fire, approximately every 5-12 years to complete their reproductive cycle.

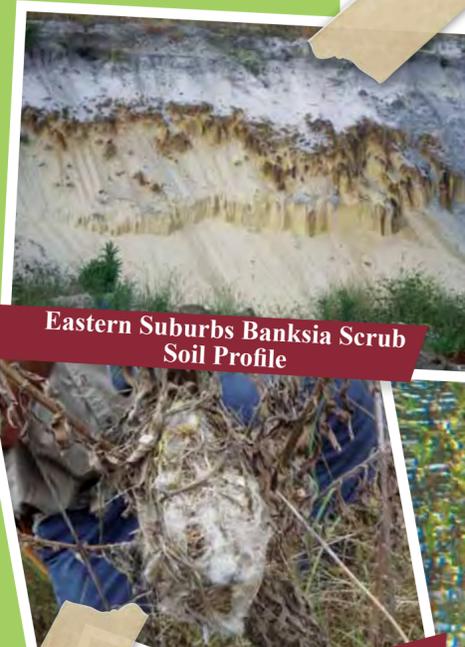
A bush fire has not occurred in Randwick Environmental Park for over 20 years. This may affect the long term survival of some plant species in the reserve.



Wetland



2009 Eastern Suburbs Banksia Scrub



Eastern Suburbs Banksia Scrub Soil Profile



Bird Nest

Micromyrtus ciliata