Endangered Ecological Communities of the Illawarra

What is an Endangered Ecological Community (EEC)?

An ecological community is an assemblage of species, including plants and animals, which occupy a particular area. They are generally recognised by the characteristic plant (tree, shrub, ground cover) species that dominate the community, in combination with other factors such as soil type, altitude, topography or location.

An Endangered Ecological Community (EEC) is an ecological community identified as facing a high risk of extinction. The NSW Threatened Species Conservation Act 1995 (TSC Act), and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) are the two pieces of legislation that identify EECs in NSW. These Acts also list threatened species, endangered populations, critical habitat and key threatening processes.

Endangered Ecological Communities are threatened by weeds, clearing of native vegetation, habitat degradation, pest animals, disease, climatic change and high frequency fires.

Any person may nominate a species, population or ecological community for listing or omission under the TSC Act or the EPBC Act. Nominations are assessed by the relevant NSW or Commonwealth scientific committee,

and must meet particular criteria to be eligible for listing under these pieces of legislation.



New Listings of EECs

This document has been prepared as an introductory guide only. It only shows those ecological communities that were listed under the TSC Act and EPBC Act at the time of publication. New listings are assessed on an ongoing basis and should be checked if you are proposing activities which affect natural areas.

New listings under the NSW TSC Act can be found at: www.environment.nsw.gov.au

New listings under the EPBC Act can be found at: www.environment.gov.au/epbc

Did You Know?

It is an offence to pick any plant that is listed as a threatened species, or that is part of an endangered population or EEC. Bush regeneration, weed control, seed collection, clearing for fire breaks, indeed almost any activity within an EEC requires approval.

Approval can be sought through one of the following:

- Section 91 licence (Threatened Species Conservation Act 1995).
- Section 132c licence (National Parks and Wildlife Act 1974) if associated with a scientific, educational or conservation activity.
- Other approval under the Environmental Planning and Assessment Act.

Section 91 and 132c licences are obtained from the Office of Environment and Heritage. For more information regarding licensing visit:

www.environment.nsw.gov.au/wildlifelicences

If an appropriate approval is not obtained before undertaking the above activities, enforcement action may be taken.

Only in the Illawarra

There are currently 19 EECs known to occur in the Illawarra. Some of these EECs extend beyond the Illawarra to other parts of the east coast of NSW, while some are endemic to, or known only to exist in the Illawarra.

Endemic EECs are:

- Illawarra Lowlands Grassy Woodland
- Illawarra Subtropical Rainforest
- Melaleuca armillaris Tall Shrubland

As these endemic EECs are only found in the Illawarra and are not well conserved, landholders, councils and agencies have an even greater responsibility to ensure their viability into the future. A variety of conservation mechanisms and incentive schemes are available to landholders to help protect and manage endangered ecological communities. These range from perpetual arrangements through to short-term landholder incentive agreements.

Further details about conservation mechanisms and incentive schemes can be obtained from the following agencies:

Southern Rivers Catchment Management Authority Wollongong Office

www.southern.cma.nsw.gov.au Phone: (02) 4224 9700 Email: southern@cma.nsw.gov.au

Office of Environment and Heritage Conservation Partners Program

www.environment.nsw.gov.au/cpp/ConservationPartners.htm Phone: (02) 9995 6768 Email: conservation.partners@environment.nsw.gov.au

Wollongong City Council www.wollongong.nsw.gov.au

Phone: (02) 4227 7111 Email: council@wollongong.nsw.gov.au

Endangered Ecological Communities of the Illawarra

Bangalay Sand Forest



Occurs on coastal sand plains on deep, freely draining sands of marine origin. Example sites include Perkins Beach, Korrongulla Wetland, Minnamurra Spit and Seven Mile Beach.

Illawarra Subtropical Rainforest



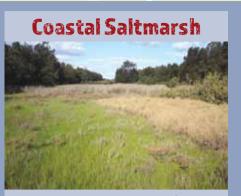
Associated with coastal volcanic soils and other substrates mainly between Albion Park and Gerringong, Berkeley Hills and the Illawarra Escarpment foothills.

Swamp Oak **Floodplain Forest**



Occurs on lake margins and estuarine fringes associated with coastal floodplains where groundwater is saline or sub-saline. Example sites include Puckey's Estate, Minnamurra River, Lake Illawarra, Mullet Creek and Dunmore wetlands.

Coastal Upland Swamps and Temperate Highland Peat Swamps



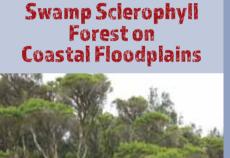
A mostly treeless community found at the upper limits of the inter-tidal zone of coastal estuaries or saline lakes and lagoons. Examples are found at Werri Lagoon, Tom Thumb Lagoon, Lake Illawarra (including at Haywards Bay) and Minnamurra River.

Littoral Rainforest and **Coastal Vine Thickets** of Eastern Australia



A closed forest community found on headlands and sand dunes in close proximity to the coast. Examples sites include Bass Point, Perkins Beach and Seven Mile Beach.

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Associated with alluvial flats and drainage lines on coastal floodplains. This community includes and replaces the former Sydney Coastal Estuary Swamp Forest (SCESF). Example sites include Crooked River, Puckey's Estate and Bellambi Lagoon.

O'Hares Creek

Shale Forest

Freshwater Wetlands on Coastal Floodplains

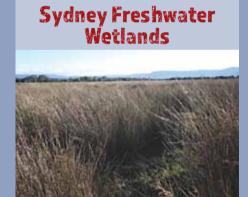


Primarily freshwater swamps in swales and depressions behind dunes or low nutrient sandplains. Example sites include Coomaditchy Lagoon, Dunmore Wetland, Korrongulla Wetland, Spring Creek, and Bellambi Lagoon.

Melaleuca armillaris Tall Shrubland



A dense shrubland to five metres tall. It occurs on dry rocky ridges on volcanic soils. The main occurrences are known from Dunmore, Jamberoo Valley and Killalea State Park.



Typically occurs on silts, muds or humic loams in depressions, flats, drainage lines, and lakes associated with coastal floodplains. Examples are found at Mullet and Hooka Creeks, Killalea Lagoon and Coomonderry Swamp.

Southern Sydney Sheltered Forest on Transitional

Illawarra Lowlands **Grassy Woodland**



Restricted to the Illawarra. Occurs on floodplains, and lower slopes of the escarpment, predominantly between Kembla Grange and Albion Park. Examples occur at Croom Reserve, Purrungully Woodland, Mount Brown, and Blackbutt Forest Reserve.

River-flat Eucalypt Forest on Coastal Floodplains



Occurs on drainage lines and river terraces of coastal floodplains. Examples are found along Macquarie Rivulet and Minnamurra River.





A closed tussock grassland found on seacliffs and coastal headlands. Scattered dwarfed shrubs may also occur as part of this community. Example sites include Bald Hill, Clifton, Brickyard Point, Little Blowhole, Killalea State Park and Minnamurra Point.

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A mostly treeless community dominated by sedges and shrubs. Occurs on impermeable sandstone plateaus with waterlogged soils. Examples found across the Woronora Plateau, with the greatest concentration at Maddens Plains.



An open forest community that occurs on flat ridgetops and adjoining slopes associated with shale outcrops. Found north from Cataract Dam through the Woronora Plateau, Darkes Forest and Helensburgh area.

Sandstone Soils



Associated with sheltered heads and upper slopes of gullies, where soils are influenced by moisture, and nutrients from more fertile soils. Known from the northern Illawarra, around the Helensburgh, Otford and Stanwell Tops areas.

Other EECs in the Illawarra

Other EECs that occur in small areas of the western extent of Wollongong, Kiama and Shellharbour local government areas include:

Robertson Rainforest Robertson Basalt Tall Open-Forest Shale/ Sandstone Transition Forest Southern Highlands Shale Woodlands

NSW Threatened Species Conservation Act 1995 (TSC)

Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC)

What is Council Doing to Protect Our EECs?

Kiama Municipal Council, Shellharbour City Council and Wollongong City Council undertake a range of activities to protect our EECs:

- Minimising threats to EECs where possible.
- Funding qualified bush regenerators to undertake bush restoration at high priority sites.
- Supporting volunteers such as Bushcare and Landcare groups to minimise weed threats to EECs.
- Seeking grant funding to continue bush restoration.
- Providing information to volunteers and residents about our natural areas.

How You Can Help Protect Our EECs

- Replace weeds with local native plants.
- Control weeds on your land.
- Manage your waste responsibly, don't dump it in bushland.
- Keep your pets indoors at night.
- Join a Bushcare or Landcare volunteer group and help protect our natural areas.
- Consider a Conservation Agreement or Property Vegetation Plan on your land.
- Submit records of threatened plants and animals you observe to the Atlas of NSW Wildlife.



Want More Information?

There are many helpful websites where you can find out more about EECs or threatened species of the Illawarra.

For more detailed information about EECs see:

Threatened Species and Ecological Communities of NSW www.threatenedspecies.environment.nsw.gov.au

Nationally listed Threatened Ecological Communities www.environment.gov.au/epbc

Protected Matters Search Tool www.environment.gov.au/epbc

Other Resources

To identify potentially weedy garden plants see: **Protecting our Bushland - Grow Me Instead** www.esc.nsw.gov.au/weeds/growmeinstead.pdf

Plantnet http://plantnet.rbgsyd.nsw.gov.au

For a list of local native plants see: GROW LOCAL: Illawarra Native Garden Guide available from http://www.wollongong.nsw.gov.au

Illawarra Bushland Database www.southerncouncils.nsw.gov.au

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ILLAWARRA BIODIVERSITY AND LOCAL FOOD STRATEGY FOR CLIMATE CHANGE









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