

Kempsey Shire

Biodiversity Strategy Discussion Paper



Importance of biodiversity

All species (including humans) depend on the necessary biological life support systems that are provided by ecosystem services. Examples of ecosystem services are oxygen to breathe, clean water to drink, fertile soil for production and physical materials for shelter and food. The services provided by ecosystems are fundamental to our physical, social, cultural and economic well-being. Protection, management and restoration of natural ecosystems and the services that they provide is essential for sustaining community wellbeing, economic prosperity and efficiency. Biodiversity has been described as containing five distinct values for humans with those being – economic, scientific, cultural, recreational and ecological life support.



What is biodiversity?

In simple terms, 'biological diversity' (or 'biodiversity') is the variety of all life forms on earth. Biodiversity is explored at three levels:

- **Genetic diversity** – the variety of genetic information contained in individual plants, animals and micro-organisms.
- **Species diversity** – the variety of species.
- **Ecosystem diversity** – the variety of habitats, ecological communities and ecological processes.

Biodiversity occurs in all environments on Earth – terrestrial, aquatic and marine. Biodiversity is dynamic and constantly changing. Genetic change and evolutionary processes can increase biodiversity and reduction in biodiversity can occur through threats, which leads to species population decline and extinction.

Local Governments role in biodiversity management

Kempsey Shire Council has a key role to play in biodiversity conservation and management in both regulatory and non-regulatory functions. The legislation or laws controlling planning, the environment and biodiversity, guides Council through the regulatory role in biodiversity conservation with land use planning, zoning and the development approval processes. Through this legislation, Council is required to ensure that the environment is properly managed, developed, protected, restored, enhanced and conserved within the areas of Council's responsibility.

Biodiversity in the Kempsey Shire

The Macleay Valley comprises a unique, rich and diverse variety of biodiversity across some 337,000 ha of the mid-north coast region of NSW. The LGA contains over 2500 plant and animal species with 231 of these species being threatened with extinction along with 16 Threatened Ecological Communities. The biodiversity of the area is heavily influenced by three distinct landscape units including; Coastal Plains, Midland Hills and Escarpment Ranges. These are differentiated based primarily on their biophysical characteristics and geographic position.

Dunghutti

The Dunghutti people have had a long association connection to the land within the Macleay Valley. Biodiversity values within the Macleay Valley landscape are central to the Dunghutti peoples spirituality, association of natural resource uses with food and medicines, caring for the land, passing on cultural knowledge and strengthening social bonds.



Did you know?

The terrestrial orchid, *Diuris disposita* (Willawarrin doubletail), is an extremely rare terrestrial orchid and a total of less than 50 plants are known. Up until recently this species was thought to only occur within the Macleay Valley, in an area near Willawarrin, however a small population was recently discovered in the Hastings Valley.

Diuris disposita (Willawarrin doubletail)
Photo: Lachlan Copeland





Vision of the Kempsey Biodiversity Strategy

That management of biodiversity within the Kempsey LGA allows for population growth while preserving and improving the rich biodiversity of the area for future generations.

Key issues and threats to biodiversity within the Kempsey Shire

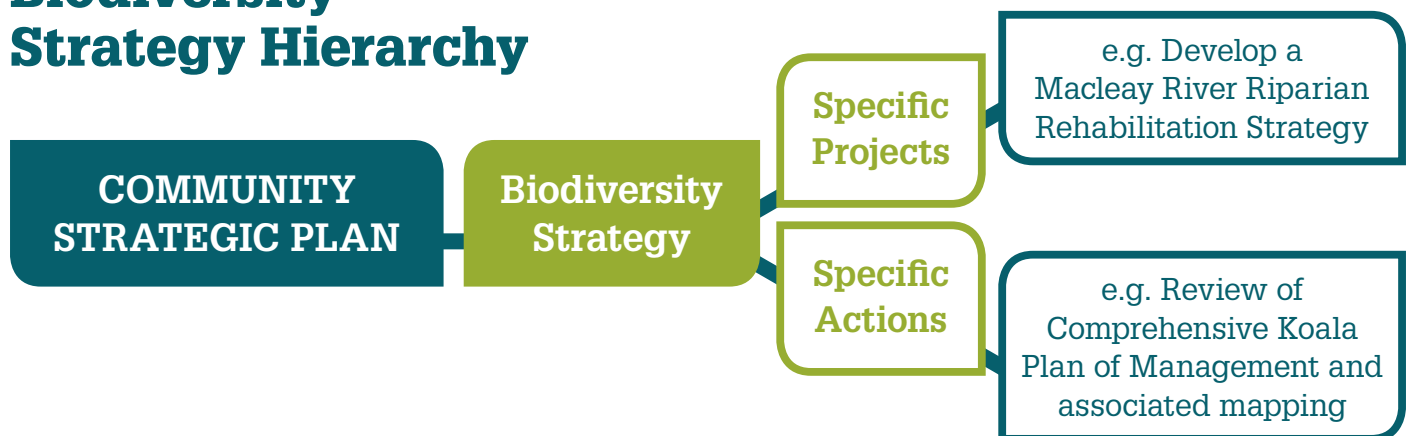
Three key threats to biodiversity within the Kempsey Shire have been identified;

1. Biodiversity decline through clearing, habitat fragmentation, fire, invasive species and impacts of agriculture.
2. Development pressure through population growth.
3. Climate change and sea level rise impacts on biodiversity.

In order for ecosystems to be resilient to these and other threats there needs to be a strong diversity of individuals, species and populations.



Biodiversity Strategy Hierarchy



How should we manage biodiversity within the Shire?



Have your say on how Council can better manage biodiversity into the future by reviewing the background information and completing the online survey at yoursay.macleay.nsw.gov.au/biodiversity-strategy.