



Wingecarribee
Local Planning Strategy
2015-2031

Chapter Two
Managing Our Natural Environment



2.1 Introduction

In drafting the Local Planning Strategy, it was considered that no reasonable conversation about land use and development could occur without an appreciation of the extent of non-urban land across the Shire. Therefore the draft Strategy begins with chapters on managing our natural environment (Chapter 2) and rural lands (Chapter 3) to provide that context for the later consideration of population and housing (Chapter 4) and employment (Chapter 5).

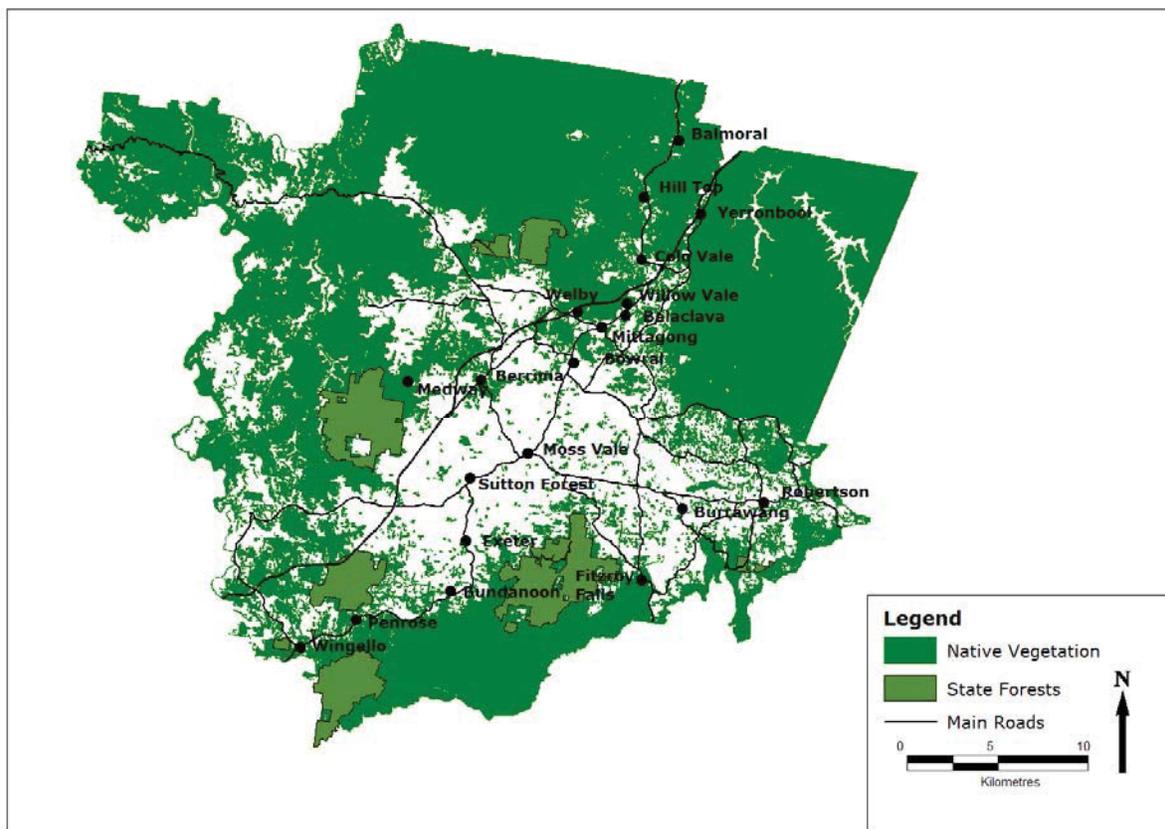
There are five ‘environmental’ zones under Wingecarribee Local Environmental Plan 2010 (WLEP 2010) and together they represent some 75% of the total land area of the Shire.

Zone	Objectives	Area covered
E1 National Parks & Nature Reserves	<ul style="list-style-type: none"> To enable the management and appropriate use of land that is reserved under the <i>National Parks and Wildlife Act 1974</i> or that is acquired under Part 11 of that Act. To enable uses authorised under the <i>National Parks and Wildlife Act 1974</i>. To identify land that is to be reserved under the <i>National Parks and Wildlife Act 1974</i> and to protect the environmental significance of that land. 	74 113 hectares
E2 Environmental Conservation	<ul style="list-style-type: none"> To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values. To prevent development that could destroy, damage or otherwise have an adverse effect on those values. 	28 915 hectares
E3 Environmental Management	<ul style="list-style-type: none"> To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values. To provide for a limited range of development that does not have an adverse effect on those values. To encourage the retention of the remaining evidence of significant historic and social values expressed in existing landscape and land use patterns. To minimise the proliferation of buildings and other structures in these sensitive landscape areas. To provide for a restricted range of development and land use activities that provide for rural settlement, sustainable agriculture, other types of economic and employment development, recreation and community amenity in identified drinking water catchment areas. To protect significant agricultural resources (soil, water and vegetation) in recognition of their value to Wingecarribee’s longer term economic sustainability. 	99 967 hectares
E4 Environmental Living	<ul style="list-style-type: none"> To provide for low-impact residential development in areas with special ecological, scientific or aesthetic values. To ensure that residential development does not have an adverse effect on those values. To encourage the retention of the remaining evidence of 	159 hectares

Zone	Objectives	Area covered
	<p>significant historic and social values expressed in existing landscape and land use patterns.</p> <ul style="list-style-type: none"> • To provide for a restricted range of development and land use activities that provide for rural settlement, sustainable agriculture and other types of economic and employment development, recreation and community amenity in identified drinking water catchment areas. • To manage land in a way that minimises impact on its environmental and scenic value from adjacent and nearby development and land use activity. • To minimise the proliferation of buildings and other structures in these sensitive landscape areas. 	

Of the total area of 203 152 hectares covered by an environmental zone, over 103 000 hectares of land comprises either National Parks and Nature Reserves, or is otherwise owned by a public authority – some 38% of the Shire. These zones, together with some 14 500 hectares of publicly owned forests, account for 45% of all land within the Shire.

The extent of environmental lands is well represented in the following map from the 2007 Wingecarribee Agricultural Lands Study.



2.2 Regional Context

The Regional Strategy identifies the unique challenges facing our Shire in the management of our natural resources. These include the need to:

- Ensure that development occurs in a way that safeguards and enhances the existing environmental, biodiversity and scenic assets of the Region.
- Ensure the sustainable management of natural resources and the protection of rural landscapes.
- Ensure development can help reduce the impact of climate change.
- Appropriately conserve and protect heritage items and values including European, cultural and Aboriginal, and incorporate these values within land use planning and natural resource management processes.

In addressing these Challenges, the Regional Strategy seeks to achieve the following Outcomes and these form the regional strategic framework within which the Council must perform.

- The Region's existing biodiversity is valued and protected by directing urban development, including employment lands, away from areas important for conservation.
- The impacts of development are mitigated by protecting and enhancing the long term viability of vegetation and habitat corridors, as well as rehabilitating degraded priority areas such as riparian corridors through a strategic approach to investment under Catchment Action Plans.
- The environmental value of rural lands as well as agriculture is recognised in strategies for managing the land uses, subdivision and settlement of rural lands in an integrated manner.
- Town water supply catchments and significant aquifers are protected by ensuring that only compatible uses occur in these catchments. Impacts on water quality are reduced. The values and functions of riparian corridors are protected and enhanced.
- The risks from flooding and other natural hazards are minimised. Planning controls in local environmental plans are consistent with the Floodplain Management Manual and councils risk management plans.

To achieve these Outcomes, the Regional Strategy identifies a number of Actions which each Council within the Region should undertake. Wingecarribee Council's response to each Action follows its description.

- Councils will confirm the location and conservation significance of key assets such as remnant vegetation and important aquifers in consultation with the Department of Environment and Climate Change (now Office of Environment & Heritage) and the Department of Water (NSW Water) and Energy, before identifying potential new urban areas and in managing rural lands.

Council's response – In February 2015 Council resolved to prepare new vegetation maps. This work will be undertaken by the National Parks and Wildlife Service

(NPWS) and will reclassify all identified native vegetation to comply with state and national standards. This will enable the clearer identification of Endangered Ecological Communities (EECs) and will provide the data to allow for an update of the Council's bushfire prone maps.

The new vegetation maps will also provide data for the development of new biodiversity maps which in turns will inform the Green Web Corridor Strategy, in particular the identification of koala habitat. Once the Strategy is completed, a new Management Plan can be prepared. All mapping and strategic development will apply to both private and public land.

Council continues to explore options for the ongoing identification of aquifers, particularly recharge zones, to ensure future development does not adversely impact on them. This is being done in consultation with NSW Water (formerly SCA) and the Department of Mining.

- Councils will ensure new urban development and rural residential development is directed away from land assessed as being of high conservation value and appropriate planning controls incorporated into local environmental plans to protect biodiversity values on other conservation land.

Council's response – This has been addressed through WLEP2010 which provides appropriate zoning and controls together with regional wildlife corridor maps.

- Local environmental plans will protect land with state or regional environmental, agricultural, vegetation and habitat values using appropriate zones and planning controls.

Council's response - This occurs through compliance with relevant State Regional Planning Policies (SEPPs) and s.117 Directions.

- Local environmental plans will include provisions to protect and enhance areas of high biodiversity value and biodiversity corridors through use of environmental protection zones or other appropriate local environmental planning provisions. The Department of Environment and Climate Change will work with councils to identify these areas.

Council's response – WLEP 2010 protects environmentally sensitive land through the E3 Environmental Management zone and the limitations to development within riparian corridors. Council agrees with the Regional Strategy observation that naturally vegetated riparian corridors provide a range of benefits including stabilising banks, maintaining water quality, providing habitat for native species and communities and visual amenity.

- Local environmental plans will identify and zone land of landscape value (including scenic and cultural landscapes) to protect those values.

Council's response – WLEP2010 contains almost 400 hectares of land zoned E3 Environmental Management which constitutes almost 7% of all land in the Shire.

- Councils, in preparing local environmental plans that apply to land within the area covered by the Drinking Water Catchments Regional Environmental Plan, must take into consideration any strategic land and water capability assessment prepared for the land, or any part of it, by Water NSW. Local environmental plans should ensure that water quality objectives in the regional environmental plan can be achieved.

Council's response – Council must refer any Planning Proposal to amend WLEP 2010 to Water NSW (formerly SCA) for comment prior to undertaking community consultation.

- New development adjoining or adjacent to areas of high biodiversity value will incorporate buffers to avoid land use conflict.

Council's response – This is a significant direction which is addressed further below under the heading of Implications for Future Development.

- Councils will consider controls to limit the creation of additional water rights on land fronting watercourses when preparing local environmental plans and development control plans and when considering development applications.

Council's response – This matter is considered in any potential rezoning along watercourses.

- Local environmental plans will not rezone land within town water supply catchments and significant groundwater areas if this has the potential to reduce the quality and quantity of these assets.

Council's response – Utilising land resources within their capacity is a key challenge for both rural and residential development. Soil landscape mapping by the Department of Environment and Climate Change can be used to assess the capacity of particular landscapes to support different land uses, and the need for site modifications to limit offsite impacts such as erosion, sediment loss and groundwater contamination. Council always refers any Planning Proposal to amend WLEP2010 to Water NSW (formerly SCA) for comment prior to undertaking community consultation.

- Councils are to work with the Southern Rivers, Hawkesbury-Nepean, Lachlan and Murrumbidgee catchment management authorities to ensure that the aims and objectives of catchment action plans are considered in the future management and planning of local council areas.

Council's response – Council does consult with all relevant authorities in assessing applications for rezoning or to increase density, as well as at the development assessment stage.

- Local environmental plans will zone areas subject to natural hazards appropriately to reflect the risks associated with the hazard and the limitations of the land.

Council's response – Council continues to identify and map flood prone land and these new maps will be incorporated into the 2015 review and update of WLEP 2010. Council also continues to liaise with Water NSW (SCA) with regard to identifying potential conflicts in any planning proposal to change a land use or intensify an existing use.



2.3 Managing Our Catchment Lands

The Regional Strategy particularly recognises that the major use of water in the Region is for potable water supply and its future management is a significant and complex issue. Inadequate water supply will place major limits on the growth of industry, agriculture and population.

The Regional Strategy also recognises that the location of future population growth will be strongly influenced by the capacity to provide potable water. Solutions need to include a combination of demand management and supply augmentation to meet future demands and secure existing supplies against drought.

Of particular significance to Wingecarribee is that fact that of the five drinking water catchments servicing Sydney, three of them – Warragamba, Shoalhaven and Upper Nepean, incorporate areas of Wingecarribee Shire. In fact there is no part of the Shire not located within one of these three drinking water catchments. In addition to these catchments, two areas designated as Special Areas by the Water NSW are also located within Wingecarribee Shire – the Wingecarribee Special Area, based on the Wingecarribee Reservoir, and the Fitzroy Falls Special Area, based on the Fitzroy Falls Reservoir. The southern section of the Metropolitan Special Area is also located within the Shire. These Catchments and Special Areas are considered below.

2.3.1 Warragamba Catchment

Warragamba is the largest of Sydney’s five drinking water catchments, covering an area of 9 050 square kilometres. In the north of the catchment, the largest towns are Oberon, Wallerawang, Lithgow and Katoomba. In the south, the main population centres are Goulburn, Bowral, Moss Vale and Mittagong. Many residents within the Warragamba catchment are actually supplied with water from other areas. Residents in Bowral and Mittagong are supplied with water from Wingecarribee Reservoir which is part of the Shoalhaven Catchment. Wingecarribee Reservoir can also top up Goulburn’s water supply during drought via an emergency pipeline.

Figure 2.1 – Location of Warragamba Catchment in relation to Wingecarribee Shire



2.3.2 Upper Nepean Catchment

The Upper Nepean Catchment covers almost 900 square kilometres of mostly pristine bushland. The Catchment lies at the southern end of the Illawarra Plateau, which stretches north from Robertson to Heathcote National Park, and is bordered by the Illawarra escarpment in the east, Campbelltown in the north-west and the villages of Bargo and Yerrinbool in the south-west. Most of the catchment is covered by the Metropolitan Special Area. It is adjoined on the west by the Warragamba Catchment.

Figure 2.2 – Location of Upper Nepean Catchment in relation to Wingecarribee Shire



2.3.3 Shoalhaven Catchment

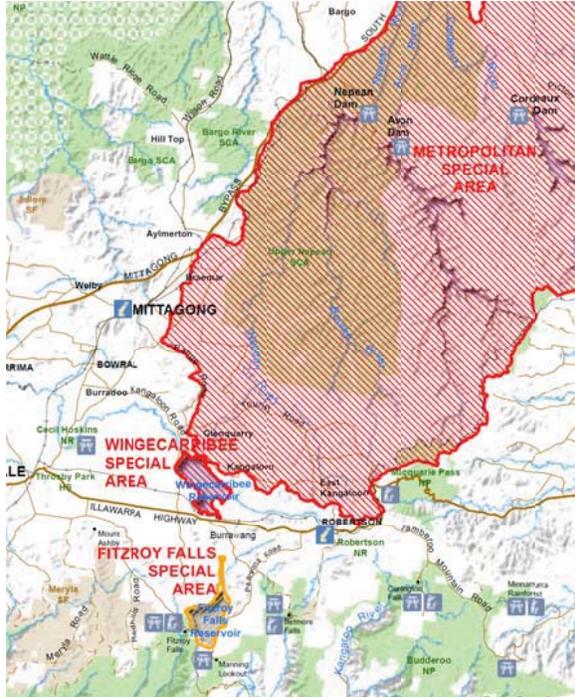
The Shoalhaven Catchment covers 5,640 square kilometres, more than one-third of Sydney’s drinking water catchment. The Shoalhaven River runs through the heart of the catchment, from the fine wool country around Braidwood in the south-west to the lush rainforests of Kangaroo Valley in the north-east. Parts of Bundanoon, Wingello and Penrose drain into the Shoalhaven Catchment. The Shoalhaven Catchment adjoins the Warragamba Catchment to the north.

Figure 2.3 – Location of Shoalhaven Catchment in relation to Wingecarribee Shire



In addition, two areas designated as Special Areas by the SCA are located wholly within Wingecarribee Shire (Figure 4) – the Wingecarribee Special Area, based on the Wingecarribee Reservoir, and the Fitzroy Falls Special Area, based on the Fitzroy Falls Reservoir. The southern section of the Metropolitan Special Area is also located within the Shire. No unauthorised entry is permitted to either the Metropolitan or Wingecarribee Special Areas while there is some restricted access to the Fitzroy Falls Special Area. The management of Special Areas is undertaken through Water NSW’s Special Areas Strategic Plan of Management.

Figure 2.4 – Special Areas included within Wingecarribee Shire



The key impact of such extensive areas of publicly owned environmental zoned land is that potential land use is significantly restricted in these zones. There are more land use options for land zoned E3 Environmental Management, but the principal reason for the application of that zone under WLEP 2010 is the extent of environmentally sensitive land, often containing Endangered Ecological Communities, and water based locations of environmental sensitivity. Council must respect and implement the many and various state directives and guidelines in managing our environmental lands.

2.4 Management of Catchment Water Quality

Water NSW’s Healthy Catchments Strategy 2012-2016 outlines priorities for works and activities to reduce risks to water quality and to improve catchment health. The Healthy Catchments Strategy is prepared with input from key stakeholders who also then influence outcomes. These stakeholders include the catchment management authorities, local councils, other government agencies, landowners and the community. The Healthy Catchments Strategy 2012-2016 may be viewed on the Water NSW’s website, www.sca.nsw.gov.au.

The Healthy Catchments Strategy provides the framework for reducing the risks to water quality in the catchment, one of the key strategies to maintain the quality of water as it moves from the

catchment to consumers' taps. Water storages, raw water delivery systems, water treatment and the distribution networks all represent a multi-barrier approach to the protection of water quality. The multi-barrier approach, as outlined in the Australian Drinking Water Guidelines 2011 (ADWG), describes a range of measures that collectively prevent or reduce contamination to drinking water from catchment source to tap – in order to reduce risks to public health. The approach recognises that while each individual barrier may not be able to completely remove or prevent contamination, they work together to provide greater assurance that the water will be safe to drink.

The table at Figure 5 below summarises seven (7) identified risks to water quality and how such risks can be reduced through a programme within the Healthy Catchments Strategy. Item 5 – Maintaining Sustainable Catchments – specifically addresses land use planning and development within the catchments. Water NSW's management tools include:

- referral of all Planning Proposals to amend Wingecarribee Local Environmental Plan 2010 (WLEP 2010) to the SCA for comment under Local Direction 5.2 under s117 of the EP&A Act 1979 at the planning stage, and
- compliance with the Neutral or Beneficial Effect (NorBE) on Water Quality test at the development stage.

Council is currently working with Water NSW to produce a Rural Living Handbook to assist rural residents to better understand the responsibilities of living on environmentally sensitive land.



(Photo Source: Katie Maddock)

2.5 Planning Proposal Requirements

In considering any Planning Proposal to amend WLEP 2010, regardless of the intended outcomes of that proposal, it must be referred to Water NSW for comment prior to being submitted to the Department of Planning and Environment for a Gateway Determination. In preparing the Planning Proposal, reference must be made to the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011, the aims of which are:



- (a) to provide for healthy water catchments that will deliver high quality water while permitting development that is compatible with that goal, and
- (b) to provide that a consent authority must not grant consent to a proposed development unless it is satisfied that the proposed development will have a neutral or beneficial effect on water quality, and
- (c) to support the maintenance or achievement of the water quality objectives for the Sydney drinking water catchment.

In addition, reference must also be made to the implications for the proposed development on Sydney's Drinking Water Catchments under Direction 5.2 of Ministerial Directions to Councils under section 117(2) of the Environmental Planning and Assessment Act. This Direction requires that a Planning Proposal must be prepared in accordance with the general principle that water quality within the Sydney drinking water catchment must be protected, and in accordance with the following specific principles:

- (a) new development within the Sydney drinking water catchment must have a neutral or beneficial effect on water quality, and
- (b) future land use in the Sydney drinking water catchment should be matched to land and water capability, and
- (c) the ecological values of land within a Special Area that is:
 - (i) reserved as national park, nature reserve or state conservation area under the National Parks and Wildlife Act 1974, or
 - (ii) declared as a wilderness area under the Wilderness Act 1987, or
 - (iii) owned or under the care control and management of the Sydney Catchment Authority,should be maintained.

2.6 Management of the Terrestrial Natural Environment

There are a number of State and Federal Acts of Parliament which provide the legislative framework with which Council must comply for the management of the terrestrial environment. The Australian Government promotes the conservation of threatened species and biodiversity through the Environment Protection and Biodiversity Conservation Act 1999. This Act applies to environmental matters of national significance and provides for:

- (a) identification and listing of threatened species and ecological communities
- (b) development of recovery plans for listed species and ecological communities
- (c) recognition of major threats, referred to as key threatening processes
- (d) reducing the impacts of these processes through threat abatement plans, where appropriate.

The Threatened Species Conservation Act 1995 (TSC Act) manages threatened species and communities at the State level. The TSC Act seeks to:

- (a) conserve biological diversity and promote ecologically sustainable development, and

- (b) prevent the extinction and promote the recovery of threatened species, populations and ecological communities, and
- (c) protect the critical habitat of those threatened species, populations and ecological communities that are endangered, and
- (d) eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities, and
- (e) ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed, and
- (f) encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.

These objectives are achieved through a number of management measures.

Ecological communities are groups of plants and animals that occur together in a particular area, as defined in the TSC Act. This area is characterised by a set of environmental conditions which define suitable habitats, for example, soil types, landforms and climatic conditions. As a result, an ecological community may be distinguished from others by its characteristic species and the area in which it occurs.

Ecological communities can be listed under the TSC Act as critically endangered, endangered or vulnerable, depending on their risk of extinction. An ecological community may be considered threatened under the Threatened Species Conservation Regulation for one of three main reasons:

- (a) its distribution has been significantly reduced
- (b) its distribution is so restricted the whole community is susceptible to significant threats
- (c) the ecological function of the community is undergoing a significant decline.

Reductions in distribution are typically related to historical or current clearing for development. Distribution may also be restricted through naturally rare environmental conditions that are essential to the community. Declines in the ecological function of a community may result from:

- (a) change in community structure
- (b) change in species composition
- (c) disruption of ecological processes
- (d) invasion and establishment of exotic species
- (e) habitat degradation or fragmentation.

Consequently, many ecological communities have been cleared or degraded to such an extent that only a small amount of their original area resembles or functions in its natural state. By listing an ecological community as threatened, all component species of that community are also protected. This approach enables a more efficient use of limited resources than the single-species approach. It also overcomes bias towards charismatic species, and protects both undiscovered species and the biological processes critical to maintaining a healthy environment.



The TSC Act also regulates the management of threatened animal and plant species and their habitat. Plants and animals interact in complex relationships with each other and with factors such as soils, water, climate and landscape. A variety of threatening processes contribute individually and in combination to the decline of native species, or cause major changes to ecological communities. Such processes include the loss, change and fragmentation of habitat; the effects of invasive plants, animals and diseases; and direct effects of human activities.

Clearing of native vegetation fragments habitats and isolates populations of plants and animals. Small habitat remnants cannot support populations for long periods and are more susceptible to threats and loss of biodiversity following local disturbances, especially if there are no suitable habitats nearby from which the animals and plants can recolonise. Conservation reserves, isolated from each other by large areas of disturbed or cleared land, often cannot ensure the long-term survival of species and ecological communities and may need to be linked by native vegetation 'corridors' so that animals can move between them.



(Photo source: Hayden McLean)

Many animal and plant species have been introduced into Australia for agriculture, for sport and as pets, and some have been brought in inadvertently. Some introduced species now flourish in native ecosystems, causing a significant impact. Animals and plants introduced for agricultural activities contribute to the economic development of Australia, but can also cause significant damage to the ecology of natural environments. In particular, livestock that has become established in the wild, such as rabbits, goats, cattle, buffalo, pigs, donkeys, horses and camels, degrade natural habitats by intensive or selective grazing. Animals with hard hoofs compact the soil and prevent the regeneration of vegetation, thus contributing to erosion. Many introduced animals compete with native animals for food, shelter and breeding sites.

2.7 Management of Koala Habitat

State Environmental Planning Policy No 44 – Koala Habitat Protection aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline:

- (a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and
- (b) by encouraging the identification of areas of core koala habitat, and
- (c) by encouraging the inclusion of areas of core koala habitat in environment protection zones.

This SEPP is of relevance to Wingecarribee Shire because early in 2015 the Shire was identified by the NSW Office and Environment and Heritage (OEH) as an area of significant koala habitat. Despite being the location where koalas were reportedly first sighted by Europeans, little is known about the Southern Highlands koala population.

To address this, Council has established a Koala Hotline (4868 0888) to allow people to report koala sightings which Council can then use to compile and maintain a data base of koala sightings. Council is also working in partnership with OEH to monitor the local koala population.



(Photo Source: Lara Todd)

2.8 Management of Bushfire Prone Land

There are numerous vegetated habitat linkages within the Sydney-Canberra Corridor which are important for many species, particularly the area in Wingecarribee Shire around Hill Top, Yerrinbool and Yanderra. This area links several catchments and provides a habitat connection between the Blue Mountains World Heritage Area and the forested escarpment areas of the Woronora and Illawarra which themselves are connected to the Morton National Park and many other national parks of southeast NSW. These locations are also identified to contain EEC.

Apart from Council's obligations under the relevant legislation, and a commitment to the Goals and Strategies of W2031+, an amendment to the Rural Fires Act 1997 in 2014 introduced a Code of Practice which enables residents in certain locations, which includes Wingecarribee Shire, to clear trees within 10 metres of a property located in bushfire prone land and other vegetation within 50 metres.

A case before the Land and Environment Court in 2014 (Johnson v Hornsby Shire Council (NSWLEC 1215) emphasised how careful Councils need to be in permitting residential development on bushfire prone land containing an Endangered Ecological Community (EEC). If Council permits subdivision and development of land containing EEC land, it has no mechanism to subsequently prevent any clearing of that EEC land under the '10/50' entitlement. This is a strong disincentive to Council to support any extension of urban development on to land which is designated to contain EEC.

Not only must Council operate within state and regional policies and strategies, the goals and strategies enunciated by the local community through the Community Strategic Plan must be respected and incorporated into future land use decisions.



2.9 Local Policy Context (W2031+)

The concerns expressed at the State and Regional level for protection of the natural environment are echoed in Wingecarribee Community Strategic Plan (W2031+). W2031+ is the blueprint for the future of the Southern Highlands based on the Vision of a community in 2031 - “A healthy and productive community, learning and living in harmony, proud of our heritage and nurturing our environment”.

W2031+ also provides a guide to the development of other Council strategies and plans including the Wingecarribee Local Planning Strategy 2015-2031. The Goals and Strategies developed under the ‘Environment’ Theme are of direct relevance to the development of future directions for environmental protection and enhancement within the Shire.

In preparing these Goals and Strategies, W2031+ recognised the following features of the Shire’s natural environment:

- The Shire’s environment comprises bushland, national parks, waterways and a diverse range of flora and fauna in many habitats.
- The community must ensure that the natural environment is maintained and enhanced.
- The conservation of resources and creating alternative sources of supply are important to countering the impacts of climate change.

2.9.1 Environment Goals and Strategies from W2031+

Goal 4.1 Wingecarribee’s distinct and diverse natural environment is protected and enhanced

4.1.1 Conserve the key natural resources of the Shire water catchments, arable land, key wildlife corridors, vegetation and scenic landscapes

4.1.2 Maintain and enhance biodiversity

4.1.3 Ensure no net loss of the natural resources of the Shire by replacement and/or offset of the unavoidable loss of trees, vegetation and other resources using an effective and transparent offset formula

Goal 4.3 Wingecarribee achieves continuous reduction in waste generation and disposal to landfill

4.3.1 Minimise waste through education, promotion of alternatives, financial incentives, prosecution of dumpers and Council’s own waste management program

4.3.2 Promote Product Stewardship (PS) and Extended Producer Responsibility (EPR) at a local level

4.3.3 Continue to reduce, reuse, recycle and return to maker

4.3.4 Promote alternatives to single use packaging and other disposables

Goal 4.4 Wingecarribee community has a carbon neutral economy

- 4.4.1 Promote the type of development that would reduce the use of fossil fuel
- 4.4.2 Encourage residents and businesses to source goods locally
- 4.4.3 Promote local sources of renewable energy
- 4.4.4 Monitor and publish performance of the reduction and offsetting of greenhouse gas emissions

In addition to these Environment goals and strategies, there are others in W2031+ which also reflect the value the community places on their protection and enhancement. Goal 3.2 under the Places theme emphasises the value placed on the ‘green between’ the towns and villages.

Goal 3.2 Wingecarribee has maintained a distinct character of separate towns and villages

- 3.2.1 Retain the rural landscape between towns and villages
- 3.2.2 Retain and make more distinctive the special qualities that make each town or village unique
- 3.2.3 Ensure growth of towns and villages does not compromise separation distance between those towns and villages

Goal 5.2 of the Economy theme identifies the tourism value of the Shire, especially its landscape.

All of these Goals and Strategies are referenced in any assessment of a submission to develop environmental or rural zoned land.

2.10 Managing Land Use

2.10.1 Wingecarribee Local Environmental Plan 2010 (WLEP 2010)

Two clauses in WLEP 2010 control the development of land with regard to environmental sensitivity. Clause 7.4 relates to terrestrial and aquatic biodiversity and clause 7.5 relates specifically to water.

The objective of clause 7.4 is to maintain terrestrial and aquatic biodiversity, including

- (a) protecting native fauna and flora, and
- (b) protecting the ecological processes necessary for their continued existence, and
- (c) encouraging the recovery of native fauna and flora, and their habitats.

The clause applies to land identified as “Regional Wildlife Habitat Corridor” on the Natural Resources Sensitivity Map and requires that, before granting development consent for development on such land, Council must consider any potential adverse impact of the proposed development on the following:

- (a) the native ecological community,
- (b) the habitat of any threatened species, population or ecological community,
- (c) any regionally significant species of fauna, flora or habitat,

(d) habitat elements providing connectivity.

Development consent under clause 7.4 must not be granted unless Council is satisfied that:

- (a) the development is designed, sited and managed to avoid any potential adverse environmental impact, or
- (b) if that impact cannot be avoided—the development is designed, sited and will be managed to minimise that impact, or
- (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

The objective of clause 7.5 is to maintain the hydrological functions of riparian land waterways and aquifers, including:

- (a) protecting water quality, and
- (b) protecting natural water flows, and
- (c) protecting stability of the bed and banks of waterways, and
- (d) protecting groundwater systems.

The clause applies to riparian land or land identified as “Natural Waterbodies” on the [Natural Resources Sensitivity Map](#) and requires that before granting development consent Council must consider any potential adverse impact of the proposed development on the following:

- (a) the natural flow regime,
- (b) the water quality of receiving waters,
- (c) the waterway’s natural flow paths,
- (d) the stability of the waterway’s bed, shore and banks,
- (e) the flow, capacity and quality of groundwater systems.

Development consent under clause 7.5 must not be granted unless Council is satisfied that:

- (a) the development is designed, sited and managed to avoid any potential adverse environmental impact, or
- (b) if that impact cannot be avoided—the development is designed, sited and will be managed to minimise that impact, or
- (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

In this clause, **riparian land** means land identified as “Riparian Land” on the [Natural Resources Sensitivity Map](#) and adjoining a natural waterbody that is:

- (a) within 50 metres from the top of bank of Category 1 streams (marked red on the [Natural Resources Sensitivity Map](#)), or
- (b) within 30 metres from the top of bank of Category 2 streams (marked green on the [Natural Resources Sensitivity Map](#)), or
- (c) within 10 metres from the top of bank of Category 3 streams (marked blue on the [Natural Resources Sensitivity Map](#)).

2.10.2 Green Web & Natural Vegetation Mapping

At the meeting of Council's Environment and Sustainability Committee held on 16 December 2014 the recommendation was passed *THAT Council endorses the NSW Office of Environment and Heritage (OEH) project proposals for Green Web and Integrated OEH Vegetation Survey, Classification and Mapping for Wingecarribee Shire and approves the engagement of OEH, under section 55(3)(b) of the Local Government Act to deliver these projects in accordance with the proposals.* This recommendation was adopted by Council at its Ordinary meeting of 11 February 2015.

Green Web is a principally 'Environment Levy' funded project with the objective of developing a detailed map of existing and potential biodiversity corridors to assist in planning decisions, revegetation activities, private conservation and biodiversity offsetting.

An essential component of the Green Web project is the creation of a new, more accurate and up to date native vegetation map for the Shire. Vegetation mapping and classification is a foundation for good land use and management decisions. Council's existing native vegetation map, produced in 2003, has several major limitations and these are also adversely affecting Council's ability to implement environmental planning, biodiversity conservation and threatened species recovery programs.

The greatest value of the Wingecarribee Shire Green Web Corridor Project and Native Vegetation Map can be achieved by ensuring that these projects align with similar projects / products of other levels of Government. To that end, an alignment of the proposed Wingecarribee Shire Green Web project with the NSW Government *Green Corridors Program* was identified. Similarly, an alignment of the Wingecarribee Shire Native Vegetation Map to the NSW Government *Native Vegetation Information Strategy* was identified. The NSW Office of Environment and Heritage (OEH) is delivering both the *NSW Green Corridors Program* and *NSW Native Vegetation Information Strategy*. Wingecarribee Shire Council has secured assistance from OEH with our Shire Green Web and Vegetation Mapping.

The proposed programme for undertaking this project is:

Stage 1: New Fine Scale Native Vegetation Map for Shire	Commencing: June 2015 Completion: June 2016
<p><u>Deliverables:</u></p> <ul style="list-style-type: none"> ○ New fine scale digital (GIS) vegetation map of the Shire showing the distribution of OEH Plant Community Types at scale commensurate with property planning and land use zonings. ○ Plant community classification, using National Standards. Will also map the relationships and linkages with Threatened Ecological Communities (TECs) and threatened species listed under the NSW Threatened Species Act 1995 and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. 	
Stage 2: Green Web Corridors Strategy for Shire	Commencing: June 2015 Completion: January 2017 (most work will occur after June 2016 when the stage 1 vegetation map is completed)

Deliverables:

- A map (digital GIS) of High Environmental Value Lands for use in strategic planning and development assessment, based on:
 - Identified **core areas for biodiversity** - the most important patches for flora and fauna conservation.
 - Identified **biodiversity corridors** across all land tenures using an evidence-based methodology.
 - The **Southern Highlands Koala Conservation Project** collaring and satellite tracking project (currently underway) will be a significant contributor to the identification of biodiversity corridors for Koalas. This project will also inform the identification of **Core Koala Habitat** under SEPP 44. A koala plan of management for the Shire will then be prepared under SEPP 44 (separate project).
- A map (digital GIS) of **Priority Investment Areas** as a refinement of the high environmental value land layer suitable for use in directing conservation investment funds.
 - **Priority Investment Areas** are those areas identified for investment in biodiversity conservation eg. appropriate management; potential acquisition for conservation etc by Commonwealth, State & Local Government + private landowners (through the Environment Levy Green Web Implementation Project).
 - **Priority investment areas** will include state and regional biodiversity corridors. Local corridors will also be mapped and clearly identified as such. This is in recognition that while local corridors should not typically be the first choice for conservation investment or offsetting, they are often an important local priority for Council and residents.
- Report
 - A report will detail the criteria by which the **high environmental lands** and **priority investment areas** were identified. It will discuss the prioritisation process and any variations from the standard criteria. Potential uses of the map along with its limitations will be made clear. All other information required for the Green Web to be a functional tool in the day to day operations of Council will be given in this report.
- The Green Web Project will support the application of the OEH biodiversity regulatory tools:
 - **BioBanking Assessment Methodology** (BBAM) (BioBanking),
 - **BioCertification Assessment Methodology** (BCAM) (BioCertification),
 - **Framework for Biodiversity Assessment** (FBA) (Biodiversity Offsets for Major Projects), or the **Single Assessment Methodology** (SAM) being developed under the NSW Biodiversity Legislation Review.



2.11 Economic Benefits of Environmental Land

Wingecarribee has an unusually high proportion of land zoned E3 Environmental Management, almost 100 000 hectares. The E3 zone emerged from the 7(a) Environmental Protection zone and the 7(b) Environmental Protection (Landscape Conservation) Zone under WLEP 1989 based on an extensive study to identify areas of high environmental sensitivity as well as high scenic value. The primary objective of the 7(a) zone was *to identify and protect wetland areas and foreshores possessing special aesthetic, ecological or conservation value, hill-lands, escarpments, river valleys, inland waterways, lakes and other landscape features of scenic significance, prominent escarpments which are intrinsic natural features of the landscape and water catchment areas of significance for local water storage purposes.*

The objectives of the 7(b) zone were

- a) to identify and protect areas of particular scenic value and to ensure the preservation of their cultural, heritage, aesthetic and environmental significance,
- b) to recognise the value of the rural scenic landscape to the local tourist economy,
- c) to permit development and land use activities which are compatible with the heritage and scenic qualities of the key cultural landscape, and
- d) to recognise the potential of coal and extractive resources on land within the zone, and to ensure that their winning takes place by means which are compatible with the heritage and scenic qualities of the key cultural landscape.

These objectives are reflected in the objectives for the E3 Environmental Management zone:

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.
- To encourage the retention of the remaining evidence of significant historic and social values expressed in existing landscape and land use patterns.
- To minimise the proliferation of buildings and other structures in these sensitive landscape areas.
- To provide for a restricted range of development and land use activities that provide for rural settlement, sustainable agriculture, other types of economic and employment development, recreation and community amenity in identified drinking water catchment areas.
- To protect significant agricultural resources (soil, water and vegetation) in recognition of their value to Wingecarribee's longer term economic sustainability.

The sensitivities of the E3 zoned land and the objectives of the zone naturally limit the extent of development which can occur there. Any submission to Council seeking to rezone such land needs to demonstrate that the proposed use will not adversely impact on those sensitivities. Land is zoned E3 for a purpose and rezoning the land, whether for a residential or some other purpose, does not alter the underlying fact that it retains environmental significance.

Much of the 'value' of environmental zoned land comes in the form of a shared benefit, rather than a private one. Many the qualities of our environment have an intrinsic value that goes far beyond economics. It's these same qualities which also attract residents whether or not they live in a rural area. It is why so many of the Goals and Strategies in W2031+ refer to protection of the environment and retention of those natural spaces between the towns and villages.

The economic benefits of environmental land, especially for tourism, are also recognised in W2031+. Tourists are particularly attracted to the Shire's natural environment and scenic landscapes. Neither Council nor the community has any desire to see this important economic resource diminished through inappropriate development. Within this context, Chapter 5 of the Strategy – Developing a Prosperous Wingecarribee, does address options for property owners seeking to 'value add' to their property through tourism related enterprises.



(Photo Source: Hayden McLean)



2.12 Conclusions and Recommendations

The extent of environmental zoned land across the Shire has significant impacts for future land use policy and strategy. The intrinsic and economic value of that land is recognised. Council is committed to protecting and enhancing environmental land and to that end the Green Web mapping project will provide a valuable update of the Shire's natural resources and sensitive lands.

In an effort to build awareness of the importance to the Shire of this land, the following Recommendations are made.

Environmental Recommendations

- 2.1 Use the outcomes from the Green Web mapping project to better inform the community about the importance of the natural environment.
- 2.2. Use the outcomes from the Green Web mapping project to better inform the assessment of submissions to rezone land currently zoned Environmental.
- 2.3. Promote the Rural Living Handbook being prepared by Council in conjunction with Water NSW to assist rural residents to better understand the responsibilities of living on environmentally sensitive land.

