



# PLANNING for ENVIRONMENT

Wyong Shire Council



The Planning for **OUR ENVIRONMENT** section of Wyong Shire Council's Settlement Strategy considers biodiversity conservation; green corridors; catchments, lakes and waterways; wetlands; groundwater; environmental amenity, heritage; and scenic protection, within the LGA. The chapter identifies ways in which Key Objectives 4 and 5 of our Community Strategic Plan can be achieved:

*'Areas of natural value in public and private ownership will be enhanced and retained to a high level in the context of ongoing development.'*

*'There will be a sense of community ownership of the natural environment through direct public involvement with environmental programs.'*



## Establishing our Vision:

### What do we want to achieve?

Wyong LGA possesses unique natural environmental attributes and scenic landscapes. The future planning of the LGA will require management and protection of these environmental values, including conservation of our biodiversity, heritage and scenic values, and management of our catchments, lakes and waters, wetlands, and environmental amenity. In addition, we need to ensure that green corridors are established and appropriately managed.

However, it is acknowledged that there needs to be a balance between development and the environment in the LGA. The purpose of this chapter of the Settlement Strategy is to guide population and development to areas where notable environmental assets and scenic landscapes can be protected.

### Key Documents for Planning for **OUR ENVIRONMENT**:

Hunter-Central Rivers Catchment Action Plan (2007)	Wyong DCP 2013 – Tree and Vegetation management
Environmental Management Framework (2011)	Tuggerah Lakes Estuary Management Plan (2006)
North Wyong Shire Structure Plan (2010)	Central Coast Regional Strategy (2006)
Wyong DCP 2013 – Wetlands Management	

### What legislation do we need to consider?

Environmental Planning and Assessment Act, 1979	Local Government Act 1993
Environment Protection and Biodiversity Act, 1999	Heritage Act 1977
National Parks and Wildlife Act 1974	Rural Fires Act 1997
Protection of the Environment Operations Act 1997	Native Vegetation Act 2003
Threatened Species Conservation Act 1995	Water Management Act 2000
Fisheries Management Act 1994	Coastal Protection Act 1979
SEPP 26 – Littoral Rainforests	Noxious Weeds Act 1993
SEPP (Infrastructure) 2007	SEPP 44 – Koala Habitat
SEPP 14 – Coastal Wetlands	Section 117 Direction 2.1

## Planning for BIODIVERSITY CONSERVATION

### HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF BIODIVERSITY CONSERVATION?



#### Background to BIODIVERSITY CONSERVATION:

Wyong LGA has extensive lake, wetland and riverine systems, giving rise to a diverse range of habitats and high biodiversity (ecosystems, species and genetic diversity). Sharp contrasts in vegetation occur due to the presence of three different geologies (Hawkesbury Sandstones, Terrigal Formations and Quaternary alluviums) resulting in many different soil types leading to a high diversity of vegetation types, especially within the coastal parts of the LGA (Wyong Shire Council, 2003).

#### Ecological Communities

Wyong LGA has 46 distinct vegetation communities, twenty of which are recognised as likely to possess state conservation significance (Bell, 2008). Fifteen vegetation communities were also considered to possess regional conservation values and twenty-eight were considered to have local conservation significance (Bell, 2008). Wyong LGA has a relatively high rate of vegetation retention, with approximately 68% vegetation cover.

However, there are still many conservation issues due to high development pressure occurring in specific parts of Wyong LGA. Some ecosystems have been more heavily impacted than others, for example vegetation types occurring in lowland and riparian habitats have experienced the highest rates of vegetation loss. There are ten Endangered Ecological Communities (EECs) known to occur within Wyong LGA:

- Low Woodland with Heathland on Indurated Sands at Norah Head
- Sydney Freshwater Wetlands in the Sydney Basin Bioregion
- Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Lower Hunter Spotted Gum - Ironbark Forest in the Sydney Basin Bioregion
- River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Themeda grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner bioregions

The following figure shows the location of endangered ecological communities within the Wyong LGA.





## Flora

The *Wyong Shire Natural Vegetation Technical Report* by Bell (2002) recognises over 1,300 plant species within Wyong LGA, seven of which are listed as endangered and twelve listed as vulnerable under the NSW *Threatened Species Conservation Act 1995* (TSC Act). Eight species were also identified as having highly restricted habitats, with potential to fall under endangered population classifications in the future. Furthermore, 56 threatened species within Wyong LGA are listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). These species are at risk of becoming extinct if action is not taken to stem the causes of their decline and assist in their recovery.

## Fauna

The Wyong sub-region of the Hunter-Central Rivers Catchment Management Authority (CMA) region supports 427 native terrestrial fauna species, of which 86 species (including 1 insect, 8 frog, 5 reptile, 48 bird and 24 mammal species) are listed in the TSC Act. There are also 58 migratory marine and terrestrial species, including eight vulnerable and four endangered species protected under international treaties and the EPBC Act.

### Issues:

## What are the current and foreseeable issues that impact upon BIODIVERSITY CONSERVATION?

### Habitat loss, fragmentation and alteration

Animals rely on niches in vegetation types and changes of season to lead them to food and breeding opportunities. Primary population effects such as development along coast lines due to urban settlement patterns and habitat fragmentation due to vegetation clearing for roads and towns include:

- Reducing and isolating habitat, potentially making some populations unviable.
- Simplifying habitat structure can reduce the diversity of native plants and animals.
- Whilst moving across roads and between fragments of remnant vegetation, native species face death or injury from motor vehicles, and attacks from foxes, cats and dogs.

Other processes altering or degrading habitats in Wyong LGA include pollution, removal of bush rock, fire wood collection, and mine subsidence. Current subdivision practices have also contributed to a loss of biodiversity, as lot sizes in urban release areas tend to be the minimum permitted, and there is little remaining space for substantial tree plantings on private property. This has resulted in a depletion of the urban tree canopy.

### Introduced Species

Pathogens, weeds and pest animals reduce agricultural productivity, compete with native flora and fauna, degrade landscapes and reduce the value of areas for recreation and tourism. Predation and grazing by introduced animals presents a major threat to our fauna and flora. Species such as foxes, feral cats and dogs are major predators of

indigenous fauna, whilst rabbits, goats, pigs and deer cause disturbance to indigenous vegetation. Feral honey bees compete with native species for food and habitat. Introduced plant species also present an ongoing threat to biodiversity in Wyong LGA, with new weeds and existing weeds increasing in area and density. Weeds result in a loss of native plant biodiversity, as well as increased weed management costs. Additionally, pathogens including Myrtle rust, amphibian chytrid and *Phytophthora cinnamomi*, are a significant threat to native plants and animals in Wyong LGA. Other processes, such as bell-miner associated die-back, is affecting native vegetation in Wyong LGA.

### Increasing cost of maintenance and operation of protected lands

Maintenance and operational costs for protected lands is steadily increasing due to increased introduced species, edge effects from urbanised areas, more stringent management requirements (in particular bush fire risk) and increased community expectations. This will strain Council's budget, and funding mechanisms to address the issue of maintenance costs for protected land should be investigated.

### Climate Change

As discussed in the 'Planning for NATURAL HAZARDS' chapter, impacts of climate change may include more intense and frequent bushfire events. This may negatively impact on biodiversity within Wyong LGA, as fire sensitive vegetation types such as dry rainforest and wetland communities can only tolerate fire to an extent. The combination of fire with other threatening processes such as vegetation clearing and weed infestation will be detrimental to these ecosystems. Other potential impacts of climate change include expansion of introduced species, such as weeds and cane toads.

### Land Tenure

Whilst there are large amounts of sensitive environmental lands designated as National Park and State Forest within Wyong LGA, a large amount of Wyong LGA's sensitive environmental lands are in private ownership. Therefore, private land is highly significant for biodiversity conservation, as degradation and fragmentation of environmental lands can negatively impact biodiversity of the region. Increasing fragmentation of land creates edge effects, discussed in more detail in the 'green corridors' section of this chapter.

### Planning for our Population:

## How do we plan for BIODIVERSITY CONSERVATION in light of the issues identified?

### Draft Wyong Conservation Strategy (WCS)

In 2003, Council prepared the draft WCS to guide future management for the protection and management of biodiversity within the Wyong LGA. Whilst the WCS was not adopted by Council, this document and its background studies provide useful reference

information for a number of Council activities in relation to biodiversity conservation. Note that the Council resolution of 9 June 2004 also adopted the following policy:

- That government and semi-government lands bear the prime burden of achieving conservation goals for the Shire and private lands only be included where they are already severely constrained from development due to existing physical attributes.
- That any proposed constraint on private land only proceed after extensive and exhaustive information and consultation with affected land owners.
- That cleared private land not be included in the draft Strategy.

In order to strengthen biodiversity protection, Council should develop, adopt and implement a Biodiversity Management Plan for Wyong LGA.

### Draft Natural Resources Management Strategy (NRMS)

The purpose of the NRMS is to ensure Wyong LGA retains and enhances its valuable natural resources and landscape setting, both for its intrinsic value and to support our lifestyle, community and economy. The NRMS focuses on informing the Wyong LEP 2013, Settlement Strategy, and Wyong DCP 2013 and future amendments.

### Coastal Zone Management Plan (CZMP)

In order to maintain coastal biodiversity, coastal ecological communities must have room to migrate and adjust to new climate and sea level conditions. Council's policy is to maintain buffer zones to enhance ecological resilience, wherever practicable. The CZMP has eight action plans that Council proposes to implement over the next ten years, including a plan for 'Biodiversity Resilience', to strengthen the ecological resilience of the coast. Council should continue to protect coastal biodiversity in line with the CZMP.

### Greening Wyong Strategy

Increasing urbanisation, increasing density, OH&S legislation and risk management practices has put enormous pressure on existing trees and tree planting possibilities, resulting in the decline of the urban tree canopy. Lot sizes in urban release areas tend to be the minimum permitted, and once these lots are built upon there is little remaining space for substantial tree plantings on private property. In recognition of the depletion of our urban tree canopy, Council is currently developing a strategy to guide and manage ongoing tree planting within public streets and parks in a proactive and sustainable way. Priority planting precincts will be identified and action plans prepared for these areas.

### Land Use Planning

The primary land use planning mechanism for biodiversity conservation is through adoption of a Settlement Strategy to confine growth to targeted areas which allows for biodiversity conservation to be achieved through a regional framework for assessment and long term management. The Central Coast Regional Strategy (CCRS), prepared by the Department of Planning & Infrastructure (DP&I) promotes the concentration of new

development within the North Wyong Shire Structure Plan (NWSSP) area, with progressive investigation and assessment of biodiversity impacts of new release areas in accordance with the draft Central Coast Regional Conservation Plan (CCRCP) to be prepared by the Office of Environment and Heritage (OEH).

The assessment of potential biodiversity conservation impacts as a result of development proposals requires accurate and up to date baseline information. For example, it has been identified that mapping of EECs west of the F3 Freeway needs to be updated. Council needs to undertake additional investigations and mapping for EECs west of the F3 Freeway in conjunction with the State Government.

In addition, to complement the Greening Wyong Strategy, Council should investigate methods of incorporating increased tree retention as part of future subdivision applications, in order to retain more of the urban tree canopy. Council should also investigate innovative funding schemes for community acquisition and/or incentives for private land holders for the protection, restoration and management of land for biodiversity conservation.

### Plans of Management

Council prepares Plans of Management for all land under Council ownership or control that is classified as community land. All plans are prepared under the provisions of the *Local Government Act 1993* (LG Act) and outline how the land is to be used and managed. These plans are therefore important planning tools to assist in protecting biodiversity. Council will continue to develop and update Plans of Management for natural areas.

### Work closely with the State Government

Council has worked in close liaison with the State Government in the preparation of both the NWSSP and the draft CCRCP, including the identification of appropriate green corridors throughout the LGA. Council will continue to liaise closely with both State and Federal Government in relation to our biodiversity conservation.

### What are other Government Authorities currently doing?

#### Central Coast Regional Conservation Plan (CCRCP)

Regional Conservation Plans, such as the draft CCRCP prepared by the OEH, guide land use planning by Councils and CMAs. As the majority of future urban will occur in the northern part of Wyong LGA, the draft CCRCP has the objective of protecting and retaining conservation values within the NWSSP area. The draft CCRCP identifies 'Priority Conservation Areas' which contain high biodiversity values, including habitat for a number of EECs and threatened flora and fauna species, and which maintain key green corridors across the region. These areas can be used by the development industry to offset the biodiversity impacts of development. The plans also guide the community on where it can most effectively concentrate its conservation efforts, including voluntary conservation initiatives, and the restoration or rehabilitation of degraded landscapes.



Conservation will be achieved through a range of mechanisms, such as:

- The establishment of new conservation reserves
- The protection and management of conservation land in perpetuity, using mechanisms such as the Biodiversity Banking and Offsets Scheme or conservation agreements
- The provision of green corridors providing connectivity from the coast to the mountains in an east-west and a north-south direction. These corridors will support wildlife movement and provide buffers for organisms affected by climate change.

The OEH is committed to finalising the draft CCRCP to ensure the delivery of a balanced development and conservation package for the Central Coast to 2031.

#### Biodiversity Banking and Offsets Scheme (BioBanking)

BioBanking provides landowners with a financial incentive to protect biodiversity on their property. The scheme enables biodiversity credits to be traded in return for agreeing to establish a BioBank site on certain land to manage and protect biodiversity in accordance with a BioBanking Agreement. These biodiversity credits can be sold and are an opportunity for rural landowners to generate income by managing conservation land. A BioBanking Agreement is legally binding and is also binding on any future land owners. There are currently no Biobanking sites in Wyong LGA. However, since the first priority for biodiversity offsetting is to protect land with the same ecological characteristics as the land being developed, some land within the NWSSP green corridor may be attractive to offset the impact of development elsewhere in the NWSSP area. Any future BioBanking sites will be appropriately zoned to reflect the environmental values on the site.

#### Biodiversity Certification (BioCertification)

BioCertification offers planning authorities such as Council a streamlined biodiversity assessment process to be utilised during the strategic planning stage of development. It identifies and protects areas of high conservation value, as well as identifying areas suitable for development, along with a range of secure options for offsetting impacts on biodiversity. After BioCertification is conferred on an area, development may proceed without the usual requirement for site-specific threatened species assessment. Any future BioCertification sites will be appropriately zoned to reflect this agreement.

#### Hunter-Central Rivers Catchment Action Plan

Catchment Management Authorities (CMA) have been set up by the State Government to co-ordinate community involvement in regional natural resource management. CMA's are responsible for developing a Catchment Action Plan (CAP), and the *Hunter-Central Rivers CAP 2006-2015* applies to Wyong LGA. The Hunter-Central Rivers CAP is a guide to protecting and improving our region's natural resources. The CAP identifies the key natural resource features (biodiversity, aquatic health, soils, estuarine, and marine health) that we need to protect and improve, and outlines the best ways to do it. Management targets to be achieved by 2015 include:

- Regenerate 25,500ha of native vegetation
- Treat 2400ha of weed affected lands and treat animal pests over 31,000ha
- Revegetate 1200ha of salinity recharge areas with deep-rooted vegetation
- Regenerate 550km of degraded native riparian vegetation.

#### Property Vegetation Plans (PVP)

Clearing remnant native vegetation or protected regrowth in non-urban areas generally requires approval under the *Native Vegetation Act 2003* (NV Act), and can only be approved when the clearing will improve or maintain environmental outcomes. Where clearing requires approval, landholders may apply to the local CMA to prepare a PVP. A PVP is a voluntary, legally binding agreement between a landholder and the CMA. A PVP may be obtained for a number of reasons, including applying for native vegetation incentive funding to protect native vegetation; to obtain clearing approval; and to secure offsets associated with that clearing. Like BioBanking and BioCertification, PVPs apply to the land, despite any future change of landholder.

#### Voluntary Conservation Agreements (VCA)

A VCA is a joint agreement between landowners and the Minister for the Environment. A VCA provides permanent protection for land containing special features including native vegetation, wildlife habitat, Aboriginal sites and historic places. The area under the VCA is registered on the title of the land ensuring that if the land is sold, the VCA and management requirements remain in place. Council encourages the use of VCA's in conserving environmental and heritage features of land within the Wyong LGA.

#### State Environmental Planning Policy No 14 – Coastal Wetlands (SEPP 14)

This Policy is addressed in the 'Planning for WETLANDS' section of this document.

#### State Environmental Planning Policy No 26 – Littoral Rainforests (SEPP 26)

This Policy seeks to protect coastal rainforests (littoral rainforests) by requiring development consent for development in or adjacent to mapped littoral rainforest areas. An environmental impact statement and the concurrence of the Director-General of the OEH may also be required under this Policy. Wyong LGA has one SEPP 26 Littoral Rainforest, located in the Wyrabalong National Park at Magenta.

#### State Environmental Planning Policy No 44 – Koala Habitat Protection (SEPP 44)

This Policy seeks to protect koala habitat by requiring a Plan of Management for all development in core koala habitat, and by encouraging core koala habitat to be included in environment protection zones in LEPs. Core koala habitat is defined as:

*'an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of and historical records of a population.'*

Potential koala habitat is also protected, with requirements for a Plan of Management to be prepared as part of a Development Application to carry out development on land found to be potential koala habitat. Potential koala habitat is defined as:

*'areas of native vegetation where the trees of the types listed in Schedule 2 constitute at least 15% of the total number of trees in the upper or lower strata of the tree component.'*

Trees listed in Schedule 2 that occur in Wyong LGA are as follows:

Scientific Name	Common Name
<i>Eucalyptus tereticornis</i>	Forest red gum
<i>Eucalyptus microcorys</i>	Tallowwood
<i>Eucalyptus punctata</i>	Grey Gum
<i>Eucalyptus haemastoma</i>	Broad leaved scribbly gum
<i>Eucalyptus robusta</i>	Swamp mahogany

**Table 19:** Summary of key Koala habitat trees that occur in Wyong LGA (SEPP 44)

To assist with koala habitat protection, Council should conduct surveys to identify potential and core koala habitat, amend zonings and apply special provisions to land identified as core koala habitat within the Wyong LEP 2013 and prepare a DCP chapter for land that is or adjoins core koala habitat, as per Clause 15 of SEPP 44.

### Office of Environment and Heritage (OEH)

The role of the Parks and Wildlife Group of the OEH is to conserve protected native flora and fauna within the reserve system and wilderness areas and promote community awareness of natural and cultural heritage. The Parks and Wildlife Group is responsible for the following reserves within Wyong LGA:

#### Wyrribalong National Park

Covering an area of 592 hectares, the Wyrribalong National Park conserves the last significant coastal (littoral) rainforest on the Central Coast.

#### Jilliby State Conservation Area (SCA)

In 2003, the National Parks and Wildlife Service took ownership of the 12,159 ha Jilliby SCA. Jilliby SCA was formerly part of Olney (4,423 ha), Wyong (3,842 ha), Ourimbah (3,836 ha) and Watagan (58 ha) State Forests. Jilliby SCA links to the Heaton and Awaba State Forests, and remaining areas of the Olney, Watagan, Wyong and Ourimbah State Forests. In the context of a regional system of reserves, Watagans National Park and Jilliby SCA form part of a significant ecological corridor stretching from the Hunter River estuary in the north to the Hawkesbury River estuary in the south. The Watagans National Park and Jilliby SCA protect important areas of remnant forest ecosystems at the head of major water catchments. Due to the fairly recent establishment of these reserves, a large

proportion of the reserves are not yet zoned correctly. This can be addressed in Wyong LEP 2013, with an amendment to E1 – National Parks and Nature Reserves Zone.

#### Lake Macquarie State Conservation Area (SCA)

Declared in November 1996, Lake Macquarie SCA comprises approximately 650 ha of important remnant bushland in six separate areas on the western and south-eastern foreshores of Lake Macquarie. A portion of the SCA is within Wyong LGA (at Chain Valley Bay), however the majority of the land is inappropriately zoned as 5(a) (Special Uses Zone - Power Station). Lake Munmorah SCA will be converted to E1 – National Parks and Nature Reserves Zone as part of Wyong LEP 2013.

#### Munmorah State Conservation Area (SCA)

Declared in April 1977, Munmorah SCA covers an area of 1,529 ha. Munmorah SCA is a relatively large, undisturbed coastal area which complements the conservation values of other protected areas, state forests and Crown reserves on the Central Coast. The special value of this SCA include its coastal setting and panoramic views; sand dunes; diverse vegetation communities; protected threatened species and migratory bird habitats; and opportunities for nature based recreation and educational and scientific study. For the most part, this site is appropriately zoned as National Park, however a portion of the site is inappropriately zoned 7(a) (Conservation Zone) and 7(g) (Wetlands Management Zone). This part of the SCA will be converted to the E1 – National Parks and Nature Reserves Zone as part of Wyong LEP 2013.

#### Colongra Swamp Nature Reserve

Covering an area of 112 ha and located within the Munmorah Power Station land, this park was created in February 2007 and contains a major SEPP 14 wetland. Colongra Swamp Nature Reserve is not appropriately zoned to reflect its National Park status. This can be addressed in Wyong LEP 2013, with a zone conversion to the E1 – National Parks and Nature Reserves Zone.

#### Tuggerah Nature Reserve

Covering an area of 132 ha and adjacent to Tuggerah Lake, this park was created in February 2007. The Tuggerah Nature Reserve is not yet appropriately zoned to reflect its National Park status. This can be addressed in Wyong LEP 2013, with a zone conversion to the E1 – National Parks and Nature Reserves Zone.

State conservation areas are reserved under the National Parks and Wildlife Act 1974 to protect and conserve areas that contain significant or representative ecosystems, landforms or natural phenomena or places of cultural significance (NSW National Parks and Wildlife Service, 2005)

Nature reserves are reserved under the National Parks and Wildlife Act to protect and conserve areas containing outstanding, unique or representative ecosystems, species, communities or natural phenomena (NSW National Parks and Wildlife Service, 2005)



### *Palm Grove Nature Reserve*

Covering an area of 240 ha and located off Ourimbah Creek Road (adjacent to Gosford LGA), this park was created in February 2007. The area of Palm Grove Nature Reserve within Wyong LGA is not appropriately zoned to reflect its National Park status. This can be addressed in Wyong LEP 2013, with a zone conversion to the E1 – National Parks and Nature Reserves Zone.

### *Point Wolstoncroft Sport Centre*

Point Wolstoncroft Sport Centre is administered by the National Parks and Wildlife Service. It is zoned 6(a) (Open Space and Recreation Zone) however it is more appropriate to rezone this land to E1 – National Parks and Nature Reserves Zone to reflect the status of this site as a National Park. This can be addressed in Wyong LEP 2013.

### **The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:**

## **What provisions can be incorporated into our Planning Instruments to ensure planning for BIODIVERSITY CONSERVATION can be met?**

### **Wyong LEP 2013**

The following measures can be incorporated into Wyong LEP 2013 to improve our planning for biodiversity conservation:

- Review existing zones and land use tables within Wyong LGA to ensure physically constrained, environmentally sensitive land; wildlife linkages; and waterways are appropriately protected.
- Protective zoning and biodiversity conservation provisions provide a limitation on development in sensitive areas and an assessment framework for the consideration of development proposals:
  - Allocate E1 National Parks and Nature Reserves (E1) zone to all National Parks, Nature Reserves and State Conservation Areas.
  - Allocate E2 Environmental Conservation (E2) zone to:
    - Mapped EECs east of the F3 Freeway recognising the state significance of these communities and potential threats from development pressures. During public exhibition, landowners will be encouraged to review the extent of E2 mapping.
    - SEPP 14, SEPP 26, and protected land with VCAs and PVPs.
    - Land acquired by Council for conservation purposes.
    - Agreed conservation lands, including Wadalba Wildlife corridor.
  - Allocate E3 Environmental Management (E3) zone to:
    - Existing 1(c) (Non Urban Constrained Lands Zone), 7(a) (Conservation Zone), 7(c) (Scenic Protection: Small Holdings Zone), 7(d) (Coastal Lands Protection Zone), 7(e) (Coastal Lands Acquisition Zone), 7(f) (Environmental Protection Zone), and 7(g) (Wetlands Management Zone) under Wyong LEP 1991. Exceptions include

7(b) (Scenic Protection Zone) or where the land has been developed for a particular purpose that is not suited to the E3 zone.

- The Environmental Management Framework (EMF) provides further information in this regard. The EMF is also summarised in the “Land Use Strategy” chapter.
- Include bonus subdivision incentive Clause 4.1.B - Variation to minimum lot sizes for environmental benefits, for development proposals that secure long term conservation management of key biodiversity lands.
- Include Clause 5.9 – Preservation of trees and other vegetation allows Council to prescribe trees and other vegetation within a DCP to ensure any proposed clearing is assessed and where approved, impacts are mitigated.
- Include provisions to prevent pre-emptive clearing of native vegetation within the NWSSP area to ensure biodiversity outcomes of the CCRS and the NWSSP are not compromised.

### **Wyong DCP 2013 – Development Controls for Wyong Shire**

The following measures can be incorporated into Wyong DCP 2013 to improve our planning for biodiversity conservation:

- Conservation Areas for Northern Wyong Shire
- Wetlands Management
- Tree and Vegetation Management
- Various Chapters – Location specific development controls (may also include requirements to assist in biodiversity conservation)
- Revise DCP provisions having regard to the Standard Instrument local clause for the preservation of trees or vegetation
- Council intends to create a comprehensive Biodiversity Chapter in a future amendment to Wyong DCP 2013.

### **Key Planning Considerations:**

#### **Key Planning Considerations for BIODIVERSITY CONSERVATION:**

- *Ensure environmentally sensitive land, endangered ecological communities, vulnerable ecosystems and high conservation value vegetation is conserved and protected.*
- *Consider appropriate development controls for lands adjoining protected lands.*
- *Require submission of a detailed flora and fauna assessment for all relevant developments, including an assessment of native tree cover and condition assessment of identified important vegetation in parklands.*
- *Encourage tree retention and larger subdivision sizes to retain urban tree cover.*

**Strategic Actions and Local Initiatives:**
**BIODIVERSITY CONSERVATION**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP 2013	Am.	DCP 2013	Am.	Other		
EN01	Review zoning and other provisions to ensure environmentally sensitive land and wildlife linkages are suitably protected. Include bonus incentive provisions for the long term conservation of key biodiversity lands.	WSC	X		X	X		<ul style="list-style-type: none"> <li>Preserving threatened and endangered species as well as ecological communities and biodiversity. This involves a balance in the use of local endemic species in both landscaping and bush regeneration and the identification of habitats which are so sensitive that no development or recreational access should be permitted near them.</li> <li>Expanding and continuing programs restoring degraded natural areas in our community. This should be done, where possible, in partnership with the local community and all levels of Government. The program could include lakes improvements, streambank stabilisation, bushland regeneration and noxious weed and feral animal control.</li> <li>Developing and implementing strategies to reduce the LGA's Environmental Footprint. This will reduce the impact of the population in the LGA on a range of current and future environmental issues and be an example of sustainable communities and economies.</li> <li>Developing and implementing a Natural Resources Sustainability Strategy for Wyong LGA. This will be based on comprehensive environmental and resource information and outline how the balance between natural and built environments will be achieved over the next 100-200 years.</li> <li>Improving and promoting public access to environmental areas. This will help increase community awareness and involvement, encourage greater use among all ages and abilities, and improve community ownership.</li> <li>Establishing and maintaining projects and</li> </ul> <p><b>6.3</b> LEPs are to appropriately zone land with high state or regional environmental, agricultural, resource, vegetation, habitat, waterways, wetland or coastline values.</p> <p><b>6.5</b> Councils, through preparation of LEPs, are to incorporate appropriate land use buffers around environmentally sensitive, rural and resource lands.</p> <p><b>6.6</b> The Office of Environment &amp; Heritage (OEH), working with the DP&amp;I, other relevant government agencies and councils, is to prepare a Regional Conservation Plan that:</p> <ul style="list-style-type: none"> <li>identifies the key conservation values of the Region and regionally significant corridors</li> <li>Outlines how the CCRCP relates to the CCRS and the relevant catchment action plans</li> <li>Establishes a biodiversity investment guide that identifies which landscapes and habitats, at a regional level, are to be targeted for investment to achieve improved conservation outcomes</li> <li>Establishes a biodiversity offset package for greenfield development within the NWSSP Area and a framework for an offset strategy to be established for development outside of this area until such time as detailed local strategies are prepared</li> <li>Identifies mechanisms that will be used to fund biodiversity investment</li> <li>Establish monitoring and review mechanisms.</li> </ul> <p><b>6.7</b> The DP&amp;I, Department of Primary Industries, OEH and councils to work</p>	
EN02	Investigate private land holder incentives for the protection, restoration and management of conservation land.	WSC	X			X	X		
EN03	Conduct surveys to identify potential and core koala habitat, amend zonings and prepare a DCP Chapter for land that is or adjoins core koala habitat, as per Clause 15 of SEPP 44 Koala Habitat Protection.	WSC		X		X			
EN04	Update native vegetation community mapping (including condition assessment) and finalise green corridor and threatened species habitat mapping. Vegetation community classification to align with State classifications.	WSC		X			X		
EN05	Finalise and implement the Natural Resources Management Strategy for Wyong LGA.	WSC					X		
EN06	Incorporate suitable zoning and specific development controls for riparian corridors and wetlands.	WSC		X		X			
EN07	Prepare an offset strategy to replace DCP Chapter – Interim Conservation Areas. The offset strategy should identify suitable offset sites, and provide financial mechanisms/framework for offsetting at local scale.	WSC					X		
EN08	Prepare a study for the Yarralong Valley and land west of Hue Hue Road to determine highest and best zones.	WSC		X					
EN09	Finalise and implement the Greening Wyong Strategy.	WSC					X		
EN10	Investigate funding mechanisms to address the high cost of conservation land maintenance.	WSC					X		
EN11	Undertake investigations and mapping for Endangered Ecological Communities west of the F3 Freeway, in	WSC/SG					X		





## Planning for GREEN CORRIDORS

### HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF GREEN CORRIDORS?



#### Background to GREEN CORRIDORS:

One of the key measures identified to improve or maintain biodiversity levels is through the creation of green corridors. Providing landscape connections between patches of habitat enables migration, colonisation and interbreeding of plants and animals (Department of Environment & Conservation, 2004). Corridors are critical for the maintenance of ecological processes as follows:

- Identifying areas for protection, enhancement and restoration
- Protecting and conserving areas on a local and sub-regional scale
- Providing landscape connectivity for flora and fauna
- Improving visual amenity for the region, by providing a green buffer.

Corridors can consist of a sequence of stepping stones across the landscape (discontinuous areas of habitat such as paddock trees, wetlands and roadside vegetation), continuous lineal strips of vegetation and habitat (such as riparian strips and ridge lines), or may be part of a larger habitat area selected for its known or likely importance to local fauna (Department of Environment & Conservation, 2004).

#### Issues:

#### What are the current and foreseeable issues that impact upon our GREEN CORRIDORS?

##### Barriers

Infrastructure, such as roads and electricity transmission easements, create barriers to fauna movement. The gap width determines whether the movement of species is limited or not. Other variables including artificial lighting that may deter some species.

##### Edge Effects

Increasing fragmentation of land creates the "edge effect". Due to corridors being generally linear, these tend to be subject to edge effects such as invasion of introduced species, increased predation, altered microclimate (wind and hydrological cycles), and increased isolation from areas of similar habitat. This leads to a loss of biodiversity.

##### Increasing maintenance and operational costs for protected lands

Similar to biodiversity conservation in general, Council's maintenance and operational costs for protected lands is steadily increasing, including land within green corridors.

##### Width and Length

Width and length are significant factors that influence the effectiveness of a green corridor. In general, narrow corridors are less successful however with high costs associated with green corridors, often corridors are not wide enough to achieve the intended conservation outcomes. In addition, short corridors in proximity to large natural areas are more likely to be effective than long corridors in isolation.





### Private ownership

Whilst there are large amounts of sensitive environmental lands designated as National Park and State Forest within Wyong LGA (predominantly in the west of the LGA), a large amount of our sensitive environmental lands are in private ownership. In particular, a large amount of privately owned sensitive environmental land is within the coastal floodplain, isolating coastal ecosystems (wetlands, lakes, coast). Fragmentation and degradation of sensitive environmental lands in private ownership fractures green corridors and reduces permeability for organisms, with significant impacts on biodiversity as a result.

### Implementation of Green Corridors

As the draft CCRCP will not provide the level of detail required to establish green corridors by way of appropriate zoning and other planning controls (as previously indicated), consideration needs to be given to the different options available to Council and private landowners to implement the green corridors.

#### Planning for our Population:

### How do we plan for GREEN CORRIDORS in light of the issues identified?

#### Implementation of Green Corridors

The level of detail required to appropriately implement the green corridor network is beyond the scope of the NWSSP and this Settlement Strategy. The draft CCRCP will also not provide detailed information to enable implementation of the network by way of appropriate zoning and other planning controls. NWSSP investigations identified several areas within the possible green corridor that have significant land use planning issues warranting urgent and more detailed local investigation to determine their environmental value, development potential, and appropriate zoning and development controls. The key objective for these sites will be to achieve a balance between development and biodiversity conservation, within the broader context of the draft CCRCP.

There are a number of options available to implement our green corridor network. It is recommended that the network is investigated and implemented by way of either:

- 1 Preparation of a green corridors plan that will identify the locations of and the minimum width and length required for our green corridors; or
- 2 A piecemeal approach whereby the green corridor is investigated and implemented during development precinct investigations subject to the NWSSP.

Option 1 is favoured by Council. Option 2 is not favoured as it will likely result in ad-hoc implementation of the green corridor network, with long delays in linking the network. These delays could lead to degradation of these future green corridors, decreasing the viability of these areas as green corridors as well as increasing regeneration and maintenance costs. There will also be areas of proposed green corridor that are located outside the investigation precinct areas and these sites need to be considered.

Resolution of these issues can only be reached through a co-ordinated planning approach involving landowners, Council, DP&I, and other relevant Government agencies. In order to achieve successful green corridor implementation, a green corridors plan should be prepared that identifies the locations of and minimum width and length required for our green corridors. This plan will require detailed ecological investigations with a focus on:

- The location, nature and conservation value of the vegetated land
- The role of this land in creating a possible green corridor
- The preferred pathway or pathways for the green corridor
- The location of local corridors, including riparian areas, and links to planned corridors outside the NWSSP area (e.g. Wyee Planning Strategy Corridors)
- The extent of potential biodiversity losses from development and the need for and extent of off-sets.

### What are other Government Authorities currently doing?

#### Draft Central Coast Regional Conservation Plan and North Wyong Shire Structure Plan

As part of the draft CCRCP, the OEH has identified the need to implement a green corridor linking our uplands with the coast. The NWSSP has identified an opportunity to contribute to this green corridor based around valuable vegetated areas that contain EECs, threatened species, riparian environments, and wetlands. The creation of such a corridor could also off-set the loss of vegetation likely to occur in new urban release areas. However, while the NWSSP has identified possible green corridors, establishment of these corridors requires more detailed site and precinct planning, environmental assessment, and identification of suitable land-use zones and development controls. It is expected that the majority of land within green corridors will remain in private ownership, with appropriate zoning and land use controls.

#### BioBanking and BioCertification

As discussed in the 'Biodiversity Conservation' component of this chapter, the State Government has introduced BioBanking to give land owners a financial incentive to protect biodiversity on their property, and BioCertification to give planning authorities a biodiversity assessment process during the strategic planning stage of development. These schemes can be utilised in the implementation of the proposed green corridors.

#### The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:

### What provisions can be incorporated into our Planning Instruments to ensure planning for GREEN CORRIDORS can be met?

#### Wyong LEP 2013

The following measures can be incorporated into Wyong LEP 2013 to improve our planning for green corridors:



- Through Clause 7.9 – Biodiversity and Clause 5.9 Preservation of trees or vegetation, Wyong LEP 2013 will require development proposals to consider the impact on the vegetation and its importance as a habitat corridor.
- In addition, consideration will be given to the inclusion of provisions in Wyong LEP 2013 (in consultation with DP&I and OEH) to prevent pre-emptive clearing of native vegetation within the NWSSP area to ensure biodiversity outcomes of the CCRS and the NWSSP are not compromised.

### Wyong DCP 2013 – Development Controls for Wyong Shire

The following measures can be incorporated into Wyong DCP 2013 to improve our planning for green corridors:

- It is proposed to create a specific chapter for biodiversity and environmental management as a future amendment to Wyong DCP 2013. This will include existing provisions from Council's DCP such as wetlands and interim conservation areas. It is proposed to expand the discussion of biodiversity conservation issues which are not currently covered, such as green corridor planning and buffer width requirements, with reference to best practice documents. Council will strengthen green corridor planning by incorporating the North Wyong Shire Structure Plan map layer into Wyong DCP 2013. The map layer identifies all native vegetation considered by the State Government as being suitable for green corridor planning within the eastern part of the LGA, where development pressure is highest.

In addition, Wyong DCP 2013 will also incorporate the following:

- Part 3 of Wyong DCP 2013 details requirements in relation to a range of environmental issues, including interim conservation areas and setback requirements for development in relevant locations.
- Part 6 of Wyong DCP 2013 – Location Specific Development Controls may incorporate specific controls where green corridors can be considered.

#### **Key Planning Considerations:**

#### **Key Planning Considerations for GREEN CORRIDORS:**

- *Maintain and restore significant green corridor linkages.*
- *Ensure green corridors are appropriately implemented, conserved and protected as part of future land use planning investigations.*

**Strategic Actions and Local Initiatives:**

**GREEN CORRIDORS**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP 2013	Am.	DCP 2013	Am.	Other		
<b>EN14</b>	Include provisions (in consultation with DP&I and OEH) to require development proposals to consider the impact on vegetation and its importance as a green corridor and to prevent pre-emptive clearing of vegetation in the North Wyong Shire Structure Plan (NWSSP) area to ensure the protection of functional green corridors as recommended by the draft Central Coast Regional Conservation Plan (CCRCP) and NWSSP.	WSC		<b>X</b>				There are no CSP actions that apply to this component.	There are no CCRS actions that apply to this component.
<b>EN15</b>	Utilising the draft CCRCP as a guideline for corridor widths and suitable adjoining land uses adjacent to sensitive areas, prepare a green corridors Plan to incorporate appropriate zoning of the green corridor network.	WSC		<b>X</b>					



## Planning for CATCHMENTS, LAKES and WATERWAYS

### HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF CATCHMENTS, LAKES AND WATERWAYS?



### Background to CATCHMENTS, LAKES AND WATERWAYS:

#### Lakes and Waterways

Wyong LGA has a diverse range of aquatic environments from inland freshwater creeks and streams through to estuarine lagoons, lakes and swamps, and marine environments.

#### Water Catchments

Each waterway has its own catchment, an area where water is collected by the natural landscape. In a catchment, rain will eventually flow to a dam, creek, river, lake or ocean, seep into the groundwater system, be used by vegetation and animals or evaporate. Managing and protecting our catchments effectively is a key process for ensuring good water quality.

**Note:** Drinking water catchments are discussed in more detail in the chapter “Planning for UTILITIES INFRASTRUCTURE”.

#### Issues:

### What are the current and foreseeable issues that impact upon our CATCHMENTS, LAKES and WATERWAYS?

The increasing level of development and subsequent population increases in Wyong LGA has resulted in the following issues associated with the LGA’s catchments, lakes and waterways:

- Increased sediment and nutrient loads from development
- Erosion of creeks and banks
- Pollutants in stormwater runoff
- Reduced freshwater flow to the lakes
- Degraded foreshores
- Loss of saltmarsh, which plays a key role in maintaining Tuggerah Lakes estuary health
- Negative community perceptions
- Lack of community education
- Increasing cost of maintenance and protection of drainage reserves (discussed above in ‘Planning for BIODIVERSITY CONSERVATION’ and ‘Planning for GREEN CORRIDORS’).

#### Planning for our Population:

### How do we plan for CATCHMENTS, LAKES and WATERWAYS in light of the issues identified?

#### The Tuggerah Lakes Estuary Management Plan

Developed in 2006, the Tuggerah Lakes Estuary Management Plan (TLEMP) is considered the platform by which Council will manage the estuary into the future. Its primary

objective is to provide direction for the management of Tuggerah Lakes and its catchment in order to ensure the sustainability of its ecological systems. The objectives of the TLEMP are as follows:

- Water quality and quantity meet community and natural ecosystem needs
- The physical structure and vegetation of river, lake and wetland riparian zones are protected (and rehabilitated where required) to sustain healthy ecosystems
- The diversity of all native plant and animal species is conserved and protected to assist the recovery of threatened and endangered species
- Human settlement, primary production and other land uses take place while protecting and enhancing Aboriginal cultural heritage, soil, water and ecosystem health
- The coastal zone environment is protected whilst providing for the social and economic needs of the community
- Knowledge of catchment and estuarine systems is improved.

Projects being implemented as part of the TLEMP include:

- Streambank rehabilitation in Wyong River, Ourimbah Creek, Tumby Creek and Wallarah/Spring Creek to reduce erosion and strengthen banks
- Installing improved systems into residential and industrial areas to reduce excess stormwater run-off in areas like Saltwater Creek
- Building of constructed wetlands and catchment improvements to filter nutrients, sediments and stormwater run-off
- Rehabilitation of significant saltmarsh communities
- Improving recreational amenities and foreshores
- Continuing scientific investigations and monitoring of water quality
- Engaging the community in education programs.

### Plans of Management

Council prepares Plans of Management for all land under Council ownership or control that is classified as community land. All plans are prepared under the provisions of the LG Act and outlines how the land is to be used and managed. The procedure for the preparation of Plans of Management involves public exhibition and consultation processes. Council has prepared the following Plans of Management that relate to our catchments, lakes and/or waterways:

- Plan of Management 2 – Foreshore Reserve - Chelmsford Road East Lake Haven.
- Plan of Management 4 – Boat Harbour and Sandy Beach - Summerland Point
- Plan of Management 10 – Natural Areas
- Plan of Management 12 – Woodbury's Inn and Braithwaite Reserve

Council will regularly review relevant Plans of Management to strengthen management of our catchments, lakes and waterways, including community engagement and education.

### Community Education

The loss of saltmarsh vegetation around our Lakes has contributed to foreshore issues such as odours and 'black ooze'. Council can assist the local community in appropriately managing the foreshore environment through education programs. This may reduce such activities as lawn mowing to the waters edge, which destroys our saltmarsh areas.

### Septic Tanks

The health of our water catchments can be affected by the number of septic tanks in that catchment. Council needs to consider whether it should limit settlement to that which can be feasibly serviced by a reticulated sewerage system.

### Subdivision of waterfront land

Subdivision of waterfront land for additional allotments is of concern due to the potential for additional extraction of surface water and groundwater resources through a proliferation of Basic Landholder Rights (BLRs) under section 52 of the *Water Management Act, 2000*. The proliferation of BLRs can significantly impact upon existing water users and the environment. Council needs to consider whether it should limit subdivision of waterfront land in order to limit additional landholders with BLRs.

### What are other Government Authorities currently doing?

#### Funding Programs

In 2007, the Federal Government committed \$20 million over five years to assist with the implementation of the TLEMP. Stage 1 of the funding provided \$8.6 million to enable works to improve water quality through projects such as streambank and saltmarsh rehabilitation, wetland management, land-use modelling and community education programs. Council and the State Government are also contributing funding to the implementation of the TLEMP and are designing and building stormwater pollution control devices, constructed wetlands and additional recreational foreshore facilities.

In May 2011, the Federal Government committed to fund Stage 2 of the TLEMP through the 'Caring for Our Country' program, at a cost of \$11.4 million. This funding will enable the project to continue for another two years. The works will include streambank rehabilitation and revegetation along many of the rivers, creeks and waterways in the LGA, protection and rehabilitation of wetlands and saltmarshes, extensive weed removal, environmental monitoring and improving land management practices. The works and community education program will be undertaken in partnership with the National Parks and Wildlife Service (NPWS), the OEH and the Hunter-Central Coast CMA.

#### Water Sharing Plans

Developed under the *Water Management Act 2000*, Water Sharing Plans (WSPs) establish rules for sharing water between the environmental needs of a river or aquifer and water users, and also between different types of water use such as town supply, rural domestic



supply, stock watering, industry and irrigation. Each WSP is supported by an implementation program that details the milestones necessary to ensure that the objectives of the plan are achieved. WSPs are in place for 10 years, providing certainty of access for environmental health and for all licensed water users during the life of the plan. Wyong LGA currently has four WSPs:

- Jiliby Jiliby Creek
- Ourimbah Creek
- Kulnura Mangrove Mountain Groundwater Sources
- Central Coast Unregulated Water Sources

### WaterPlan 2050

As discussed in more detail in the 'Planning for UTILITIES INFRASTRUCTURE' chapter, *Water Plan 2050* is the Central Coast's long-term strategy to secure and sustain our water supply system over the next 40 years. However, *WaterPlan 2050* also seeks to identify medium to long-term changes and improvements that can be progressively introduced to protect the health of our rivers and creeks as well as the general environment.

#### The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:

### What provisions can be incorporated into our Planning Instruments to ensure planning for our CATCHMENTS, LAKES and WATERWAYS can be met?

#### Wyong Local Environmental Plan (LEP) 2013

The following measures can be incorporated into Wyong LEP 2013 to improve planning for our catchments, lakes and waterways:

- In relation to waterways, Council is encouraged to allocate W1 Natural Waterways or W2 Recreational Waterways zones to all lakes, waterways and estuaries up to the tidal limit (estuarine area), and such that the cross sectional extent is to the highest astronomical tide, therefore encompassing the maximum area subject to tidal inundation. The relevant waterways zones are divided as follows:
  - W1 Natural Waterways - high value aquatic vegetation, threatened species habitat, nursery or other identified environmental values.
  - W2 Recreational Waterways - the default waterway zone used for recreational boating and fishing purposes.
- In relation to riparian lands, Council is encouraged to incorporate local provisions in Wyong LEP 2013 to recognise the importance of riparian areas for the protection of aquatic ecosystems, biodiversity and wildlife habitat and corridors, and scenic and cultural heritage values. The OEH and DP&I propose to provide a local clause and supporting local mapping assistance to identify riparian buffer areas and a clause to guide assessment of development in those areas. The proposed clause will recognise the need to prevent inappropriate development and clearing of vegetation within foreshore and riparian zones. It will recommend buffers between 10m and 40m (on

each bank) based on stream orders. A model local clause has not been finalised for riparian buffer areas as yet, however Council will investigate inclusion of a "Sensitive Waterways" clause as an amendment to the Wyong LEP 2013. Inclusion of such a clause would also require appropriate supporting maps. As accurate mapping of riparian areas in the western part of the LGA is not currently available, this needs to be undertaken prior to inclusion of such a clause.

- Where riparian corridors have been identified as having high conservation value, OEH recommends that they be allocated to the E2 zone with permitted uses limited to those that are consistent with the protection of the values of this zone. As part of the investigation of staged urban release areas in the NWSSP area, Council will assess and determine appropriate riparian and foreshore buffers to be zoned as E2 or E3 depending on the detailed assessment of the investigations.
- The use of foreshore building line provisions will also be utilised in certain areas fronting the LGA's river and lake system. Council will include the settled model local clause for foreshore building line and apply to land previously protected by Wyong LEP 1991.

#### Wyong DCP 2013 – Development Controls for Wyong Shire

The following measures can be incorporated into Wyong DCP 2013 to improve planning for our catchments, lakes and waterways:

- Part 2 of DCP 2013 - Setback requirements for development in relevant sections.
- Chapter 3.2 Water Sensitive Urban Design (within a future amendment)
- Chapter 3.3 and Floodplain Management
- Part 6 of DCP 2013 – Location Specific Development Controls

#### Key Planning Considerations:

### Key Planning Considerations for CATCHMENTS, LAKES and WATERWAYS:

- *Assess the impacts of development on water quality:*
  - *Ensure catchments, lakes and waterways are appropriately conserved and protected.*
  - *Conserve and enhance riparian vegetation and riparian corridors.*
  - *Retain riparian functions to maintain habitat for aquatic and terrestrial species.*
  - *Ensure erosion and sediment control measures are implemented and that appropriate monitoring systems are in place.*
  - *Consider proliferation of Basic Landholder Rights and the impact on catchments, lakes and waterways when assessing waterfront subdivision applications.*

**Strategic Actions and Local Initiatives:**
**CATCHMENTS, LAKES and WATERWAYS**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP 2013	Am.	DCP 2013	Am.	Other		
<b>EN16</b>	Incorporate protection of catchments, lakes and waterways through land use zones or map overlays depicting environmentally sensitive lands, including: <ul style="list-style-type: none"> <li>▪ Zone waterways and environmentally sensitive areas around lakes.</li> <li>▪ Identify suitable riparian and foreshore buffer widths to be zoned E2 or E3 as part of the investigation of staged releases in the NWSSP area.</li> <li>▪ Include foreshore building line provision and mapping.</li> </ul>	WSC	<b>X</b>	<b>X</b>				There are no CSP actions that apply to this component.	There are no CCRS actions that apply to this component.
<b>EN17</b>	Develop appropriate controls for sensitive creeklines, tributaries, aquatic vegetation and marine shoreline habitat, to minimise impacts of development. This will include investigation of inclusion of a sensitive waterways clause and a review of DCP provisions relating to erosion and sediment control.	WSC		<b>X</b>		<b>X</b>			
<b>EN18</b>	Review the Waterfront Structures Policy with a view to creating a new chapter to Wyong DCP 2013.	WSC				<b>X</b>			
<b>EN19</b>	Continue to implement the Tuggerah Lakes Estuary Management Plan and sub-strategies.	WSC					<b>X</b>		
<b>EN20</b>	Review Plans of Management to strengthen management of our catchments, lakes and waterways, including community engagement and education. For example, liaise with the Catchment Management Authority to encourage residents to revegetate rural landholdings.	WSC					<b>X</b>		
<b>EN21</b>	Implement a pro-active environmental education and audit program on 'high risk' development sites, with a focus on erosion and sediment control.	WSC					<b>X</b>		

## Planning for OUR WETLANDS

### HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF OUR WETLANDS?



### Background to OUR WETLANDS

Wetlands are areas of land that are wet by surface water or groundwater, or both, for long enough periods that the plants and animals in them are adapted to, and depend on, moist conditions for at least part of their lifecycle (Department of Environment, Climate Change & Water, 2010). Wetlands form a vital component of regional and national biodiversity by providing habitat for a wide range of animals and plants (Department of Environment, Climate Change & Water, 2010). Wetlands are integral to landscape processes such as nutrient cycling, trapping of sediments, and detention and slow release of flood water (Department of Environment, Climate Change & Water, 2010).

#### Issues:

### What are the current and foreseeable issues that impact upon OUR WETLANDS?

Wetlands have been severely degraded and depleted since the arrival of Europeans in Australia over 200 years ago, with in excess of 80% of the NSW population living near coastal waterways and wetlands (Department of Environment, Climate Change & Water, 2008). The main threats to wetland function from urban development are:

#### Direct Encroachment on Wetland Ecosystems

Land clearing, filling and artificial drainage directly encroach on wetlands and result in and contribute to alterations of these systems and even loss of the wetland system entirely.

#### Alterations to Hydrology and Water Quality

The volume of runoff into and out of a wetland typically increases as a result of urbanisation, which impacts on inundation patterns. Physical disturbances as a result of altered hydrology include direct flood damage on vegetation, erosion and/or deposition of substratum, changes to substratum particle size distribution and changes to inflow and/or outflow patterns. This alteration can cause:

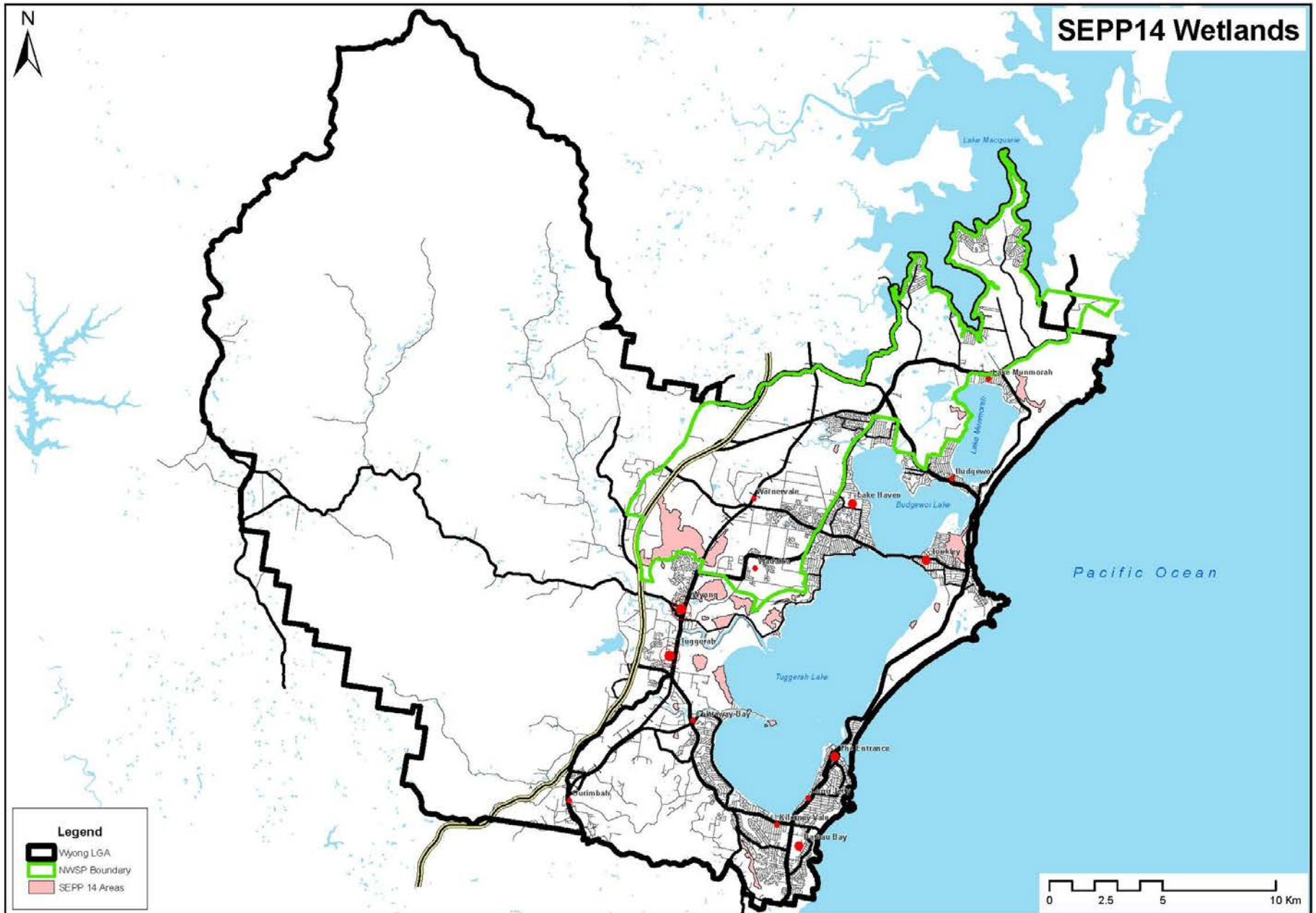
- Redistribution and loss of vegetation communities
- Loss of individual species and biodiversity or changes to species composition
- Deterioration of water and sediment quality within the wetland
- Increased bushfire impacts.

#### Alterations to the Substratum

Alterations to the chemical and physical properties of the substratum are linked to changes in water quantity and quality, altering parameters such as pH, redox potential, dissolved oxygen, nutrients, toxicants and suspended solids. The physical properties of the substratum can be altered in terms of sediment deposition and changes in sediment particle size distribution (Hunter & Central Coast Regional Environmental Management Strategy, 2007).



Figure 16: SEPP 14 Wetlands



## Climate Change

Sea level rises appear to be implicated in the decline of salt marsh habitat and increase in mangrove habitat in coastal estuaries (Wilton 2002). Therefore, climate change impacts may have the potential to alter the ecology of our wetlands.

### Increasing cost of maintenance and operation of protected lands

Maintenance and operational costs for protected lands is steadily increasing due to increased numbers of introduced species, edge effects from urbanised areas, and more stringent management requirements and increased community expectations in general. This has the potential to impact Council's budget for years to come.

#### Planning for our Population:

### How do we plan for OUR WETLANDS in light of the issues identified?

#### The Tuggerah Lakes Estuary Management Plan (TLEMP)

The TLEMP has a role in improving the quality of Wyong LGA wetlands and is discussed in more detail previously in the 'Planning for CATCHMENTS, LAKES AND WATERWAYS' section of this chapter.

#### Porters Creek Catchment Stormwater Harvesting Scheme

In 2006, an Integrated Water Cycle Management (IWCM) Strategy was formulated to mitigate impacts on the Porters Creek Wetland from stormwater runoff from existing and proposed new development in the Wyong Employment Zone and Warnervale Town Centre. The IWCM strategy has a key role in improving the quality of Wyong LGA wetlands and is discussed in more detail previously in the 'Planning for UTILITIES INFRASTRUCTURE' section of this chapter.

### What are other Government Authorities currently doing?

#### SEPP 14 – Coastal Wetlands (SEPP 14)

SEPP 14 aims to protect and preserve coastal wetlands. The areas covered by SEPP 14 are identified on a series of maps prepared by the DP&I. Over 1,300 coastal wetlands have been mapped under SEPP 14, representing 7% of all coastal wetlands in NSW. Wyong LGA has more than 30 SEPP 14 coastal wetlands (refer to map on previous page).

SEPP 14 restricts development in coastal wetland areas. Land clearing, levee construction, drainage work or filling of land may only be carried out on land within a SEPP 14 coastal wetland with the consent of Council and the agreement of the Director General of the DP&I. Activities on SEPP 14 wetlands which require development consent are deemed to be designated development, which means the development application must be accompanied by an environmental impact statement and be placed on public exhibition for public comment.

## NSW Wetlands Policy

In 1996, the State Government released the first NSW Wetlands Management Policy, which has helped it manage activities in and around wetlands, and guided its conservation and rehabilitation efforts. The latest version of this document, the NSW Wetlands Policy (Department of Environment, Climate Change and Water, 2010) promotes the sustainable conservation, management and wise use of wetlands in NSW and the need for all stakeholders to work together to protect wetland ecosystems and their catchments.

#### The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:

### What provisions can be incorporated into our Planning Instruments to ensure planning for OUR WETLANDS can be met?

#### Wyong LEP 2013

The following measures can be incorporated into Wyong LEP 2013 to improve our planning for wetlands:

- Allocate E2 – Environmental Conservation zone to all wetlands, in recognition of the high value aquatic vegetation, threatened species habitat, nursery or other identified environmental values.

#### Wyong DCP 2013 – Development Controls for Wyong Shire

The following measures can be incorporated into Wyong DCP 2013 to improve our planning for wetlands:

- Chapter – Wetlands Management specifies a minimum buffer zone to wetlands.
- Chapter - Water Sensitive Urban Design (within a future amendment)
- Part 6 – Location Specific Development Controls where relevant.

#### Key Planning Considerations:

### Key Planning Considerations for OUR WETLANDS:

- *Ensure sensitive wetlands are appropriately conserved and protected.*

**Strategic Actions and Local Initiatives:**
**OUR WETLANDS**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP 2013	Am.	DCP 2013	Am.	Other		
EN22	Allocate E2 – Environmental Conservation zone to all wetlands, in recognition of the high value aquatic vegetation, threatened species habitat, nursery or other identified environmental values.	WSC	X					There are no CSP actions that apply to this component.	There are no CCRS actions that apply to this component.
EN23	Finalise the Water Sensitive Urban Design chapter of Wyong DCP 2013.	WSC				X			
EN24	Review the Wetlands chapter of Wyong DCP 2013 for incorporation into a future biodiversity chapter of Wyong DCP 2013.	WSC				X			



## Planning for OUR GROUNDWATER

### HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF OUR GROUNDWATER?



#### Background to OUR GROUNDWATER:

Groundwater is water that has seeped from the surface into underground spaces known as aquifers. It is an integral part of the hydrologic cycle and provides significant contributions to rivers, lakes, wetlands and swamps, being an ongoing source of water during seasonally dry periods (Sydney Coastal Councils Group, 2006).

Groundwater is seen as both a resource as well as an essential component of ecosystem health and functionality. Groundwater also maintains the dynamics of estuarine and near-shore marine water bodies, contributing inflows of fresh water to otherwise saline environments, essential for the ongoing health and functionality of these ecosystems (Sydney Coastal Councils Group, 2006).

However, although groundwater accounts for over 30% of Australia's water use for such purposes as irrigation, drinking water and industrial uses, it is not an infinite resource (National Centre for Groundwater Research and Training, 2010). Accordingly, proper planning is required to ensure its sustainable management.

#### Issues:

#### What are the current and foreseeable issues that impact upon OUR GROUNDWATER?

##### Increasing population

An increasing number of residents and businesses are accessing Wyong LGA's groundwater resources. However, there is little opportunity for Council to control the level of access to the resource. Although the *Water Management Act 2000* requires that all connections to a groundwater source for water supply, groundwater monitoring, dewatering, or other specified purposes must be licensed, there are a large number of unlicensed spear pumps and bores in the area. There are gaps in knowledge as to the long-term impacts of uncontrolled access to groundwater resources, on both the groundwater resource itself, as well as the ecosystems that rely on groundwater for continued health and functionality. With population and employment lands in Wyong LGA expected to increase significantly over the next 20 years, it is important for Council to adopt a consistent and well-informed approach to groundwater management.

##### Groundwater Contamination

Sources of contamination are most often referred to as either point sources (generally related to urban development) or diffuse sources (generally rural in nature). Point-source contaminants are localised and include underground storage tanks, septic tanks, landfill, intensive rural industries, manufacturing spills, gas works and mining-related activities (Agriculture and Resource Management Council of Australia and New Zealand, 1995).

Diffuse contaminants are broad-scale and include fertilisers and pesticides. Disturbance of acid sulfate soils during construction can also lead to contamination of groundwater.

Once an aquifer is polluted, it is difficult and expensive to remediate. Due to the varied uses of groundwater, from irrigation to drinking water, groundwater contamination is a serious concern that needs to be carefully monitored, with mitigation measures put in place to avoid further contamination.

### Groundwater Salinity

Natural salinity in groundwater is for the most part determined by the geology of the area as well as the distance to the water recharge source. Natural salinity can be exacerbated by human activity, such as irrigation, waste water disposal and the clearing of land (Sydney Coastal Councils Group, 2006). Excessive extraction of groundwater can also result in coastal aquifers being refilled by inflowing saline water from the ocean.

High salinity groundwater has limited practical uses and can lead to soil degradation and impacts on plants. Increasing groundwater salinity may also have an impact on groundwater-dependant ecosystems, reducing biodiversity as salt-intolerant species are unable to survive in higher saline groundwater environments.

#### Planning for our Population:

### How do we plan for OUR GROUNDWATER in light of the issues identified?

#### Liaison with State and Federal Government

While groundwater is becoming a focus for both Federal and State Governments, information and mapping of the groundwater resource within Wyong LGA is largely unknown. Council should work closely with the State and Federal Governments in mapping and appropriately managing our groundwater resources. As part of this mapping program, mapping of groundwater dependent ecosystems such as wetlands, riparian vegetation and wet heathland should also occur.

#### Groundwater Mapping

Groundwater mapping should be undertaken in order to develop a more complete understanding of groundwater resources within Wyong LGA. Council will liaise with State and Federal Government in order to undertake a groundwater mapping program and determine the vulnerability of Wyong LGA groundwater resources.

A subset of this mapping should also include Groundwater Vulnerability Mapping. These maps show the vulnerability of aquifers to contamination relating to physical characteristics of the location, such as the depth to the water table and soil type, and are a valuable tool used for groundwater quality protection. The maps should be used by groundwater managers, planners, developers, and regulating agencies to make better informed judgements on where to locate potentially polluting activities so as to minimise the risk to groundwater.

Once our groundwater resources are mapped, Council should develop a central register for groundwater information within Wyong LGA to better plan for groundwater management.

### What are other Government Authorities currently doing?

#### National Centre for Groundwater Research and Training

The National Centre for Groundwater Research and Training, established in 2009, is funded by the Federal Government, with \$29.5 million over five years set aside to accelerate the assessment of Australia's groundwater resources and to harmonise definitional issues, governance and management practices. Subsequent to the award of this core funding, the Centre was awarded an additional \$15 million over four years to develop groundwater research infrastructure.

#### National Water Quality Management Strategy

At a national level, guidelines have been developed to provide a framework for reducing groundwater contamination, as part of the National Water Quality Management Strategy. The protection framework involves the identification of the specific beneficial uses of every major aquifer, with strategies which can be applied to protect those beneficial uses.

#### Wyong Water Study (2010)

The Wyong Water Study – Assessment and Documentation of Current Groundwater and Surface Water Information (SKM, 2010) was prepared on behalf of the then Department of Planning. The objective of this report was to assess and document the current status of groundwater and surface water information in the western part of Wyong LGA, in order to verify the previously released report on the impacts of underground coal mining in the Wyong LGA in June 2008.

Whilst this study was prepared for a specific purpose, one of the outcomes of the study was a recommendation as a high priority that all high yielding groundwater extraction bores in the study area should be metered and reported to a central agency or group. The study also recommended that an annual assessment of groundwater use from stock and domestic extraction bores should also be undertaken. Responsibility to implement this recommendation would rest with the Gosford-Wyong Councils Water Authority and the NSW Office of Water) in conjunction with the owners of privately owned bores.

#### NSW State Groundwater Policy Framework Document

The NSW State Groundwater Policy Framework Document (Department of Land & Water Conservation, 1997) was prepared with the aim of achieving efficient and sustainable management of groundwater resources. Three component policies were written to support the framework document:

- NSW State Groundwater Quality Protection Policy (1998).
- NSW State Groundwater Dependent Ecosystems Policy (2002).

- Draft NSW State Groundwater Quantity Management Policy.

Whilst the NSW Office of Water is the main agency responsible for groundwater management in NSW, the OEH is the lead agency responsible for managing contaminated groundwater and developing groundwater clean-up strategies for contaminated sites within NSW.

### State Environmental Planning Policy 55 - Remediation of Land (SEPP 55)

SEPP 55 establishes best practice for managing land contamination through the planning and development control process. Under SEPP 55, planning authorities must consider land contamination issues in assessing development and rezoning applications and must assess whether the land is suitable or can be made suitable for its proposed use. This includes groundwater contamination.

### Legislation

The following legislation covers different aspects of groundwater management:

- The *Water Act 1912* and the *Water Management Act 2000* deal specifically with groundwater resources, including a requirement for an access licence to extract groundwater from an aquifer.
- The *Protection of the Environment Operations Act 1997* prohibits the pollution of all water, including groundwater.
- The *Contaminated Land Management Act 1997* allows for the regulation of the clean-up of contaminated sites, including groundwater that has been impacted by point source pollution.
- The *Environmental Planning and Assessment Act 1979* requires that groundwater impacts are taken into consideration when new developments are proposed.

### The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:

### What provisions can be incorporated into our Planning Instruments to ensure planning for OUR GROUNDWATER can be met?

#### Wyong LEP 2013

The following measures can be incorporated into Wyong LEP 2013 to improve our planning for groundwater:

- A model local clause is being developed by the State Government and aims to 'maintain the hydrological functions of key groundwater systems and to protect vulnerable ground water resources from contamination as a result of inappropriate development. The utilisation of the model local clause under Wyong LEP 2013 will require further studies in determining the vulnerability of groundwater resources within Wyong LGA and will be done in conjunction with Federal and State Government authorities and organisation.

### Wyong DCP 2013 – Development Controls for Wyong Shire

The following measures can be incorporated into Wyong DCP 2013 to improve our planning for groundwater:

- Utilise Part 6 – Location Specific Development Controls where relevant.

### Key Planning Considerations:

#### Key Planning Considerations for OUR GROUNDWATER:

- *Assess the impacts of development on groundwater quality and quantity.*

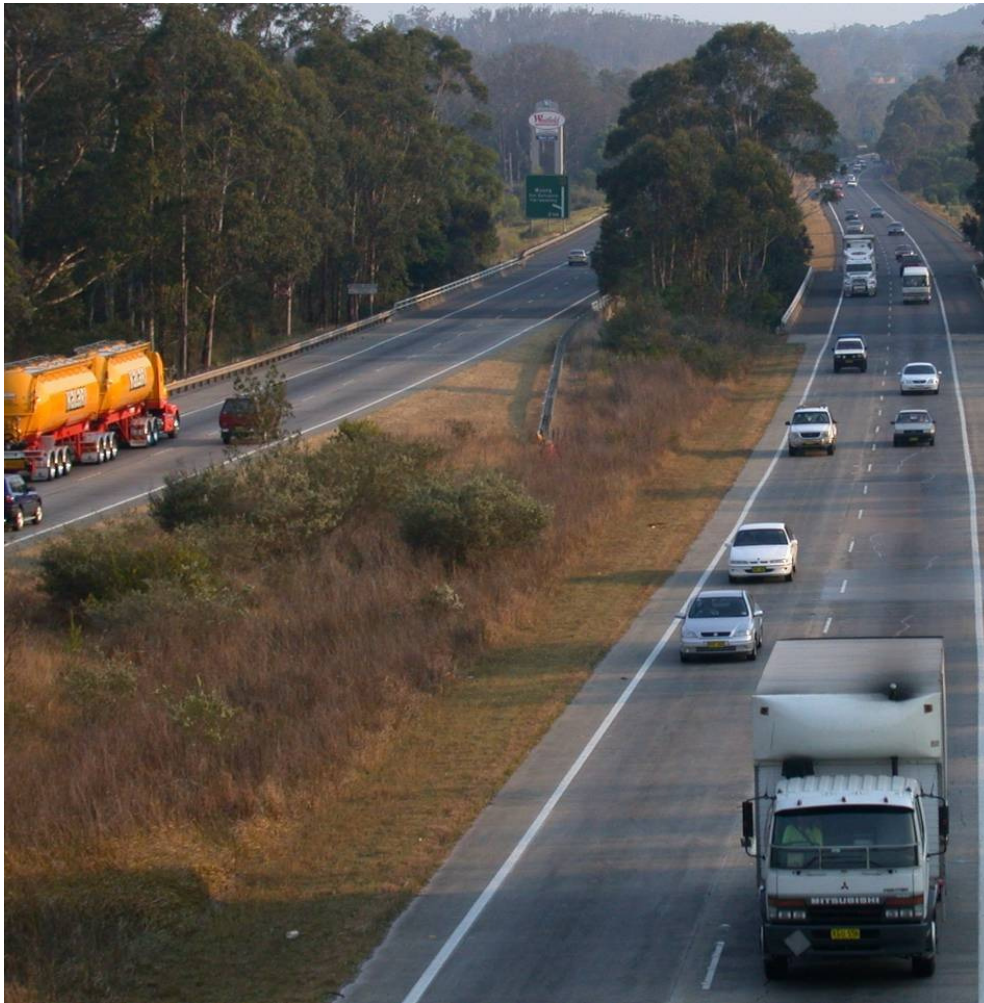


**Strategic Actions and Local Initiatives:**
**OUR GROUNDWATER**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP 2013	Am.	DCP 2013	Am.	Other		
EN25	Investigate the provisions of a settled model local clause for groundwater vulnerability to protect groundwater resources from inappropriate development.	WSC		X				There are no CSP actions that apply to this component.	6.23 Councils are to refer to the principles and guidelines in the Groundwater management handbook: a guide for local government (Sydney Coastal Councils Group 2006) when undertaking groundwater resource management and broader planning.
EN26	Liaise with State and Federal Government in order to undertake a groundwater mapping program and determine the vulnerability of Wyong LGA groundwater resources. As part of this mapping program, map groundwater dependent ecosystems such as wetlands, riparian vegetation and wet heathland.	WSC					X		
EN27	Develop a central register for groundwater information to better plan for groundwater management.	WSC					X		

## Planning for OUR ENVIRONMENTAL AMENITY

**HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF OUR ENVIRONMENTAL AMENITY?**



### Background to OUR ENVIRONMENTAL AMENITY:

#### Air Quality

Greenhouse gases, non-greenhouse gases (including particles, ozone, and other emissions which may impact on human health or amenity) and airborne dust can all contribute to reduced air quality. Odour from agricultural, industrial or commercial processes can also result in locally significant air quality problems. Although air quality is not considered to be a major issue of concern within Wyong LGA currently, careful planning will need to be undertaken into the future to ensure that continued population and employment growth within the Wyong LGA is carried out in a responsible manner, with air quality a key early consideration in planning for new developments.

#### Noise and Vibration

Noise and vibration issues in Wyong LGA are most often caused by nearby transport nodes – usually due to close proximity to roads or rail, and in some cases proximity to Warnervale Aerodrome. Noise associated with industrial uses and intensive agricultural can also pose particular challenges. Like air quality, careful planning will need to be undertaken into the future to ensure that continued population and employment growth within the Wyong LGA is not carried out to the detriment of our environmental amenity.

#### Issues:

### What are the current and foreseeable issues that impact upon OUR ENVIRONMENTAL AMENITY?

Continuing urban development within Wyong LGA will contribute to reduced air quality, unless specific consideration is given to this issue at an early planning stage. New urban release area development, whether commercial, industrial or residential development, can contribute significantly to reduced air quality, with a combination of greenhouse gas emissions, non-greenhouse gases and airborne dust, as well as odour issues from certain industrial land uses. Major infill developments also need to be considered in terms of air quality impacts associated with the proposed use.

#### Planning for our Population:

### How do we plan for OUR ENVIRONMENTAL AMENITY in light of the issues identified?

#### Air Quality

Strategic planning can contribute to maintaining or improving air quality by reducing greenhouse gas emissions in a number of ways:

- Creating compact urban forms and minimising the length of vehicle trips between new residential areas and employment and service centres in order to minimise fuel use and associated greenhouse emissions.
- Avoiding development of remote residential areas with limited access to jobs, services and public transport.
- Encouraging public transport use by locating commercial and industrial development within 400 metres of a bus stop or 800 metres of a train station, and locating higher density residential development within 800 metres of a train station.
- Encouraging bike or pedestrian activity by implementing an appropriate and attractive pedestrian and cycle path network, linking centres to surrounding residential areas.
- Requiring improved design of buildings to improve energy efficiency, encourage use of 'clean' fuels such as gas, and discourage reliance on solid fuel burning for heating.
- Avoiding the potential for co-location of uses which will potentially result in sensitive users being impacted by air pollution.
- Ensuring that development of new or extension of existing employment areas take into account current local air quality as well as the potential for cumulative air quality impacts associated with potential new sources of air pollution.

### Noise and Vibration Issues

Strategic planning can contribute to maintaining or improving noise and vibration issues by:

- Ensuring appropriate noise and vibration studies are carried out as part of all future urban release area investigations and major new infill development proposals.
- Similar to air quality, avoiding the potential for co-location of uses which will potentially result in sensitive users being affected by noise and vibration issues. Minimise the impacts of noise on sensitive land uses by ensuring adequate separation between incompatible land uses.
- Ensuring that new development is capable of being designed to achieve acceptable noise levels for occupants (i.e. indoor noise levels).

### What are other Government Authorities currently doing?

#### Air Quality

##### *Action for Air*

The Central Coast region is part of the Metropolitan airshed and thus is included in *Action for Air* (Environment Protection Authority, 1998), the State Governments 25-Year Air Quality Management Plan. Action for Air is a policy framework and air quality monitoring regime designed to improve ozone and particle pollution levels so that they consistently meet National Environment Protection Measure (NEPM) standards. Although air quality in the Central Coast region is amongst the best in the Metropolitan airshed, the strategic

planning objectives and strategies of *Action for Air* must be factored into the strategic planning processes of councils in these areas. These include reducing or limiting vehicle kilometres travelled in urban areas through compact urban forms and encouraging utilisation of public transport.

Being part of the Metropolitan airshed also means that the Central Coast region is included in a major new database known as the Air Emissions Inventory that provides information on air pollution sources by area or type of emission source and allows projections to be made of the cumulative air quality impacts of development proposals. This tool can assist Council in understanding existing local air quality as well as testing the impacts of proposed development on air quality.

##### *Air Quality Monitoring*

There are four background air quality monitoring stations operated by Delta Electricity at Wyee, Lake Munmorah, Marks Point and Dora Creek. In addition, the OEH has obtained development consent from Council for construction of an air quality monitoring station at Wyong Race Club, as part of a high-quality ambient-air monitoring network in strategic locations around NSW to continuously measure air quality. The monitoring station will be constructed on Wyong Race Club land. The existing monitoring stations have not measured a decline in background air quality.

### Noise and Vibration

#### *Obstacle Limitation Surface (OLS)*

For information on the OLS mapping and restrictions, please refer to the Warnervale Aerodrome section in "Planning for UTILITIES INFRASTRUCTURE" chapter of this document.

#### *NSW Industrial Noise Policy*

The NSW Industrial Noise Policy (Environment Protection Authority, 2000) deals with noise from industrial sources and aims to balance the need for industrial activity with the environmental amenity requirements of the community. It provides the framework and process for deriving noise limit conditions for consents and licences that will enable the EPA to regulate premises that are scheduled under the *Protection of the Environment Operations Act 1997*

#### *Environmental Criteria for Road Traffic Noise*

The Environmental Criteria for Road Traffic Noise (Environment Protection Authority, 1999) includes a procedure to test whether a proposed development site is likely to be significantly affected by road traffic noise.

#### *Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects*

Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (Department of Environment and Climate Change, 2007) recommends that a noise and vibration assessment, including recommendations for acoustic treatment, be carried out



for apartment buildings and other sensitive land uses within 60 metres of a railway line. Any recommended acoustic treatments should be incorporated into the development consent. This document is now under review.

#### *Development Near Rail Corridors and Busy Roads – Interim Guideline*

Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning, 2008) aims to assist in reducing health impacts of rail and road noise and adverse air quality on sensitive adjacent development. In addition, development near rail corridors and busy roads can impact on the structural integrity of the transport infrastructure, so the guideline also assists in the planning, design and assessment of development in, or adjacent to, rail corridors and busy roads.

The guidelines also support specific rail and road provisions of the State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP). The key objectives of these provisions are to:

- protect the safety and integrity of key transport infrastructure from adjacent development; and
- ensure that adjacent development achieves an appropriate acoustic amenity by meeting the internal noise criteria specified in the Infrastructure SEPP.

#### *Noise Guide for Local Government*

The Noise Guide for Local Government (Department of Environment and Climate Change, 2004) provides general information for Council about noise regulation under the POEO act. The Guide also has a section on land use planning principles.

#### **The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:**

### **What provisions can be incorporated into our Planning Instruments to ensure planning for OUR ENVIRONMENTAL AMENITY can be met?**

#### **Wyong LEP 2013**

The following measures can be incorporated into Wyong LEP 2013 to improve our planning for environmental amenity:

- Wyong LEP 2013 includes specific objectives in a number of zones (RU1 Primary Production, RU6 Transition, R5 Large Lot Residential, B1 Neighbourhood Centre, B2 Local Centre, B4 Mixed Use) to make clear that avoiding land use conflicts is a specific objective of the zone.

#### **Wyong DCP 2013 – Development Controls for Wyong Shire**

The following measures can be incorporated into Wyong DCP 2013 to improve our planning for environmental amenity:

- Chapter – Industrial Development provides controls for industrial development. A site specific industrial DCP chapter for North Wyong Industrial Area provides guidelines for the location of certain industries and requirement for noise and air quality emissions.
- Chapters developed for Urban Release Areas (as required under Model Local Clause Part 6, Clause 6.3) should require consideration of environmental amenity as part of future industrial developments.

#### **Key Planning Considerations:**

### **Key Planning Considerations for OUR ENVIRONMENTAL AMENITY:**

- *Ensure air quality and noise and vibration issues are given early consideration in all rezoning and development proposals to ensure that environmental amenity is maintained.*

**Strategic Actions and Local Initiatives:**

**OUR ENVIRONMENTAL AMENITY**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP 2013	Am.	DCP 2013	Am.	Other		
EN28	Incorporate objectives and controls (where appropriate) to ensure environmental amenity is considered and addressed in land use and development decision-making.	WSC	X					There are no CSP actions that apply to this component.	There are no CCRS actions that apply to this component.

## Planning for **OUR HERITAGE**

### **HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF OUR HERITAGE?**



#### **Background to OUR HERITAGE:**

Wyong LGA is rich in heritage, with many sites and places of Aboriginal cultural significance ranging from artefacts and engravings, to places and landscapes. Unique European heritage value aspects of the Wyong LGA include the number of urban centres with water based leisure, tourism and recreational focus, the early forestry, agricultural and pastoral activities in the Valleys and the early dominance of Wyong as the urban centre (David Scobie Architects, 2010).

There are some 270 Aboriginal Heritage sites within Wyong LGA listed on the National Parks and Wildlife Service database (the Aboriginal Heritage Information Management System (AHIMS) currently records 315 sites) and 97 items of local European heritage significance listed in *Wyong LEP 1991* which date back to the early settlements in the 1820s. These include houses, barns, holiday homes, war memorials and bridges. In addition, there are now four items listed on the State Heritage Register under the *Heritage Act 1977* in Wyong LGA:

- The Entrance Ocean Pools
- St Barnabas Anglican Church, Yarramalong
- Hargraves House, Noraville
- Norah Head Lighthouse.

#### **Issues:**

#### **What are the current and foreseeable issues that impact upon OUR HERITAGE?**

##### **Population growth and resultant urban development and redevelopment.**

A significant pressure contributing to the deterioration or loss of heritage items is due to population pressures, leading to infill developments as well as Greenfield site development, placing pressure on heritage assets (Productivity Commission, 2006). There are limited heritage incentives or legislation to ensure preservation of local heritage items.

##### **Increasing land values.**

Increasing land values have resulted in a push to maximise development potential of sites. In areas such as The Entrance, older homes are being demolished and replaced with multi-unit developments due to private developer and government pressure to increase population densities. This has an impact on local heritage precincts, with development reflecting current trends rather than the existing character of the area - resulting in the loss of context and the degradation of streetscapes,

##### **Natural processes of deterioration.**

Natural processes of deterioration have a significant impact on our heritage items, with exposure to the elements leading to a gradual weathering and deterioration.



### Community perceptions

In general, there is a lack of broad community appreciation and support for the retention and conservation of heritage places. Council can improve this by increasing community education and involvement in heritage conservation.

### Maintenance and operational costs

One of the most significant pressures on the conservation of heritage items and/or places is the high and increasing cost of maintaining these items, affecting both public and private owners of heritage items (Productivity Commission, 2006). Council has limited power to enforce maintenance of local heritage items, with power only extending to weed control and situations where the building forms a safety concern,

#### Planning for our Population:

### How do we plan for OUR HERITAGE in light of the issues identified?

Council plays an important role in protecting local natural, built and cultural heritage as part of land use planning and the assessment of development applications. Council can improve planning for heritage as follows:

#### Shirewide Heritage Review

In 2011, Council adopted the Wyong Shirewide Heritage Review, a review of heritage items and areas, thematic history and conservation controls for the LGA, in accordance with the guidelines provided by the OEH. A schedule of heritage significant items and items where the level of significance warrants statutory heritage protection has been prepared. The review also identified three proposed Heritage Conservation Areas: Wyong Town Centre, South Tacoma Road, South Tacoma and Oakland Avenue, The Entrance.

Additional recommendations of this review include the establishment of a Local Heritage Fund, and a Heritage Advisor Service. The recommendations of this review will therefore be implemented by way of the Wyong LEP 2013, Wyong DCP 2013, preparation of Conservation Management Plans for Council owned items, plus additional measures.

#### Relationship with local Aboriginal groups

Input from the Aboriginal community is an essential part of assessing the significance of those Aboriginal objects or places likely to be impacted by any activity. In May 2010, Council signed a Principles of Co-operation agreement with the Darkinjung Local Aboriginal Land Council (LALC) with the aim of fostering an effective working relationship and partnership between the two parties. It is hoped this partnership will lead to enhanced cultural, economic, environmental and social outcomes for the people of the LGA and improved relations between Aboriginal and non-Aboriginal residents. Following the signing of this agreement Council and Darkinjung LALC meet on a regular basis to co-ordinate any joint projects. Opportunities to develop similar agreements with other local Aboriginal groups may arise in the future.

Council currently employs a full time Indigenous Community Development Worker to establish and maintain working relationships with local Aboriginal persons and groups. Council continues to work closely with the OEH, Darkinjung Aboriginal Land Council, and other local Aboriginal groups to protect Aboriginal heritage items.

#### Indigenous cultural awareness and education

Council is involved in the promotion of Aboriginal heritage and culture through events such as National Aborigines and Islanders Day Observance Committee (NAIDOC) Week. Council's Indigenous Community Development Worker has a role in education and promotion of cultural and heritage values to the community. Council can improve planning for Aboriginal cultural heritage by improving the transmission of information and education of Council staff regarding the presence and appropriate management of Aboriginal sites including contractors working on and around sites. Council will continue to consult where appropriate with the Aboriginal community as an integral part of impact assessment in the land-use planning and development assessment process.

#### Aboriginal cultural heritage studies and management plans

Under the Shirewide Heritage Review it was not considered feasible and appropriate to document indigenous sites. The Shirewide Heritage Review did recommend that a future study utilising specific indigenous and archaeological expertise could be undertaken for indigenous sites capable of communicating the local indigenous narrative to the general community. This recommendation could be progressed through the preparation of an Aboriginal cultural heritage study for the LGA. Notwithstanding this recommendation, the management of heritage sites will continue to be undertaken in partnership between the local Aboriginal community and the OEH.

Plans of Management exist for various properties and land parcels owned and or managed by Council. It is recommended that these Plans should be reviewed to consider the management of any identified or potential Aboriginal sites or places.

### What are other Government Authorities currently doing?

#### Office of Environment and Heritage (OEH)

The OEH protects and conserves Aboriginal culture and heritage landscapes located in NSW parks and reserves, as well as European heritage across NSW, particularly those items of State heritage significance. The OEH carries out a number of heritage management activities, including:

- Working with communities to help them identify important places and objects
- Providing guidance on how to look after heritage items
- Supporting community heritage projects through funding and advice
- Maintaining the NSW Heritage Database, a list of all NSW statutory heritage items

- Maintaining a list of known Aboriginal heritage sites within NSW, which can be utilised by Council in the assessment of Development Applications and Rezoning Applications.

### Heritage Act 1977

Natural, cultural and built heritage is protected in NSW under the *Heritage Act 1977*. The Act allows for heritage items or places to be listed on the State Heritage Register, and for interim heritage orders to be made to protect heritage items or places. Indigenous heritage items or places are protected under the *National Parks and Wildlife Act 1974* (NPW Act), although these can also be listed for protection on the State Heritage Register or under an interim heritage order. Approval must be obtained from the Heritage Council or local council before work can be done which might damage the item or place.

Items and places which are of national heritage significance, Commonwealth Heritage Places, or World Heritage are protected under the main Commonwealth environmental law, the *Environment Protection and Biodiversity Conservation Act 1999*.

### Burra Charter

The Burra Charter is a guide for conserving and managing places of cultural significance and sets a professional standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance. The OEH refers to the Burra Charter in assessing, planning for and managing the heritage for which it is responsible and has incorporated the principles and logic of the Burra Charter into guidelines and other conservation planning documents.

### The National Parks and Wildlife Act 1974 (NPW Act)

The NPW Act is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in New South Wales. Part 6 of the NPW Act provides specific protection for Aboriginal objects and declared Aboriginal places by establishing offences of harm. Licences are required under the NPW Act for works which could impact on Aboriginal heritage items or places.

### The Environmental Planning and Assessment Act 1979 (EPA Act)

The EPA Act administered by the DP&I establishes the framework for European and Aboriginal heritage values to be formally assessed in the land-use planning and development consent processes.

### The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:

### What provisions can be incorporated into our Planning Instruments to ensure planning for OUR HERITAGE values can be met?

#### Wyong LEP 2013

The following measures can be incorporated into Wyong LEP 2013 to improve our planning for heritage:

- The Wyong LEP 2013 will include the mandated Standard Instrument Clause 5.10 - Heritage Conservation for Aboriginal and European cultural heritage values to be formally assessed in land use and development matters. In addition, Schedule 5 - Environmental Heritage will also contain a list of all Council-endorsed Heritage Items and Heritage Conservation Areas proposed to be subject to the assessment and protection provisions of clause 5.10. All heritage items identified by the Wyong Shirewide Heritage Review have been added to Schedule 5 of Wyong LEP 2013.

### Wyong DCP 2013 – Development Controls for Wyong Shire

The following measures can be incorporated into Wyong DCP 2013 to improve our planning for heritage:

- Chapter - Conservation Areas for Northern Wyong Shire
- Chapter – Heritage Conservation has been produced in accordance with the Shirewide Heritage Review. The DCP Chapter provides:
  - Guidelines on the consistent application of approved guidelines on the preparation, assessment and expertise on Conservation Management Plans (CMPs).
  - Guidance for development in the vicinity of a heritage item.
  - Incentive clauses for development, which permits types of development that would normally be prohibited, if use ensures conservation of a heritage item.
  - Requirement to provide archival record prior to demolition.
  - Also insert clauses in relation to carparking and floor space ratio.

### Key Planning Considerations:

#### Key Planning Considerations for OUR HERITAGE:

- *Ensure our heritage items and values are appropriately conserved and protected.*
- *A heritage management conservation plan and/or archaeological assessment will be required for relevant development and planning proposals for rezoning.*
- *Continue to consult with the Aboriginal community as an integral part of impact assessment in the land-use planning and development assessment process.*

**Strategic Actions and Local Initiatives:**
**EUROPEAN HERITAGE**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP		DCP		Other		
			2013	Am.	2013	Am.			
EN29	Implement the recommendations of the Shire-wide Heritage Review, including: <ul style="list-style-type: none"> <li>▪ Map heritage items and Heritage Conservation Areas and list within Schedule 5 of Wyong LEP 2013.</li> <li>▪ Amend Wyong DCP 2013 Chapter – Heritage Conservation.</li> <li>▪ Progress other measures such as the administration of a Local Heritage Fund.</li> </ul>	WSC	X		X		X	There are no CSP actions that apply to this component.	<b>6.8</b> Ensure LEPs facilitate conservation of Aboriginal and non-Aboriginal heritage. <b>6.20</b> Councils are to review and protect the cultural heritage values of centres. <b>6.22</b> Councils are to refer to Design in context: guidelines for infill development in the historic environment (NSW Heritage Office and the Royal Australian Institute of Architects NSW Chapter Infill Guidelines Working Party 2006) in preparing development control plans and making decisions relating to development in existing areas so it is compatible with conservation areas and heritage items.
EN30	Increase opportunities for interpretation of heritage values in the public and private domain, e.g. The Entrance Boardwalk and Wyong Town Centre plaques, and in combination with recreational facilities and Public Art.	WSC				X			
EN31	Prepare detailed Conservation Management Plans including maintenance schedule for Council owned/managed heritage items.	WSC					X		

**ABORIGINAL HERITAGE**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP		DCP		Other		
			2013	Am.	2013	Am.			
EN32	Maintain and improve relationships with Local Aboriginal Land Councils., and facilitate engagement of the Aboriginal Community.	WSC					X	There are no CSP actions that apply to this component.	<b>6.15</b> Councils and the Department of Planning & Infrastructure are to ensure that Aboriginal cultural and community values are considered in the future planning and management of the local government area.
EN33	Develop options to engage and promote awareness of Aboriginal heritage and culture amongst the community and Council staff, including providing education regarding the presence and appropriate management of Aboriginal sites.	WSC					X		
EN34	Review Plans of Management to consider the management of Aboriginal items.	WSC					X		
EN35	Consider undertaking a Shire-wide Aboriginal Cultural Heritage Study	WSC					X		



## Planning for SCENIC PROTECTION

### HOW DO WE SUSTAINABLY CATER FOR OUR RESIDENTS, BUSINESS AND VISITOR POPULATION, IN TERMS OF SCENIC PROTECTION?



### Background to SCENIC PROTECTION

Scenic values such as vegetated ridgelines and slopes, estuaries, beaches and coastal headlands, contribute to an areas identity and should be conserved. Wyong LGA has a diverse range of scenic landscapes and seascapes (such as mountain ranges, beaches, rivers, valleys and wetlands, both along the coastline and in inland areas such as the Kulnura plateau, which create a unique scenic value. The rural character of the Dooralong, Yarramalong and Ourimbah valleys also adds scenic value to the LGA.

The region's scenic values contribute to resident's quality of life as well as the visitor experience of the LGA. The scenic value of Wyong LGA therefore plays an important role in attracting residents and tourists to the area. Any loss of significant scenic landscapes will have impacts on general aesthetics of the area, as well as the level of tourism within the LGA.

#### Issues:

### What are the current and foreseeable issues that impact upon our SCENIC PROTECTION?

Population growth can lead to increased pressure for development of land with scenic values within the LGA. Scenic management issues include:

- Avoiding development unsympathetic to the landscape and built form of an area
- Protecting scenic backdrops to centres and urban areas
- Maintaining major river corridors and estuaries
- Maintaining rural landscapes as a scenic feature
- Maintaining urban scenic character
- Minimising development and protecting vegetation on prominent foothills, ridges and protecting headlands
- Sensitive design and location of extractive industries and major infrastructure such as roads, railway lines, power stations and transmission lines.

#### Planning for our Population:

### How do we plan for SCENIC PROTECTION in light of the issues identified?

#### Scenic Resource Inventory

Council should compile a scenic resource inventory for the LGA, including an appropriate set of criteria for assessing scenic quality. This would involve developing recommendations regarding conservation measures for scenic landscape values at particular locations. In addition, restricting development from those areas of steep slopes >15% or higher than particular relative levels (RL's) in certain areas will assist in restricting development in more visible scenic areas.

### Greening Wyong Strategy

Discussed above in 'Planning for BIODIVERSITY CONSERVATION', Council is currently developing the Greening Wyong Strategy to guide and manage ongoing tree planting within our public streets and parks. Increasing urbanisation, increasing density and risk management practices has put enormous pressure on existing trees and tree planting possibilities, resulting in the decline of the urban tree canopy. This has an impact not only on biodiversity within the area, but also on the scenic amenity of an area. In order to combat this loss of scenic amenity, Council will continue to develop and implement the Greening Wyong Strategy.

### Rural Lands Development Control Plan (DCP) Chapter

The Wyong Valleys Planning Report and Strategy (Wyong Shire Council, 1998) recommended that a DCP be prepared for the Wyong Valleys area, a component of which would incorporate guidelines/controls for landscape management and design issues to identify:

- The types of controls which are necessary to preserve the landscape character of different landscape types in the Wyong Valleys, giving particular attention to those areas which are identified in the Landscape Quality Study as having high to medium levels of significance.
- The types of development controls which should be implemented in specific areas, such as those areas which have been identified as major visual corridors, visual boundaries or tree tunnels along roadsides by the Landscape Quality Study.

Council will prepare a DCP chapter for rural lands within the Wyong LGA, including the Wyong Valleys.

### What are other Government Authorities currently doing?

#### Central Coast Regional Strategy (CCRS)

The CCRS prevents development in areas constrained by coastal processes, flooding, wetlands, important primary industry resources and significant scenic and cultural landscapes. Action 6.4 of the CCRS also requires that LEPs are to appropriately zone land of high landscape value (including scenic and cultural landscapes).

#### The Standard Instrument, Wyong LEP 2013 and Wyong DCP 2013:

### What provisions can be incorporated into our Planning Instruments to ensure planning for SCENIC PROTECTION can be met?

#### Wyong LEP 2013

The following measures can be incorporated into Wyong LEP 2013 to improve our planning for scenic protection:

- Incorporate model local clause Part 6, Clause 6.3 which requires DCP's prepared for new urban release areas to consider the scenic amenity of visually prominent areas. Scenic protection assessment will therefore be undertaken as part of the investigation of future development release areas.
- Include an objective in Wyong LEP 2013 to protect areas of high scenic landscape value.
- The existing 7(c) (Scenic Protection - Small Holdings Zone) along the ridge line behind Fountaindale, Glenning Valley and Tumbi Umbi are to be zoned E4 Environmental Living to protect the scenic value of the ridge.

### Wyong DCP 2013 – Development Controls for Wyong Shire

The following measures can be incorporated into Wyong DCP 2013 to improve our planning for scenic protection:

- Part 2 – Development Provisions provides certain requirements for development in rural and scenic areas
- Part 6 – Location Specific Development Controls may provide controls where relevant e.g. Warnervale Wadalba
- Develop a DCP Chapter (Rural Lands) to address scenic protection issues as discussed previously in this section.

#### Key Planning Considerations:

#### Key Planning Considerations for SCENIC PROTECTION:

- *Ensure that the special and unique scenic characteristics and natural or rural settings of Wyong LGA are retained and protected.*
- *Minimise the visual impacts of development visible from the coastline, ocean and waterways.*
- *Require an assessment of the visual impacts of relevant development proposals and its effect on scenic amenity of the area.*

**Strategic Actions and Local Initiatives:**
**SCENIC PROTECTION**

#	ACTIONS	RESPONSIBLE AUTHORITY	IMPLEMENTATION					COMMUNITY STRATEGIC PLAN	CENTRAL COAST REGIONAL STRATEGY
			LEP		DCP		Other		
			2013	Am.	2013	Am.			
EN36	Wyong LEP 2013 should include an objective to protect areas of high scenic landscape values.	WSC	X					Ensure development areas create or maintain tree-covered ridgelines and waterways. This should form an attractive backdrop to development and also add to the environmental value and appeal of the area.	6.4 LEPs are to appropriately zone land of high landscape value (including scenic and cultural landscapes).
EN37	Develop a DCP Chapter (Rural Lands) to address: <ul style="list-style-type: none"> <li>▪ The types of controls necessary to preserve the landscape character of different landscape types in the Wyong Valleys, giving particular attention to those areas which are identified in the Landscape Quality Study as having high to medium levels of significance.</li> <li>▪ The types of development controls to be implemented in those areas identified as major visual corridors, visual boundaries or tree tunnels along roadsides by the Landscape Quality Study.</li> </ul>	WSC				X	X		
EN38	Prepare and implement a Scenic Resource Inventory including an appropriate set of criteria for assessing scenic quality by way of preparation and implementation of <i>Scenic Quality Guidelines</i> .	WSC				X			