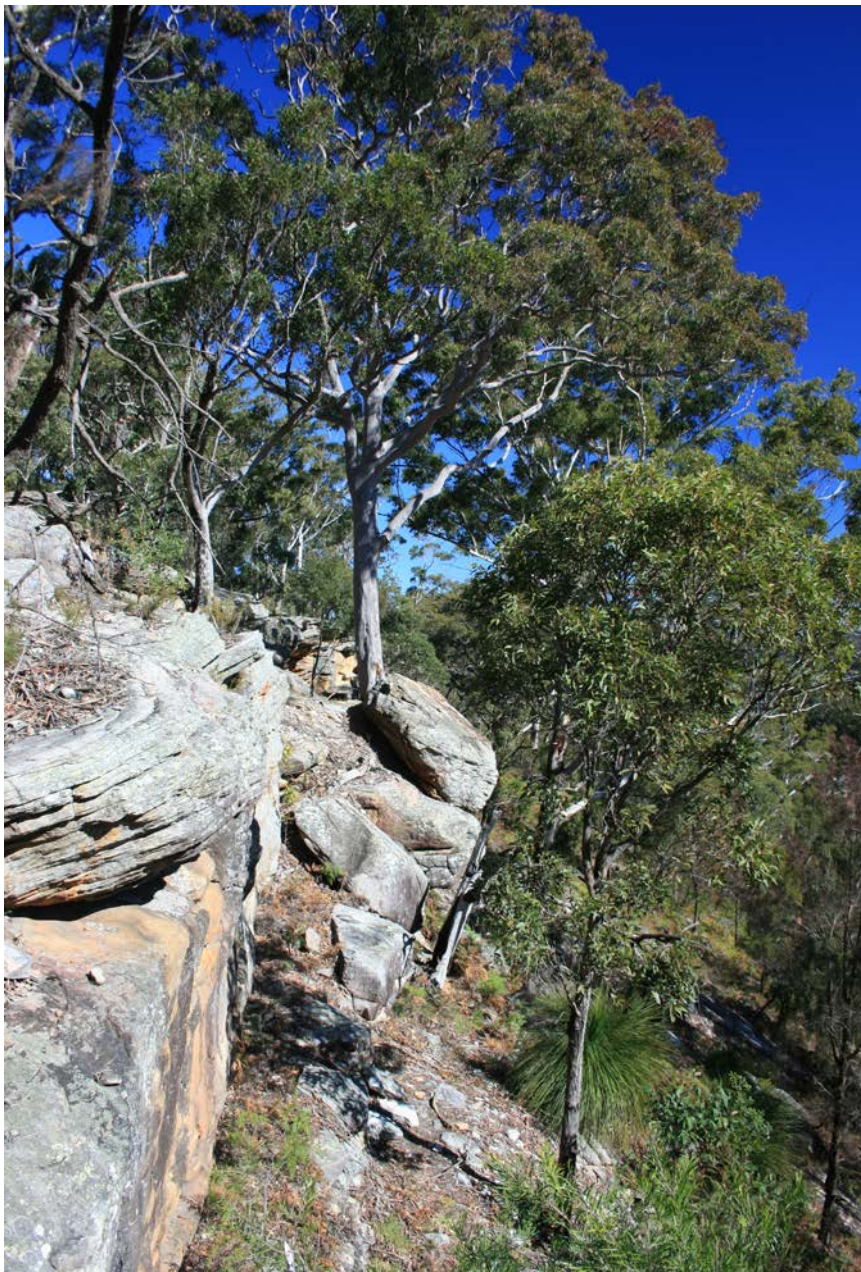


# COASTAL OPEN SPACE SYSTEM (COSS) STRATEGY



**August 2010**



**coastal  
open space  
system**

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# COASTAL OPEN SPACE SYSTEM STRATEGY

## 1.0 INTRODUCTION

The Coastal Open Space System (COSS) is a network of reserves supporting native vegetation that are managed by the Gosford City Council for a number of environmental and community values. The COSS reserves are consistent with the community land classification of 'bushland' as defined in section 36 *The Local Government Act 1993*. The network is not contiguous, and the reserves are situated predominately in six separate units that are located close to each other in the eastern part of the Gosford Local Government Area (LGA).

In addition to the publicly owned Council freehold land and Crown Land within the COSS boundary, a number of private properties have been identified to be voluntarily acquired for inclusion in the System. These properties have been assessed as having values that are consistent with the COSS. Bringing these properties into public ownership will ensure that the land will be managed for its ecological, cultural and social values.

The primary purpose of the COSS is to maintain areas of native vegetation and habitat for native animals on public land in the eastern part of the Gosford Local Government Area. The reservation of the land in the COSS also has the effects of protecting Aboriginal cultural sites and non-Aboriginal heritage items as well as local water catchments and geological formations. In addition, the retention of native vegetation provides a green back drop to many of the urban areas in the City, and ensures that most of the residents of the Gosford area live in the vicinity of natural environments.

The specific objectives of the COSS are:

- a. to conserve the visual and environmental quality of the natural scenery of Gosford City;
- b. to protect the vegetated ridgelines which provide a green backdrop and visual relief to the urban areas;
- c. to provide habitat for native flora and fauna, and for the protection of biodiversity within the City;
- d. to provide vegetated connections between ridgelines and wetlands to allow movement of wildlife and the plant gene pool;
- e. to facilitate and enhance the enjoyment of the conservation areas by the provision for passive recreation activities compatible with the natural environment;
- f. to ensure natural areas with water catchments remain undeveloped thus not causing deterioration in water quality entering receiving waters;
- g. to ensure natural areas are preserved for the educational and scientific value they provide to the community; and
- h. to bring land that has environmental and scenic value into public ownership.

Ensuring that the appropriate planning and management frameworks are developed and applied is essential for maintaining the COSS as one of the Gosford City community's premiere natural assets.

## **2.0 PURPOSE OF THE COSS STRATEGY**

The purpose of the COSS Strategy is to implement the Gosford Community's Vision 2025, and the State Government's planning priorities and legislation by identifying the strategic directions and the major actions required to conserve and preserve a sustainable Coastal Open Space System including the acquisition of identified lands for the System.

Council's policy position in relation to the COSS is to retain the system of open space to preserve its environmental values and integrity. This is supported through the continuation of the bonus lot subdivision provisions and land dedication under Draft Gosford Local Environmental Plan (LEP) 2009, albeit in a different format to that currently in IDO 122. The collection of contributions in exchange for increased subdivision potential and dedication of identified lands is integral to the overall implementation and on-going management of the COSS.

The Department of Planning has advised that all of Council's planning directions must have a strategic basis. The current bonus lot provisions in IDO 122 are the cornerstone of the COSS and in that way are strategic in nature; however, there has never been a formal strategy on which they were based. With the preparation of the Draft Gosford LEP 2009, the opportunity arose for there to be a concurrent strategy prepared for the COSS. The COSS Strategy has been prepared to provide a strategic planning rationale for the operation and management of the COSS, including the acquisition of identified land. A number of actions are identified within this strategy that, as implemented, will assist in the operation and management of the COSS. A list of the actions is listed in Appendix I.

Strategic plans are not static and must be monitored to assess whether the assumptions made were correct, whether the COSS is moving in the direction envisaged, and whether the Gosford Vision 2025 is being achieved. Regular review of the COSS Strategy is therefore required.

### **Action:**

- 1. The COSS Strategy is to be reviewed on a five year cycle to allow for adjustments to be made if circumstances or assumptions alter.**

## **3.0 HISTORY/BACKGROUND**

### **3.1 Establishment of the Coastal Open Space System**

The COSS was initiated by Council in 1984. Formulation of the COSS was in response to the 1975 Rural Lands Study (RLS) that was prepared by the then NSW Planning and Environmental Commission for the non-urban areas of Gosford and Wyong Shires. This Study identified a number of pressures on non-urban coastal lands, including a reduction in the area being farmed in coastal valleys, rapidly increasing rateable values on rural land, destruction and deterioration of areas of high landscape and environmental values. It also identified that the Gosford/Wyong area had extensive areas of aesthetically pleasing landscape, much being of State and National importance, which had strongly contributed to the attractiveness of the region.

The RLS also identified that there had been a rapid deterioration in the quality of some areas of high landscape and environmental value, due to extensive subdivision and a variety of development activities, particularly rural residential subdivision. The study identified areas which were not suitable for development. It was considered that development of land in these areas would disturb the environment or landscape, which included areas with steep slopes (20% and over), ridgelines, prominent hills and headlands, wetlands (estuarine and freshwater), coastal dunes and cliffs and important flora and fauna habitats. These landscape features were among the attributes that were later included to assess individual land parcels when undertaking the review of the COSS boundary adopted by Council in

2007, and for the identification of the western extension of the COSS adopted by Council in 2008.

The RLS established an overriding goal to protect the natural environment and character of the area with objectives to prevent development within areas of high landscape or environmental value and conserve the considerable natural beauty of the sector. It also proposed the formulation of an acquisition program for those areas that could not be protected through land use controls; a management program for areas to be acquired; formulation of land use controls for areas to be acquired; and to determined land uses and controls for areas not subject to acquisition.

The policy directions of the RLS were implemented through the gazettal of Interim Development Order (IDO) No 100 on 18 February 1977, which in turn were carried through in the gazettal of IDO No 122 on 30 March 1979. These planning instruments contained clauses to allow 'bonus' development i.e. additional subdivision potential subject to land dedication or cash contribution. The calculation of the amount of contribution/land to be dedicated in exchange for bonus subdivision rights in the scenic protection zone were established so that lands could be dedicated at no cost (if land held in the same ownership were suitable for "bonus" subdivision), or otherwise to contribute to a trust fund established to acquire land, improve or embellish conservation lands. These provisions were subject to modifications under Gosford Local Environmental Plan (LEP) No 36 gazetted on 20 November 1981 and Sydney Regional Environmental Plan (SREP) No 6 - Gosford Coastal Areas on 6 May 1983. These provisions which have allowed for progressive funding of the COSS have been the cornerstone of the COSS and instrumental in its success in protecting areas with very high environmental and scenic value.

In order to further the objectives of the RLS and to integrate land proposed as regional open space and land dedicated under the "bonus lot" provisions, Council adopted the concept of a continuous open space system for the coastal area in September 1978. It was further resolved that a more detailed plan be prepared identifying areas considered essential for public ownership. In 1980, a further report was brought before Council which led to the public exhibition of the original COSS. This eventually resulted in the preparation of a major strategic plan and its adoption in 1984. This revised scheme detailed and identified lands which should be protected and wherever possible acquired as part of a continuous coastal open space system and provided a detailed investigation of the existing condition and future direction for the COSS. It was also resolved to establish an active acquisition program (for lands that were unlikely to be dedicated as part of a bonus lot subdivision) and identify priority acquisition areas; to prepare a wildlife study of ridge land areas; establish a system to monitor agreements and payments as part of the bonus lots; and source additional external funding from the then Department of Environment and Planning.

The detailed plan for the COSS did not meet the objective of identifying a continuous system of reserves in the coastal part of the City, however the 1984 plan (Appendix II) however identified six main units that were not continuous but formed a broken network from the Bouddi Peninsula in the south of the City to The Ridgeway at Matcham and Holgate in the north. It was proposed that these units be connected by corridors. In addition to the six main units, a number of properties on the western side of Brisbane Water, were identified for inclusion in the COSS (see Appendix II).

### **3.2 Expansion of the COSS**

More than a decade after the adoption of the COSS, the expansion of the COSS westward to the F3 Freeway was considered to have merit. The concept of Western COSS, later known as COSS Stage 2, was first suggested in the late 1990's. This was as a result of Council's actions in relation to rezoning of a parcel of land owned by Council that had been originally purchased in 1979 with a view to developing it as a landfill site, however declared surplus for this purpose in 1993. After appropriate consultant studies and statutory processes, a significant portion of the land was rezoned for open space and classified as "community

land", with the creation of four "bonus" type lots of 1 hectare in size off Siletta Road, Niagara Park for disposal as "rural residential" type lots with a conservation zone. The open space land provided an important link in a series of publicly owned parcels, including parts of Strickland State Forest, that extended from the northern boundary of the Local Government Area along the Central Coast Plateau's eastern escarpment to eventually link with Brisbane Water National Park, with some interspersed private parcels. The western escarpment is now recognised as being an important in a broader network of open space lands on the Central Coast, as it acts to maintain the link between the COSS and National Parks in the west of the Local Government Area. This vegetated link continues, albeit bisected by roadways including the F3 Motorway, into the Wyong Shire to the north. In addition, the western escarpment makes a major contribution to the scenic quality of Brisbane Water, Gosford and Narara Valley.

In 2002 Council engaged consultants to undertake a Western COSS Assessment to:

- identify and prioritise suitable private land for voluntary inclusion into a Western COSS reserve network;
- to identify and prioritise suitable Council owned land for inclusion in the Western COSS reserve network; and
- to identify and prioritise suitable Crown Land resources under Council's care, control and management for inclusion into a Western COSS reserve network (Biosis, 2002).

This report provided a detailed basis for the ranking of priorities for land and identified issues for conservation priority within Western COSS. It also highlighted areas for future consideration and priorities for conservation planning and management. The Western COSS concept was endorsed by Council at its meeting held on 23 September 2003.

The criteria used by Council for the review of the COSS boundary in 2007 (Sec. 6.3) were applied to the lands identified as having landscape and environmental values in the Western COSS Assessment Study of 2002. These criteria, which were based on the values of the COSS, were assigned relative scores and the known attributes of each property were assessed in a matrix against the criteria. The resultant numerical score helped prioritise land suitable for inclusion in COSS Stage 2. Following public exhibition and consideration of submissions, Council adopted the COSS Stage 2 on 1 July 2008.

#### **4.0 VALUES OF COSS**

The value and importance of COSS lands is well recognised by the community and the State Government. Council has been the recipient of numerous awards for the COSS in relation to its planning and environmental outcomes.

During 2004 and 2005, Council, with extensive community consultation, undertook a visioning process to identify the future vision and aspirations of the residents of Gosford City. Vision 2025 was adopted by Council in 2006 and directly reiterates and supports the continuation of the COSS. Gosford Vision 2025 identified the following specific strategies that directly relate to COSS:

- protect and enhance COSS reserves with appropriate buffer zones and create natural linkages across the landscape;
- protect and actively manage the area's natural habitats;
- protect and conserve corridors for wildlife migration so that a diversity of native plants and animals thrive across the region;
- continue to protect the region's ridgelines from urban development;
- maintain Gosford's village character within designated green zones to retain the character and identity of local communities.



Maintaining the COSS is therefore integral to the achievement of the community's Vision 2025.

In 2008, the Department of Planning released the Central Coast Regional Strategy (CCRS). The Strategy recognises the importance of the Central Coast's environmental assets, landscape values and natural resources, and provides a framework for their protection. The Region's waterways, topography and conservation areas, along with important natural resource lands, limit the expansion of the urban footprint. The CCRS aims to protect the outstanding environmental qualities of the Central Coast by focusing future population growth in existing urban areas, east of the F3 Freeway. This means that future growth in Gosford will be contained within existing settlement areas and focussed on land zoned for medium density residential use.

The CCRS identifies that the Region's national parks, reserves, waterways, coastline and foreshore areas need to be conserved and managed to ensure both their preservation for environmental purposes as well as their continuing contribution to recreation and scenic quality. In the eastern part of the Gosford LGA, the COSS contributes substantially to the preservation of the environment, scenic quality and the provision of low impact nature base recreational opportunities.

The Coastal Open Space System (COSS) Management Strategy (Manidis Roberts, 1992) identified five main factors that make the Gosford Local Government Area (LGA) unique and which are important determinants for the significance of lands for inclusion within COSS. These were:

- *Scenic Quality*: backdrop to the city and the contribution to the sense of place of Gosford;
- *Natural Setting*: the substantially unaltered natural ecosystem that provides a range of wildlife habitats and includes a diversity of vegetation species and associations;
- *Human interaction*: the area's proximity to human activities and the opportunities it offers for recreation, education and scientific endeavours;
- *Cultural significance*: the Aboriginal and other cultural significance within Gosford LGA is considerable although not well understood;
- *The System*: the size, proximity and linkages of COSS enhance the overall value of individual reserves and other parcels of land.

#### **4.1 Scenic Quality**

The forested ridgelines of the Gosford area are one of the key elements in the natural beauty and scenic quality of the City (Manidis Roberts 1992). The landscape of the Gosford LGA includes a variety of natural features including sandy beaches; coastal cliffs and rock platforms; the coastal lagoons; the Brisbane Water and Hawkesbury Estuaries; local creeks and waterways; hills; incised plateaux and coastal lowlands.

The soil landscapes map of the Gosford - Lake Macquarie (Murphy 1993) and the soil landscapes map of Sydney (Chapman and Murphy, 1989) divide the Gosford LGA into 6 physiographic regions. The interaction of factors such as local geology, climate, erosion and sedimentation in these physiographic regions has resulted in the diversity of landforms that occur in the Gosford LGA.

The native vegetation communities and water bodies that sit atop the underlying landforms result in the variety of the aesthetically pleasing landscapes that occur in the Gosford LGA. The past and present land use of the LGA has influenced the current extent of native vegetation cover as well as, in some cases, the shorelines of local water bodies.

Agriculture, forestry and urbanisation have seen a reduction in the natural extent of native vegetation in the City, but particularly in the part of the city east of the F3 Freeway. The bulk of the native vegetation currently in this eastern part of the City occurs in National Parks and



Nature Reserves, Strickland State Forest, Crown Land reserves, larger private properties and Council reserves including the COSS.

The prominent location of the COSS in the eastern part of the City makes a considerable contribution to the local landscape. Rumbalara Reserve, for example, provides a green backdrop to the Gosford City Centre, and together with the other COSS reserves substantially contribute to the 'bushy' character of the City. This vegetated land is visible from most parts of the City east of the F3 Freeway between the urban settlements, adding substantially to the attractiveness of the area for both residents and visitors. Those private properties that have been identified for future voluntary acquisition for the COSS support prominent areas of native vegetation on areas such as the western escarpment and on the Ridgeway.

Limiting development on prominent ridgelines is important for maintaining the natural aesthetic of Gosford. Ensuring that the scenic values of the COSS are considered when lands are assessed for inclusion in the COSS is important in maintaining the bushland nature of the Gosford LGA. The review of the COSS boundary and the identification of the western extension of the COSS nominated landscape units in addition to considered the elevation of lands for inclusion in the COSS. The landscape units identified were the western escarpment; the Ridgeway and Wamberal Ridge; Rumbalara and Katandra Reserves; the Bouddi Peninsula; Cullens Ridge at Macmasters and Copacabana; and - Kincumba Mountain and Avoca Lake. Including the landscape and elevation attributes was considered to be an objective way of identifying properties with important to the scenic values of the COSS.

**Actions:**

- 2. Ensure that the scenic values of the COSS land continue to be considered when assessing properties for future voluntary acquisition for the COSS.**
- 3. Investigate ways in which the scenic value of properties can be objectively compared prior to undertaking the next review of the COSS boundary.**

#### **4.2 Natural Setting - COSS in Wider Biodiversity Conservation Context**

The values of the COSS identified by Manidis Roberts (1992) include the geology and topography, wildlife habitats and diversity of vegetation species. The biotic components are at risk of being depleted by the threats to biodiversity that occur at a national scale as identified by the Department Environment Water Heritage and the Arts; the threats at the state level identified by the Department of Environment, Climate Change and Water; those identified specifically for the COSS by Manidis Roberts (1992); and those threats that occur on a local level.

The COSS plays a substantial role in the conservation of biodiversity by supporting native ecological communities. The eastern part of the Gosford LGA has seen a high level of urban development which has been accompanied by a loss of native vegetation cover, a decline in the populations of native animals and disturbance to ecological communities.

The vegetation communities in the COSS include those which have been reduced in extent by development or those that naturally had a limited distribution. These include:

- Katandra Hawkesbury Woodland in Kincumba Mountain and Katandra Reserves;
- Narrabeen Coastal Peppermint Forest in Kincumba Mountain Reserve;
- Coastal Narrabeen Ironbark Forest in Katandra Reserve; and
- Tumby Spotted Gum Ironbark Forest in the reserves on the Ridgeway and ridge west of Wamberal.

The COSS also provides habitat for endangered flora and fauna species including:

- Yellow-bellied Glider, *Petaurus australis*
- Grey Headed Flying Fox, *Pteropus poliocephalus*

- Spotted Quoll, *Dasyurus maculatus*
- Red Crowned Toadlet, *Pseudophryne australis*
- Sooty Owl, *Tyto tenebricosa*
- Glossy Black Cockatoo, *Calyptorhynchus lathami*
- Tranquility Mintbush, *Prostanthera askania*
- Biconvex Paperbark, *Melaleuca biconvexa*

In addition to the threatened ecological communities, plant and animal species, the COSS supports habitat for many relatively common species and communities that were formerly more widespread in the Gosford LGA. The loss and fragmentation of native vegetation is seen as one of the major threats to biodiversity across the globe (Sisk and Margules 1993). The quality of the habitat provided by remnants is affected by a number of factors including size, shape, structure of the vegetation, non biotic features including caves, waterways and a remnants proximity to other remnants (Fahrig 2002, Fahrig & Merriam 1985). Larger remnants of native vegetation with high area to boundary ratios tend to provide habitat for a wide range of species including those that require 'core' habitat as well those species that require 'edge' habitat. Smaller remnants, or those that are long and narrow, tend to provide only edge habitat (Bender *et al.* 1998; Quinn and Hastings 1987). Maintaining remnants that are large in size, have high area to boundary ratios, and have all vegetation strata intact is important for the conservation of ecosystems.

Many parts of the COSS are located on the ridges in the eastern part of the City. This means that headwaters of a number of local creeks and drainage lines remain vegetated. Native vegetation plays an important role in the maintenance of water quality and biodiversity values of waterways. The majority of local creeks and drainage lines that have their headwaters in the COSS reserves are tributaries of Erina Creek and Narara Creek; drain directly into Brisbane Water; or drain into one of the four main coastal lagoons.

One of the challenges faced by Council is to manage the COSS to maximise the long term survival of all the species and ecological communities that are currently found within the COSS. Management of the threats to the biodiversity is essential for ecosystem sustainability within the COSS. In order to ensure that habitat and wildlife management actions are correctly targeted and prioritised information about the natural resource present in the COSS needs to be gained. The necessary to guide management includes: up-to-date information about the species and ecological communities that occur in the COSS; an assessment of the relevance of the identified threats to biodiversity and particular species in the local context; and a regular assessment of the quality of habitat for species and communities present in the COSS. Monitoring of the effectiveness of management is also required in order to improve management of the biodiversity of the COSS. Opportunities for the reintroduction of species where suitable habitat exists is not considered to be a current option, but may require investigation in the future.

**Actions:**

4. **Undertake a review of the existing records and literature relating to plant and animal species and vegetation communities that are recorded as existing in or near the COSS.**
5. **Identify gaps where information about the flora, fauna and vegetation communities is not available.**
6. **Undertake flora and fauna surveys, habitat assessment, and weed inventories and mapping in COSS reserves to assist in filling knowledge gaps and to inform natural asset management strategies.**
7. **Identify the local threats to flora, fauna and ecological communities of the COSS.**
8. **Develop and implement management strategies to address the identified threats to the flora, fauna and ecological communities in the COSS.**
9. **Monitor and review the effectiveness of the management of flora, fauna and ecosystems of the COSS.**

### 4.3 Human interaction: recreation, education and scientific endeavours

The values of the COSS include the social services that the natural reserves provide to the community including opportunities for nature based recreation, educating the community about the natural environment, and opportunities to undertaken scientific investigation. Providing opportunities for the community to increase their understanding of the values of the COSS; the threats to these values; and the actions they can take to minimise their impacts on these values are important in sustaining the COSS.

#### 4.3.1 Nature based recreation in the COSS

There are a number of opportunities for visitors to the COSS reserves to undertake recreational activities. Infrastructure has been established at various locations in the COSS that allows for bushwalking, picnicking, mountain bike riding, and horse riding. Other activities including jogging, bird watching, wildflower viewing and enjoying lookouts and vantages points are also possible using the trails and other infrastructure provided.

Recreational infrastructure has been largely limited to Kincumba, Katandra and Rumbalara Reserves, although some smaller reserves may have walking trails, lookouts or picnic areas. The trails, picnic areas and lookouts in the reserves provide visitors with opportunities to experience the values of the COSS.

Establishing and maintaining infrastructure that minimises the impact of visitors on the values of the COSS is important in protecting its values. Not all visitors have the same level of mobility or willingness to enter bushland areas, and infrastructure that provides a range of experiences to visitors is desirable. The design of recreational infrastructure can affect the impact that visitors will have on the values of the COSS. It is therefore important that infrastructure is constructed to provide the intended experience without impacting on the resource. Infrastructure must also be constructed to comply with industry standards.

Environmental interpretation plays an important role in enhancing the visitor experience, promoting the values of the COSS, identifying the threats to these values and identifying ways in which visitors can minimise their impact on the reserves.

#### Action:

- 10. Develop and implement a recreational strategy for the COSS that provides for nature based recreational opportunities to a wide range of visitors while minimising the impact of recreation on the values of the COSS. The recreation strategy is to consider the role that environmental interpretation is able to play in reducing the impact of recreational activities on the values of the COSS.**

#### 4.3.2 Opportunities for increase community understanding of the COSS

The sustainability of the COSS requires the support of the community. If the COSS is valued as an important community asset, there is an increased potential for the acquisition and management programs to be continued and adequately resourced. To increase the value that the community places on the COSS, it is important that there is an understanding of how the COSS contributes to the quality of life of the residents of the Gosford LGA. Providing opportunities for the community to experience the COSS, and to learn about the values of the COSS are important precursors to the understanding how the COSS contributes to the quality of life of local residents. Development of an understanding of how the values of the COSS can be protected by the community is also an important step in changing community behaviours that may impact on the values of the COSS.

There are a number of ways in which information about the COSS can be provided to the community. Interpretive signage associated with infrastructure such as walking trails and picnic areas is an often used method. Organised events provide opportunities to engage the community directly and to provide experiential learning activities. Fact sheets and information that can be used for displays and on the internet are also commonly used to

provide information about particular issues. Other ways in which information can be provided to the local community about the COSS should be investigated.

Behaviours that have the potential to impact on the values of the COSS include:

- Allowing domestic animals to enter the COSS, as a result of not controlling where pets roam or taking them walking in COSS reserves which is not permitted;
- Disposing of garden refuse or other waste in the COSS reserves;
- Encroachment of neighbouring properties into the COSS reserves;
- Deviating from designated tracks when visiting the COSS reserves; and
- Dumping rubbish in the COSS reserves.

An environmental education and promotional strategy to increase community involvement in sustaining the values of the COSS would assist in targeting activities and maximising the use of available resources.

Potential target groups for education and actions to raise awareness of the values of the COSS include:

- a. Visitors to the COSS reserves;
- b. Residents who live adjacent to, or in the vicinity of the COSS;
- c. Residents and visitors to the Gosford City;
- d. Organisations or groups undertaking activities in the COSS
- e. Staff and contractors for Council, telecommunications and energy companies.
- f. Elected representatives at local, state and national level;
- g. Regional organisations, as well as state and Commonwealth government departments; and
- h. Property owners whose land is identified for future COSS acquisition.

#### **4.3.3 Current Environmental Education and Awareness Activities**

A number of education and awareness programs are currently undertaken to raise community awareness of the values of the COSS and the local natural environment including:

##### **i COSS Week**

A week of activities to celebrate and showcase the values of the COSS was first undertaken in September 2008. The aim of COSS Week was to increase the communities understanding of what the COSS is and its values, by providing opportunities to participate in organised activities in the reserves.

The activities undertaken included opportunities to learn about local flora, fauna and fungi; Aboriginal and post settlement heritage; astronomy; bush tucker; orienteering; and bushwalking opportunities. COSS Week successfully introduced members of the community to parts of the COSS that some participants had not previously visited.

##### **ii Bushcare**

The Gosford City Bushcare Program that has operated since 1995 provides an opportunity for the community to become actively involved in the on-ground management activities including the restoration of habitat. The Bushcare Program facilitates the involvement of the community in restoring areas of Council managed bushland. Of the fifty-five groups currently active in the Bushcare Program, seven (7) groups work on COSS land (Katandra; Cappers Gully; Calantha Road; Siletta Road; Green Point; The Bays; Putty Beach).

Council facilitates the involvement of the Bushcare volunteers by providing:

- 'Introduction to Bushcare' training that provides information about bush regeneration, and occupational health and safety;
- Qualified supervision of volunteers during designated work days;

- On-site training by qualified bush regeneration supervisor;
- An annual training and information workshop program on relevant topics including bush regeneration, and biodiversity; and
- tools, gloves, hats and other equipment required to undertake bush regeneration.

A quarterly newsletter is also produced which provides information about the Bushcare Program, the COSS, and Natural Resource Management issues. Where funds permit, additional professional bush regeneration is provided to groups to assist in achieving the objectives for their site.

### **iii Reserve brochures and information boards**

The current information that relates to the values of the COSS, including the nature based recreational opportunities available in the reserves is dated. Council's Natural Open Space Unit is currently undertaking a project to update the brochures, information boards, Council website and other information that relates to the COSS.

Outputs of this project include:

- Rumbalara / Katandra Reserve Brochure & Interpretive Boards
- Fire Awareness at the Bushland Interface Booklet
- Firebreak / Asset Protection Zone signage

These projects are being supported with funds from the Gosford City Council Protection of the Environment Trust and funding provided by Emergency Management NSW.

### **iv Environmental Education**

COSS reserves are regularly used for environmental education. The Rumbalara Environmental Education Centre uses the COSS as a natural classroom for a range of its programmes, and some local schools have field excursions to the COSS reserves.

#### **Action:**

- 11. Develop and implement an environmental education, promotional and interpretive strategy for the COSS that aims to increase the community's understanding of the values of the COSS, the contribution that the COSS makes to the local quality of life, and develops an awareness of how individuals in the community can contribute to a sustainable COSS.**

## **4.4 The System - COSS in Wider Landscape Context**

The COSS is not continuous and varying levels of connectivity exist between COSS reserves and between the COSS reserves and other remnant vegetation. In 1984, a number of corridors between the different parts of the COSS were identified to strengthen the connectivity of the network.

The connectivity of patches of remnant habitat is important to allow species to move between habitats for a range of reasons including the exploitation of seasonal or patchy resources; and the colonisation of new environments (Harris and Scheck 1991). The characteristics of corridors between remnants will affect which species are able to utilise a given corridor. Those species that are highly mobile, such as some bird species, will be able to move between remnants that are not directly connected by vegetated corridors. Other species such as the Koala, *Phascolarctos cinereus*, can move between remnants where the corridor consists of a few scattered trees (Prevett 1991, 259). Other species will require good quality habitat to be able to move between remnants (Soule and Gilpin 1991). Species that require core habitat for dispersal may not be able to move between remnant patches particularly where vegetated connections are relatively narrow (Soule and Gilpin 1991).

Some COSS reserves connect large areas of remnant vegetation with each other. Putty Beach Reserve at Killcare, for example, connects the two parts of Bouddi National Park. In some instances COSS reserves are adjacent to other patches of remnant vegetation, and form part of a larger area of habitat. The COSS reserves at Nursery Street, Narara, are for example adjacent to Strickland State Forest and are therefore part of a much larger area of remnant vegetation. In other instances the vegetated connections between COSS reserves and other remnant vegetation have been lost or have become degraded. In some locations infrastructure such as roads can act as a barrier to the dispersal of plant and animal species even where the remnant vegetation has the potential to provide a suitable corridor.

The escarpment to the west of the City Centre and Brisbane Water provides a vegetated corridor that has regional significance. The publicly owned and yet to be acquired private COSS land make up an almost unbroken vegetated link between Brisbane Water National Park, Strickland State Forest and the Wyong Shire boundary. North of the Council boundary, the vegetated link connects to Ourimbah State Forest, Palm Grove Nature Reserve and further north to Olney State Forest, Watagan State Forest and Watagans National Park. Major roads cross, including the F3 Motorway and the Central Coast Highway, however cross this vegetated corridor.

The COSS complements the National Park estate in the eastern part of the Gosford LGA, and in some cases COSS land with significant environmental values has been added to the National Park estate. The maintenance of connectivity between COSS reserves and between the COSS and other land that supports native vegetation is important for biodiversity conservation in the eastern part of the City. The review of the corridors to reflect changes in land use and increases in the knowledge of the ecological importance of corridors is required to be undertaken, along with the investigation and implementation of strategies for maintaining effective and sustainable corridors between the non-contiguous parts of the COSS.

**Action:**

- 12. Review the corridors that were identified in 1984 and where possible identify corridors required to enhance the linkages between the non-contiguous parts of the COSS and other significant areas of native vegetation.**
- 13. Research the roles the particular corridors play in the conservation of biodiversity.**
- 14. Develop, prioritise and implement strategies for the management of identified corridors that link the COSS and other significant areas of native vegetation.**
- 15. Review the developed corridor management strategies to ensure that they are effective in sustaining biodiversity conservation.**

#### **4.5 Cultural heritage**

The COSS reserves are known to support items of both Aboriginal and non-Aboriginal significance or interest, however many knowledge gaps exist in the location and best management practices of these sites. Involving the local indigenous community in the management of sites of Aboriginal significance in the COSS is essential in ensuring that management is culturally appropriate.

Management of non-Aboriginal heritage items and locations has not been actively undertaken to date in the COSS. The non-Aboriginal sites of significance or interest in the COSS reserves have not been formally identified or assessed. Identification and assessment of the sites is important for the development of management strategies, including interpretation of the heritage items. Local experts are often aware of items and locations of heritage value, and engaging with these individuals and groups can provide opportunities for improved management of non-Aboriginal sites.

Individual items or locations may have both Aboriginal cultural values and non-Aboriginal heritage value. The management of such sites needs to ensure that all values are incorporated into management plans and activities.

**Action:**

- 16. Develop a collaborative relationship with the indigenous community to ensure that management of Aboriginal sites is undertaken in a culturally sensitive manner.**
- 17. Undertake an inventory of non-Aboriginal heritage items and locations in the COSS.**
- 18. Develop and implement non-Aboriginal heritage management and interpretation strategy for the COSS.**

## **5.0 KEY STAKEHOLDERS**

There are a number of individuals, groups and organisations that are considered to be stakeholders in the COSS. These include:

- the community of Gosford, encompassing individuals, community groups and organisations;
- Gosford City Council
- COSS Environmental Task Group and Environment Committee;
- Private landholders within the identified COSS boundary;
- Land and Property Management Authority (formerly the Department of Lands);
- NSW Department of Planning;
- Industry and Investment NSW
- Department of Environment, Climate Change and Water; and
- Hunter-Central Rivers Catchment Management Authority.
- Darkinjung Aboriginal Land Council

The community of Gosford is an important stakeholder in the COSS. Community funds have been allocated to the acquisition and management of the COSS, and the community benefits from the environmental, scenic and recreational values of the COSS.

The landholders of properties within the COSS boundary are key stakeholders whose management actions can directly affect the objectives of the COSS. In addition to the public land owned by Council, there are a number of NSW government agencies, including the Land and Property Management Authority, which controls public land within the COSS boundary.

The COSS also has the additional component of private land which has been identified for future voluntary acquisition. The privately owned land is largely zoned in order to maintain its environmental and scenic values; however the management actions on the private land can affect the value of the land to COSS in the longer term. A failure to control weeds may, for example, reduce the habitat value of land for a particular wildlife species, thereby resulting in the loss of an attribute of the land that is of value to COSS.

While the Department of Environment Climate Change and Water (DECCW) does not control COSS, land it is a stakeholder in the COSS. Land that has been acquired for the COSS has later been transferred to DECCW for inclusion in the National Parks estate. COSS land on the Macmasters Ridge and Daleys Point was, for example, added to Bouddi National Park in 2005. Former COSS land is also the basis of Wambina Nature Reserve. The mechanism exists for COSS, and other Council land, to be included in the National Parks estate in the future should Council resolve to do so.

**Action:**



19. **Assist in maintaining the COSS values of land identified for future inclusion in the COSS by providing access to sustainable land management advice to landowners.**
20. **Work collaboratively with public and private landholders to ensure that the COSS remains an important component of biodiversity conservation in the Gosford Local Government Area.**

### **5.1 Role and Function of COSS Committee/Task Group**

The overall implementation and management of COSS has been undertaken with reference to an advisory committee of Council that comprises elected representatives, community members, representatives from government agencies and council staff as appropriate. The Committee commenced operations early in the history of COSS where its role was advisory regarding management matters in relation to COSS. This was later expanded to cover consideration of development applications on land adjoining COSS land. The Committee later came under the auspices of a formal council sub-committee, with meetings being minuted and put to Council for adoption.

As a result of a review of the number and functions of all Council sub-committees, in May 2004 the COSS Committee became subsumed into the Environmental Planning and Sustainability Committee. This Committee was to be further reviewed and became the Environment Committee in September 2005, with its inaugural meeting held in December 2005. The COSS Environmental Task Group was formed as a sub-group of this Committee.

This COSS Environmental Task Group plays a key role in the administration and management of COSS. Its terms of reference are listed in Appendix III. A number of the terms of reference identified for the COSS Task Group when it was established in 2005 have been completed or are in the progress of completion.

#### **Action:**

21. **The terms of reference for a COSS advisory group, currently the COSS Environmental Task Group, are to be reviewed in association with the appointment of the Committees of Council at the commencement of each Council term, or as determined by Council.**

### **5.2 Public Land Stakeholders**

The public land within the boundaries of the Coastal Open Space System is owned and controlled by a number of organisations. Gosford City Council and the Land and Property Management Authority (LPMA), formerly the Department of Lands, are the major land owners. Other NSW Government Agencies including the Roads and Traffic Authority; NSW Department of Planning; and State Rail control relatively small areas of public land within the COSS boundary.

#### **i. Land and Property Management Authority:**

Under the *Crown Lands Act, 1989*, Crown Land that is owned by the NSW Government may be managed by local councils. Councils may be appointed trustees, or the management of the land may devolve councils. A reserve trust, or Crown Lands Act trust, is the legal body which enables the temporary ownership of reserved or dedicated Crown land so it can be managed by the trust on behalf of the public. The trust owns a legal interest in the property for which it is responsible. A trust can only make decisions and take actions concerning the reserve in the interests of the reserve itself, and the public (LPMA 2007).

A reserve trust is set up under the *Crown Lands Act 1989* to have responsibility for the care, control and management of a Crown reserve. While a reserve trust is a legal entity in its own right, it cannot operate without having someone appointed to manage its affairs. A reserve trust can be managed by:

- the Minister for Lands (generally through the Land and Property Management Authority);
- a trust board;
- an incorporated body, usually a local council, but it could also be an association incorporated under the *Associations Incorporation Act 1984* or a charity which is a limited liability company, or the Lands Administration Ministerial Corporation; or
- an administrator.

A reserve trust can now also be managed by more than one manager, with the different management responsibilities being determined on either a geographical or functional basis. When a council or a corporation is appointed as manager, decisions regarding the operation of the reserve must be made in accordance with the rules which govern the council's operations or the corporation's own constitution, as applicable, as well as the *Crown Lands Act 1989* (LMPA 2007)

Certain Crown reserves are automatically managed by the local council even if a reserve trust has not been established. These reserves are generally those with the public purpose of 'public recreation' or 'public cemetery' and not managed by another body or person (s. 48 *Local Government Act 1989*). The Minister may however declare at any time by a notice in the Government Gazette that a reserve that would normally devolve to management by council is for the time being under the care, control and management of the Minister. This declaration may also be revoked.

#### **ii. Gosford City Council**

Several of the properties in the COSS are owned by Gosford City Council and are classified as community land. These lands are managed under the Generic Bushland Plan of Management prepared in accordance with the *Local Government Act 1993*. In some locations Council owned and Crown Land may be adjacent to each other and form a single reserve, such as in Kincumba Mountain Regional Reserve, or Rumbalara Reserve.

#### **iii NSW Department of Planning**

A small number of properties in the COSS are Crown Land which is administered by the NSW Department of Planning. Many of these properties have been purchased under the Coastal Lands Protection Scheme. Some of these properties are managed by the NSW Department of Planning while other parcels of this land are managed by Council. Any future proposals to disposal or subdivision of such these land parcels should not be supported by Council as they are important components of the COSS.

#### **iv. Roads and Traffic Authority**

A single Roads and Traffic Authority, property at Green Point that was formerly owned by the Department of Education and Training, is located within the COSS boundary. The development of a road by the RTA through part of this land has seen loss of much of the environmental values of the land parcel. The appropriateness of the inclusion of the remainder of the lot in the COSS may require review.

#### **v. Industry and Investment NSW**

Part of the former Gosford Horticultural Institute Site at Narara owned by the Department of Primary Industries has been identified for COSS. The tenure of this land in public ownership is not assured and indications from the Department of Primary Industry are that Council would need to purchase the land for it to be managed as part of the COSS.

Strickland State Forest at Somersby is also managed by the Department of Primary Industries. This State Forest is no longer used for timber production, but remains important for conservation of biodiversity and recreation. Private land identified for the

COSS acquisition and publicly owned COSS land are adjacent to or in the vicinity of Strickland State Forest.

**vi. State Rail**

Parts of the State Rail owned land in the area known as the Railway Dams is identified for inclusion in the COSS. The assessment of land for inclusion in the COSS considered the land that railway dams are located on. The potential management issues and costs associated with the dam walls and the water, resulted in most of these lands not being included within the COSS boundary.

Formal agreement on the on-going land use of public land within the COSS boundaries has in many instances not been entered into with the management authorities. The sale of public land or the development of key parcels of public land may compromise the entire COSS system. Mechanisms to ensure that publicly owned land within the COSS boundary is managed for its COSS values need to be established and made binding. Publicly owned land within the COSS boundary, may for example be transferred to Council ownership, or joint management arrangements may be entered into. In the case of Crown Land, the purpose of the land should be commensurate with the biodiversity values and other COSS values it provides.

Some crown land within the western extension of COSS is subject to land claim under the *Aboriginal Land Rights Act 1983*. The title is yet to be assigned to the Darkinjung Aboriginal land Council, however when this occurs this land will become freehold. Voluntary acquisition of the Darkinjung land would occur using the same processes used to bring private freehold land into public ownership for the COSS.

**Action:**

**22. Identify and implement mechanism for ensuring that the publicly owned land within the COSS boundary is permanently classified and managed for its values that are consistent with COSS.**

## **6.0 THE COSS BOUNDARY**

The adoption of the COSS by Council on 18 September 1984 resulted in the setting of the original boundary of the COSS in the eastern part of the City This included lands that were mostly located east of the Main Northern Railway. The 1984 COSS map (Appendix II) and the subsequent Coastal Open Space System Ecological Study (Mitchell McCotter 1994) guided the acquisition of properties for inclusion in the COSS until 2007. The COSS boundary review adopted by Council in 2007 included the adoption of a process for prioritising voluntary property acquisition for the COSS.

### **6.1 Review of the COSS boundary 2007**

Given the substantial increase in the population of Gosford City since 1984, and the potential for changes to have occurred in the attributes of land identified for COSS acquisition, a review of the COSS boundary was recommended by the COSS Task Group. The review which was undertaken during 2006 and 2007 included an assessment of the properties that were identified for the COSS in 1984, as well as a review of adjacent or nearby lands that were considered to have the potential to add value to the COSS. Upon completion of the review process a report and the revised boundary of the COSS were presented to Council.

On 1 May 2007 Council resolved (min no. 2007/239) that:

- A Council adopt the draft COSS boundary review strategy.
- B A copy of the reviewed COSS strategy be provided to the Department of Planning.
- C Council's Natural Resources Project Officer to approach the owners of properties identified for future COSS acquisition and offer assistance to them with property planning, access to grant funding and establishing networks with neighbours to achieve natural resource management objectives.
- D Council acknowledge the submissions received and the issues raised.

A map of the COSS boundary was adopted at that time.

### **6.2 COSS Stage 2 - Western COSS**

The concept for expanding the COSS was recommended by the COSS Management Committee and the concept of the Western COSS, later referred to as COSS Stage 2, was adopted by Council on 23 September 2003. During 2002 Council engaged consultants to undertake a study of part of the City east of the F3 Motorway and west of Brisbane Water, and the Main Northern Railway north from Brisbane Water.

As part of the Western COSS Assessment Study (Biosis, 2002) conservation zones across the study area were identified. Further investigation of the values of particular parcels of land was not undertaken to identify which properties were suitable for inclusion in the western extension of the COSS.

The process for assessing the properties used to review of the original COSS boundary (described in sec 6.3 below) was also used to assess the properties identified in the Western COSS Assessment Study. After completion of the assessment of the properties for COSS Stage 2 by the COSS Task Group, a report was considered by Council. On 1 July 2008 (min no. 2008/457) resolved that:

- A The revised boundaries of COSS Stage 2 be adopted by Council.
- B The plan of the boundaries of COSS Stage 2 be forwarded to the Department of Planning.
- C The standard COSS message be added to the section 149 certificates of the affected properties.
- D Council write to all residents who made submissions thanking them for their input.

E Council write to all property owners affected by the COSS Stage 2 informing them that COSS Stage 2 has been adopted by Council, and that the COSS message will be added to the section 149 certificates for their properties.

The adopted boundary of both the original COSS and COSS Stage 2 were combined into a single map of the entire COSS (Appendix IV). The distinction between the two stages of the COSS was also removed, and the whole system is now referred to as the Coastal Open Space System (COSS).

### **6.3 COSS Assessment Process**

In order to provide a repeatable process for assessing lands for the inclusion in the COSS, a matrix based on the values of the COSS was prepared in 2006 (Appendix V). The matrix is made up of a number of measurable attributes that contributed to the values of the COSS. These attributes include the area of remnant native vegetation of the land parcel; the presence of endangered ecological communities, regionally significant vegetation, and threatened flora or fauna species; elevation; connectivity with other COSS land; and presence of riparian environments.

This matrix scored each of the identified attributes of a land parcel, that when added together provided a total score for each individual property. A high score resulted in a high priority for acquisition. Weighting of attributes was undertaken to reflect the relative importance of each of the COSS attributes. The weighting of the landscape attribute, for example, was influenced by the degree to which the landscape unit was in public ownership. The Long Ridge Landscape Unit was weighted heavily because there was a large percentage of the properties identified for acquisition that were yet to be acquired. The identification and weighting of the attributes for each land parcel assessed was developed in consultation with the COSS Task Group.

Some properties identified in the Western COSS Assessment Study (Biosis, 2002) which had particularly low scores when assessed using the matrix were where not included in the boundary of COSS Stage 2. This also occurred when reviewing the properties in the original COSS. Some properties with low scores were excluded from the 1984 boundary as they were considered to no longer have sufficient COSS related attributes to be included in the 2007 review. This process also resulted in the inclusion of some properties that were not in 1984 boundary, but during the review of the original COSS were considered worthy of investigation for potential inclusion in the COSS.

The data relating to threatened flora, threatened fauna, endangered ecological communities and regionally significant vegetation used in the COSS assessments was accessed from Council's GVIEW mapping system. The Department of Environment and Climate Change and Water provides the data relating to regarding flora, fauna and ecological communities. Council's vegetation mapping has been prepared by Eastcoast Flora Survey (Bell 2002). The classification of regionally significant vegetation is based on data from the Hunter and Central Coast Regional Environmental Management Strategy. It was recognised that data gaps existed which would influence scores. There is considerable variation in the amount of biodiversity survey data that exist across the City.

The percentage of the property that was the subject of the assessment was affected by the amount of native vegetation that could be viewed from aerial photography. A number of larger properties are partially developed, but retain some areas of important native vegetation. In situation such as this, only part of the property was assessed.

The output from the assessment processes for both stages of the COSS was the production of maps representing the priorities for acquisition across the COSS. The map relating to the review of the COSS Stage 1 was adopted by Council on 1 May 2007 and the map for COSS Stage 2 was adopted on 1 July 2008. A composite map of the entire system was subsequently produced (Appendix IV). While the boundary of the COSS is public

information, the priorities for acquisition of land remains confidential since there are potential implications for property prices were the priority rating to be made publicly available.

Some of the data and information included in the matrix to assess the COSS boundaries is subject to change. The status of vegetation communities, plant species or animal species may, for example, change as a result of determinations of the Scientific Committee that operates under the *Threatened Species Conservation Act* 1995. Periodic reviews of the boundary of the COSS need to be undertaken to ensure that current information is used to rank the existing properties according to their priority for acquisition. These reviews may also consider properties that are not currently included in the COSS. The review of the boundaries could potentially include the review of the matrix and/or the inclusion of additional parts of the City for inclusion in the COSS.

**Action:**

**23. Review the boundary of the COSS every ten (10) years, or as determined by Council.**

## **7.0 ACQUISITION**

The land identified with the COSS boundary includes publicly owned land managed as part of the COSS, and privately owned land that is identified for future voluntary acquisition. A process to identify the priority rating of each of the private properties within the COSS has been undertaken to assist with the acquisition process.

Message number 109 on the Section 149 Certificates identifies private properties that are identified for future voluntary acquisition. Message 109 reads:

The land has been identified within the Gosford Open Space System as being desirable for future voluntary acquisition in full or in part by Council's Minute 1166/92. The Land Acquisition (Just Terms Compensation) Act 1991 guarantees that if and when the land is acquired by Gosford City Council under that Act, the amount of compensation will not be less than market value (assessed under that Act) unaffected by the proposal.

The Section 149 message alerts owners and potential buyers to Council's potential interest in the property for inclusion in the COSS. The process that results in acquisition of identified properties for the COSS can be instigated in a number of ways, however the usual process is as follows:

1. The owner wishes to sell the property, and approaches Council. Any approaches by property owners are referred to Council's COSS Task Group or equivalent, which may consider the potential acquisition in terms of factors such as the current availability of acquisition funds, the priority of the property for acquisition or the importance of the property to the entire System. In the current structure of the Committees of Council, the COSS Task group then makes a recommendation to the Environment Committee in relation to further investigation.
2. If the recommendation is that no further investigation be undertaken at this time, then a letter is sent to the owner advising them that Council does not wish to proceed with acquisition at this time but may wish to do so in the future.
3. If the recommendation of the COSS Task Group is that a valuation to be undertaken, then a request is sent to Council's Property Section to have a professional valuation for the property undertaken. Clear instruction about the part(s) of the property that of interest to the COSS, and the appropriate account number to which costs are to be charged need to be charged must be provided to Property Services. Property Services may recommend that information is provided directly to the appointed valuer.

4. Valuations are considered by the COSS Task Group. The COSS Task Group may seek further information to assist in their consideration of the property, or it may recommend to Council via the Environment Committee to proceed with acquisition of the property. The COSS Task Group may also consider that the valuation for the property does not warrant value for money, and recommend not entering into negotiations over the property.
5. After a recommendation from the COSS Task Group, via the Environment Committee, to proceed with acquisition of a property is adopted by Council, Property Services Section commences negotiation with the owners over the property.
6. Once agreement on the price and conditions of sale is reached, Property Services Section advises the COSS Task Group. If the price and conditions of sale are acceptable to the COSS Task Group, a recommendation to purchase the property is made via the Environment Committee to Council. Once Council has adopted the recommendation to purchase, acquisition can proceed.
7. Property Section then proceeds with acquisition. The appropriate account number is provided to Property Services to enable acquisition to be completed. Advice from Property Services Section is provided back to the COSS Task Group on the progress of the sale.
8. After the property has been acquired it is included in the COSS land managed by the designated section of Council which is currently the Open Space and Leisure Services Section. The COSS mapping and Council's GVIEW are updated to reflect the new public status of the land. The property is to be added to the schedule of lands in the appropriate plan of management.
9. It has been past practice that after land zoned Conservation 7(a) is acquired by Council for inclusion in the COSS, it is zoned Open Space 6(a) when Council prepares a Local Environment Plan (LEP) where it is appropriate to include the zoning. Any necessary changes in zone are to be undertaken at the next opportunity after acquisition. Changes in zoning should seek to zone land to the most suitable zone given consideration of the Standard Instrument LEP mandated objectives, and the values of the COSS as described within this Strategy.

Other ways in which acquisition may proceed:

- Council may approach the owner of a property that is of particular interest to the Council for inclusion in the COSS.
- The property or part of the property may be dedicated to Council as a result of subdivision or development.

### **7.1 Acquisitions of part properties:**

In some locations part(s) of a property are identified for COSS acquisition. Typically the property will have a dwelling house as well as a substantial area of bushland. The dwelling is not normally of interest to the COSS. Subdivision of the property is therefore required to enable part of the property to be acquired for the COSS. Where a dwelling is acquired as part of the property it may be appropriate to demolish the building or allocated for a use that is compatible with the COSS values.

Subdivision of land below the lot size specified for a particular zone is permissible under some circumstances. Interim Development Order (IDO) 122 (Clause 20) allows subdivision for certain purposes including providing land for the use of the Crown, public utility undertaking, a statutory body or the Council. Gosford Planning Scheme Ordinance (Schedule 10, Exempt Development) allows for subdivision of minor environmental significance on land other than land in Zone No.9(a), 9(b), 9(c), 2(f), 5(d), 5(e) or 6(d). Subdivision for one of the following



purposes only: including creating a public reserve and excising from an allotment land which is, or is intended to be, used for public purposes, including drainage purposes, the purposes of a rural fire brigade or other rescue service, or for public conveniences. Similar provisions are to be included in the Draft Local Environmental Plan (DLEP) 2009 (Clause 2.8), however development consent is not required. This DLEP is to be exhibited for the period 10 February 2010 until 8 April 2010 with gazettal some months later.

**Action:**

- 24. 149 Certificates to be kept up to date to ensure that new owners are aware that their land is of potential interest to Council for voluntary acquisition and inclusion in the COSS.**
- 25. Council to regularly communicate with owners of land to be acquired for the COSS to ensure that they are aware that they have the option to approach Council when they wish to sell their property.**

## **8.0 MANAGEMENT**

The COSS (including Stages 1 and 2) is comprised of over 662 parcels of land, equating to approximately 4,368 hectares largely comprised of Council owned and Council managed Crown Land. Some of these adjacent parcels of land have been consolidated under one reserve name, such as Kincumba Mountain Regional Reserve. In other locations single parcels of COSS are identified as one reserve. In addition, private land parcels that are acquired for the COSS may be added to larger reserves or may be considered to be a reserve in its own right.

*The Local Government Act 1993* allows for the preparation of specific plans of management for individual reserves, or number of reserves. There are a number of benefits of having a single, or small number of plans of management for the COSS reserves. This approach allows for more consistency in management, and also reduces the resources required to produce and update multiple plans. *The Local Government Act 1993* requires the updating of plans of management every five (5) years.

### **8.1 Core Management Objectives in Local Government Act 1993**

Section 36(J) of the *Local Government Act 1993* identifies the following core objectives for the management of community land with a bushland category:

- a. To ensure the ongoing ecological viability of the land by protecting the ecological, biodiversity and habitat values of the land, the flora and fauna (including invertebrates, fungi and micro-organisms) of the land and other ecological values of the land;
- b. To protect the aesthetic, heritage, recreational, educational and scientific values of the land;
- c. To promote the management of the land in a manner that protects and enhances the values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to minimising or mitigating any disturbance caused by human intrusion;
- d. To restore degraded bushland;
- e. To protect existing landforms such as natural drainage lines and watercourses;
- f. To retain bushland in parcels of a size and configuration that will enable the existing plant and animal communities to survive in the long term; and
- g. To protect bushland as a natural stabiliser of the soil surface.

### **8.2 Principles of Crown Land Management**

The principles of crown land management are identified in s.11 of the *Crown Lands Act 1989* as:

- a. Environmental protection principles are observed in relation to the management and administration of Crown Land.

- b. The natural resources of Crown Land (including water, soil, flora, fauna and scenic quality) are conserved wherever possible.
- c. Public use and enjoyment of appropriate Crown Land be encouraged.
- d. Where appropriate, multiple use of Crown land be encouraged.
- e. Where appropriate, Crown Land should be used and managed in such a way that both the land and its resources are sustained in perpetuity.
- f. Crown Land be occupied, leased, licensed or otherwise dealt with in the best interests of the State and consistent with the above principles.

### 8.3 COSS Management Strategy 1992:

The COSS Management Strategy (Manidis Roberts, 1992) identifies the primary goal of management of the COSS as:

*To protect the values and manage the threats to ensure a self sustaining ecosystem for all time.*

The management goals for the COSS, developed from the primary goal are to:

- encourage nature base recreation and interpretation of the resource. This entails the provision of a range of opportunities that fit between municipal parkland and national park recreation opportunities.
- acknowledge the value of the entire open space system and the principle that the total is greater than the sum of the parts.
- protect the scenic quality of the COSS and acknowledge this value as significantly contributing to the region's sense of place.
- manage the resource to the best of Council's ability within staff and budgetary constraints (Mitchell McCotter, 1992)

In 1994, the Gosford COSS Ecological Study was undertaken (Mitchell McCotter 1994) that provided an important scientific basis for the environmental significance of the COSS. Ranking criteria based on the ecological values of the COSS was developed as part of this Study. The ranking criteria were reviewed as part of the COSS boundary review and western expansion of the COSS adopted by Council in 2007 and 2008.

### 8.4 Plans of Management

The following documents relate to the management of the COSS:

- *Plan of Management for Community Land - Natural Areas - Bushland Plan* (GCC, 2002) prepared under Section 36 of the *Local Government Act, 1993*. This Plan of Management provides general directions for management, but does not necessarily provide guidance on site specific management issues.
- *COSS Management Strategy* (Manidis Roberts, 1992) provides management objectives for the COSS.
- *COSS Action Plan Strategy* (Manidis Roberts, 1992) identifies a number of actions that, when implemented will go towards meeting some of the COSS objectives.
- *Gosford Natural Areas Bushfire Risk Analysis* (Conacher Travers, 2006) provides an analysis of the bushfire risk posed by all lands under the care and control of Council and recommended actions to reduce that risk
- *Annual Fuel Management Program* (prepared annually by the Gosford Bushfire Management Committee)

Specific Plans of Management

- *Kincumba Mountain Regional Reserve Plan of Management* (GCC, 2007)
- *Putty Beach Plan of Management* (Dept of Lands, 1989) covers Putty Beach Reserve which is one of the few coastal reserves in the COSS.
- *Coastal Lagoons Management Plan* (GCC, 1995) covers Cockrone Lagoon which is part of the COSS, and some COSS lands adjacent to the Avoca Lagoon.

Many of the existing documents relating to the COSS are now dated, or the required documents have never been produced. Updating of both existing documentation as well as documents identified for preparation through the *COSS Action Plan Strategy* (Manidis Roberts, 1992). There may be advantages in the preparation of a single plan of management for all COSS reserves.

**Action:**

**26. Plans of management for COSS land be developed and reviewed on a five year cycle as required by the Local Government Act 1993, or as required under the Crown Lands Act 1989.**

## **9.0 COSS FUNDING ACQUISITION AND MANAGEMENT**

The recommendations of the Financial Report COSS (Min 2006/763) were adopted by Council on 3 October 2006. The report provided an overview of the sources of funds available for COSS acquisition and management.

The four primary accounts identified in that report are:

1. Funds generated from the bonus provisions of the subdivision of 7(c2) lands
2. Financial Strategy
3. Deed of Agreement with the NSW Government
4. Purchase of wetlands in Davistown

The resolution adopted by Council was:

- A Council transfer the sum of \$1,500,000.00 from account R0260.066 - Contributions COSS - IDO 122 into a special interest bearing account to be administered by Council's newly established "Gosford Sustainability Environmental Trust". The annual interest derived from this account is to be deposited into account RO260.220. This account RO260.220 to be renamed COSS Maintenance/Operation Account.
- B Council rename accounts RO260.066 - Contributions COSS - IDO 122 to RO260.066 - Land Acquisitions - COSS Contributions - Financial Strategy, and account RO260.065 - Interest on Investment COSS - IDO 122 be renamed to RO260.065 - Interest on Land Acquisitions.
- C Council transfer the balance of funds held in account F2700.773 to RO260.066. Any interest generated and held in RO260.065 to be redirected back into RO260.666 for future land acquisition.
- D Council advertise to the wider community and businesses the establishment of the "Gosford Sustainability Environmental Trust" along with the special interest being account advising that any gift to the account will go towards the long-term maintenance and operation of the Coastal Operation Space System (COSS) in perpetuity. In promoting this special interest bearing account, Council advise that any gift is tax deductible and any sum over \$5,000 will enable the tax deduction to be claimed over five years. Donation of less than \$5,000 will be still tax deductible, however, they can only be claimed in the year of the donation.
- E Council's Natural Resource Officer to prepare a budget for the management of COSS including an estimate of future budgetary requirements to address Council's voluntary Bushcare Groups working within COSS.
- F Regular financial reports on the operation of the COSS be reported back to both the Environment Committee and the COSS Environment Task Group.

### **9.1 Gosford City Council Protection of the Environment Trust**

The Gosford City Council Protection of the Environment Trust was established and the inaugural meeting of the Protection of the Environment Trust Management Committee was held on 17 June 2008.

The Deed of Settlement for the Trust made on 25 July 2006 (IR 2681261) identifies the purpose of the trust as:

- a. to promote the protection and enhancement of the natural environment or of a significant aspect of the natural environment and in particular the conservation of flora and fauna indigenous to the Local Government area of Gosford City; and
- b. for the provision of information or education or the carrying out of research about the natural environment or a significant aspect of the natural environment in particular relating to flora and fauna of the area for the benefits of persons within the Local Government Area of the City of Gosford.

The Trust Management Committee recommend on 17 June 2008 that:

- 1 The interest component be used for maintenance activity works on 6(a), 6(b) and 7(a) land as approved by the Trust.
- 2 Council investigate the appropriateness of placing the Davistown Wetlands Acquisition Fund monies into the Gosford City Council Protection of the Environment Trust.

The minutes of the meeting of the Trust Management Committee were adopted by Council on 1 July 2008 (Min no. 2008/454).

### **9.2 Financial Strategy**

The Financial Strategy was established in 1997 with an opening balance of \$4,250,000. As all funds were not spent in the first three years, this generated a surplus which was distributed to all financial strategy projects. The COSS Financial Strategy account project received an additional allocation of \$750,000. Later a grant of \$55,000 was received. Total allocation of the financial strategy was \$5,508,000.

Part C of the Council resolution of 3 October 2006 (Min 2006/763) relation to the COSS Financial Report (IR 2470118) was:

- C. Council transfer the balance of funds held in account F2700.773 to RO260.066. Any interest generated and held in RO260.065 to be redirected back into RO260.666 for future land acquisition.

### **9.3 Deed of Agreement**

A deed of agreement was signed with the NSW Government on 25 June 2003 for a total of \$1,500,000. These funds have been expended on the acquisition of land for the COSS. The remainder of the deed funds available is committed to the acquisition of 'Triple Springs' at Oak Road, Matcham.

### **9.4 Davistown Wetlands Funds**

The Davistown Wetland Fund was identified for the acquisition of wetlands in the Davistown area. Income from this account is derived from the sale of surplus Council owned land that is developable and is not classified as wetland in the Davistown area.

The recommendation of the Gosford City Council Protection of the Environment Trust of 17 June 2008 was that Council investigate the appropriateness of placing the Davistown Wetlands Acquisition Fund monies into the Gosford City Council Protection of the Environment Trust. This has not occurred to date.

The review of the COSS boundary undertaken in 2006 and 2007 resulted in the removal of the single wetland from the Davistown area being removed from the COSS. While that wetland has considerable ecological values, it does not have a direct link to other COSS lands. A future review of the COSS boundary may consider including Davistown Wetlands in the COSS where the attributes of these land parcels are consistent with COSS values.

#### **9.5 Funds generated by "bonus provisions" subdivisions of land zoned 7(c2)**

The mechanism whereby funds are generated by "bonus provisions" subdivisions is currently contained within IDO 122 and is a type of "transferable development rights", whereby smaller lots are allowed to be created within the 7(c2) zone, subject to the owner dedicating land identified in COSS, paying a "bonus" contribution or both. When preparing a consolidating planning instrument in the early 1990's, advice was received that if these provisions were to continue, then a Section 94 Contributions Plan would need to be prepared. It was determined that it was not possible to prepare such a plan and Council has continued with the operation of IDO primarily on this basis.

As part of the State Government's planning reform process, all councils in NSW are required to prepare new Local Environmental Plans based on the State Government's "Standard Instrument Local Environmental Plan", or "LEP Template". Council has now prepared its draft LEP 2009, and this is to be exhibited for the period 10 February until 8 April 2010. The DLEP contains provisions to aimed to facilitate the continuation of the bonus lot subdivision provisions (Clauses 4.1A and 4.1B) on identified lots currently greater than 2 hectares in area, however the mechanism by which applications are assessed and contributions levied is contained within the supporting Draft Development Control Plan 2009. Voluntary planning agreements will be required in each instance of "bonus provisions" subdivisions. These new provisions could be contestable in the Land and Environment Court.

#### **Actions:**

- 27. Identify and pursue sources of funds to continue the acquisition of lands for inclusion in the COSS.**
- 28. Ensure that the constructed assets in the COSS are included in Council's proposed Asset Management System to ensure that costs of maintenance and replacement are considered.**
- 29. Use available knowledge to allocate value and maintenance costs for natural assets in the COSS.**
- 30. Develop estimates of future budgetary requirements for management of the constructed and natural assets in the COSS, as well as associated programs such as Bushcare.**
- 31. Monitor the operation and effectiveness of new provisions in relation to the operation of bonus lot subdivisions once DLEP 2009 is operational.**

## 10.0 MONITORING, REPORTING AND REVIEW

Monitoring the success of the COSS Strategy is important for ensuring that it remains a useful and relevant document. As indicated in Section 2.0, strategic plans are not static and must be monitored to assess whether the assumptions made were correct, whether the COSS is moving in the direction envisaged, and whether the Gosford Vision 2025 is being achieved. Regular review of the COSS Strategy is therefore required, and regular cycle of review has been identified.

Reporting on the success of the COSS acquisition and management programs is important for ensuring that the objectives of these programs are met. This reporting on the success of these programs need to be reported to Council, the community.

**Action:**

**32. The status of the COSS acquisition and management programs be reported to Council through the Environment Committee or equivalent, and to the community through Council's annual community reporting process.**

## 11.0 CONCLUSION

The Coastal Open Space System (COSS) is an important feature of the Gosford Local Government Area, is one of the community's premier natural assets, and contributes to the quality of life of the local community. The COSS contributes to nature conservation on a local, regional, state and national level by providing habitat for endangered species of plants and animals as well as ecological communities. In addition, COSS lands protect local landscapes, as well as sites and items of cultural and heritage value. Infrastructure within the COSS provides opportunities for a range of nature based recreational activities that are compatible with the values of the reserves. The COSS is also regularly used for environmental education activities by local and visiting school groups; and for scientific investigation and the study of aspects of reserve management by staff and students from tertiary institutions.

Meeting the objectives of the COSS involves a number of actions, including the development of strategic documents; the allocation of resources and the implementation of management strategies. Management of the publicly owned COSS land and acquisition of the privately owned land are relatively high profile activities within this range of actions. The preparation of strategic documents such as this COSS Strategy, are also essential in achieving the objectives of the COSS.

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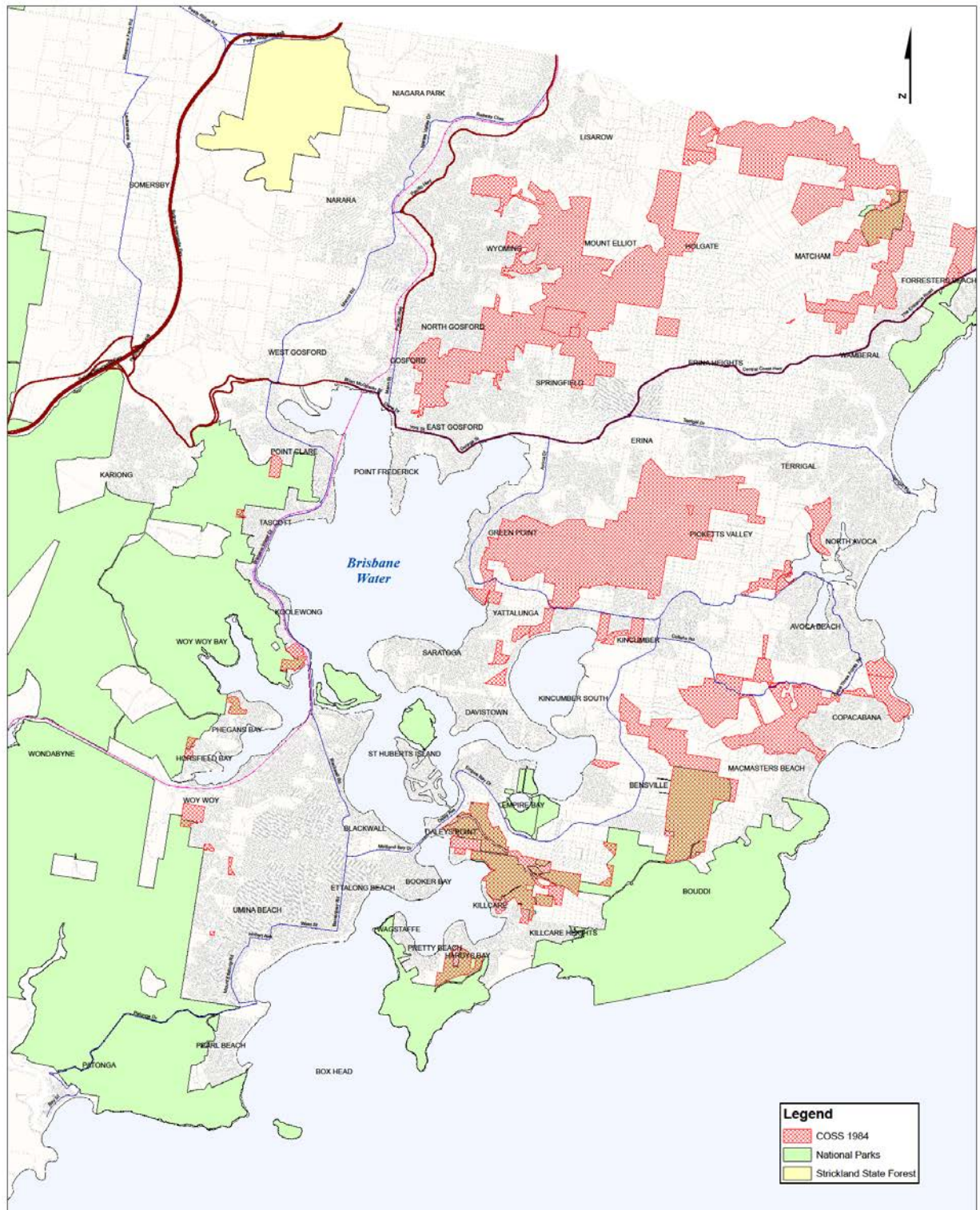
## APPENDIX I: LIST OF COSS STRATEGY ACTIONS

1. The COSS Strategy is to be reviewed on a five year cycle to allow for adjustments to be made if circumstances or assumptions alter.
2. Ensure that the scenic values of the COSS land continue to be considered when assessing properties for future voluntary acquisition for the COSS.
3. Investigate ways in which the scenic value of properties can be objectively compared prior to undertaking the next review of the COSS boundary.
4. Undertake a review of the existing records and literature relating to plant and animal species and vegetation communities that are recorded as existing in or near the COSS.
5. Identify gaps where information about the flora, fauna and vegetation communities is not available.
6. Undertake flora and fauna surveys, habitat assessment, and weed inventories and mapping in COSS reserves to assist in filling knowledge gaps and to inform natural asset management strategies.
7. Identify the local threats to flora, fauna and ecological communities of the COSS.
8. Develop and implement management strategies to address the identified threats to the flora, fauna and ecological communities in the COSS.
9. Monitor and review the effectiveness of the management of flora, fauna and ecosystems of the COSS.
10. Develop and implement a recreational strategy for the COSS that provides for nature based recreational opportunities to a wide range of visitors while minimising the impact of recreation on the values of the COSS. The recreation strategy is to consider the role that environmental interpretation is able to play in reducing the impact of recreational activities on the values of the COSS.
11. Develop and implement an environmental education, promotional and interpretive strategy for the COSS that aims to increase the community's understanding of the values of the COSS, the contribution that the COSS makes to the local quality of life, and develops an awareness of how individuals in the community can contribute to a sustainable COSS.
12. Review the corridors that were identified in 1984 and where possible identify corridors required to enhance the linkages between the non-contiguous parts of the COSS and other significant areas of native vegetation.
13. Research the roles the particular corridors play in the conservation of biodiversity.
14. Develop, prioritise and implement strategies for the management of identified corridors that link the COSS and other areas of native vegetation.
15. Review the corridor management strategies to ensure that they are effective in sustaining biodiversity conservation.
16. Develop a collaborative relationship with the indigenous community to ensure that management of Aboriginal sites is undertaken in a culturally sensitive manner.
17. Undertake an inventory of non-Aboriginal heritage items and locations in the COSS.

18. Develop and implement non-Aboriginal heritage management and interpretation strategy for the COSS.
19. Assist in maintaining the COSS values of land identified for future inclusion in the COSS by providing access to sustainable land management advice to landowners.
20. Work collaboratively with public and private landholders to ensure that the COSS remains an important component of biodiversity conservation in the Gosford Local Government Area.
21. The terms of reference for a COSS advisory group, currently the COSS Environmental Task Group, are to be reviewed in association with the appointment of the Committees of Council at the commencement of each Council term, or as determined by Council.
22. Identify and implement mechanism for ensuring the publicly owned land within the COSS boundary is permanently classified and managed for its values that are consistent with COSS.
23. Review the boundary of the COSS every ten (10) years, or as determined by Council.
24. 149 Certificates to be kept up to date to ensure that new owners are aware of that their land is of potential interest for voluntary acquisition for inclusion in the COSS.
25. Council to regularly communicate with owners of land to be acquired for the COSS to ensure that they are aware that they have the option to approach Council when they wish to sell their property.
26. Plans of management for COSS land be developed and reviewed on a five year cycle as required by the Local Government Act 1993, or as required under the Crown Lands Act 1989.
27. Identify and pursue sources of funds to continue the acquisition of lands for inclusion in the COSS.
28. Ensure that the constructed assets in the COSS are included in Council's proposed Asset Management System, to ensure that costs of maintenance and replacement are considered.
29. Use available knowledge to allocate value and maintenance costs for natural assets in the COSS.
30. Develop estimates of future budgetary requirements for management of the constructed and natural assets in the COSS, as well as associated programs such as Bushcare.
31. Monitor the operation and effectiveness of new provisions in relation to the operation of bonus lot subdivisions once DLEP 2009 is operational.
32. The status of the COSS acquisition and management programs be reported to Council through the Environment Committee or equivalent, and to the community through Council's annual community reporting process.

## APPENDIX II: COSS BOUNDARY 1984

### COASTAL OPEN SPACE SYSTEM (COSS) 1984



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### APPENDIX III: TERMS OF REFERENCE FOR COSS TASK GROUP

- 1 Develop criteria and prioritise lands suitable for acquisition into COSS.
  - The aim of this term of reference is to provide strategic direction on future acquisitions.
  - Staff will undertake research to identify possible criteria.
  - The Task Group will debate and select the preferred criteria prior to forwarding a resolution to the Environment Committee.
  
- 2 Provide input into the process to identify land for acquisition in the COSS and develop strategies to secure funding for acquisition of identified lands.
  - The aim of this term of reference will be to apply the criteria developed in the first term of reference.
  - Staff will apply the criteria to the future COSS. Staff will provide maps of identified areas. Once land in COSS has been endorsed by Council, staff will arrange for notification to be placed on 149 certificates. Staff will research options for funding.
  - The Task Group will review the identified properties confirming priority lists and debate funding options prior to forwarding a resolution to the Environment Committee.
  
- 3 Examine opportunities to protect and secure identified Coastal Open Space lands other than acquisition through agreements to maintain the private land for the protection of native flora and fauna or encourage private landowners to donate their land to Council or the National Parks or other available mechanism.
  - The aim of this term of reference is to address the fact that it may not be economically practical for Council to acquire all properties identified in COSS. This term of reference is aimed at protecting and securing lands for the protection of native flora and fauna that may remain in private ownership or finding mechanisms to encourage the transfer of lands to Council by other means.
  - Staff will undertake research and may initiate negotiations with private landowners.
  
- 4 Provide input into strategies to identify, formalise and fund the acquisition and or securing of corridor linkages between COSS reserves.
  - The aim of this term of reference is to identify if there is a need to provide land linkages between the current and future COSS reserves.
  - Staff will undertake a comprehensive mapping and evaluation exercise to examine the current land linkages between the current and future COSS reserves. The resulting analysis will result in a series of maps and supporting documentation. In addition to providing this information staff will examine both funding options and securing the land by some other mechanism.
  - The Task Group will review proposed land linkages, funding and securing of land corridor strategies and provide comment prior to forwarding a resolution to the Environment Committee.
  
- 5 Review COSS boundaries.
  - The aim of this term of reference is to ensure the current COSS meets the agreed criteria developed in the first term of reference.
  - Staff will apply the developed criteria to determine whether or not the boundary of the identified COSS needs to be amended. Staff will develop and provide a series of maps and supporting documentation.
  - The Task Group will review any proposed boundary amendments and provide comment prior to forwarding a resolution to the Environment Committee.

- *The Task Group will review and develop strategies to address encroachment issues associated with boundaries, that pose a threat to the values of the COSS. (propose new TOR as described in Manidis report page 74).*
- 6 Provide input into the development of strategies for funding the acquisition of outstanding lands identified for COSS.
    - The aim of this term of reference is to maximise opportunities for funding.
    - Staff will research and explore funding options.
    - The Task Group will review any proposed options and provide comment prior to forwarding a resolution to the Environment Committee.
  - 7 Provide input into the process to review the acquisition priorities in existing COSS.
    - The aim of this term of reference will be to apply the criteria developed in the first term of reference.
    - Staff will apply the developed criteria to determine a new priority listing.
    - The Task Group will review the new priority listing and provide comment prior to forwarding a resolution to the Environment Committee.
  - 8 Provide input into the development of strategies to protect the natural values of land identified for acquisition before they are acquired.
    - The aim of this term of reference is to ensure those lands that are in private ownership retain natural values.
    - Staff will undertake research to develop strategies to encourage private landowners to enhance the natural features of their land.
    - The Task Group will review any proposed strategy and provide comment prior to forwarding a resolution to the Environment Committee.
  - 9 Provide input into the development of strategies to obtain on-going funding for the management of the recreational and natural values of COSS and reserved lands.
    - The aim of this term of reference is to develop strategies that provide adequate funding for the long-term management of the COSS reserved lands including construction and maintenance of walking tracks, fire trails, weed management, fox management etc.,
    - Staff will undertake research to look at options of securing long-terms funding for management of both the recreational and natural values of the COSS reserved lands.
    - The Task Group will review any proposed strategy and provide comment prior to forwarding a resolution to the Environment Committee
  - 10 Provide input into the development of strategies of promoting COSS and reserved lands.
    - The aim of this term of reference is to look at strategies that are aimed at promoting the value of the COSS reserved lands.
    - Staff will develop promotional and educational material.
    - The Task Group will review any promotional and education material and provide comment prior to forwarding a resolution to the Environment Committee.
  - 11 Provide input into the development of strategies of maintaining COSS and reserved lands.
    - The aim of this term of reference is to look at strategies that are aimed at maintaining the value of the COSS reserved lands.
    - Staff will develop strategies and action plans directed toward maintaining the recreational and natural values of the reserves, plus examine opportunities of possible transfer of suitable lands to the NSW Department of Environment and Conservation (*now Department Environment, Climate Change and Water*) National Parks and Wildlife Service estate.

- The Task Group will review any proposed strategies and action plan and provide comment prior to forwarding a resolution to the Environment Committee.

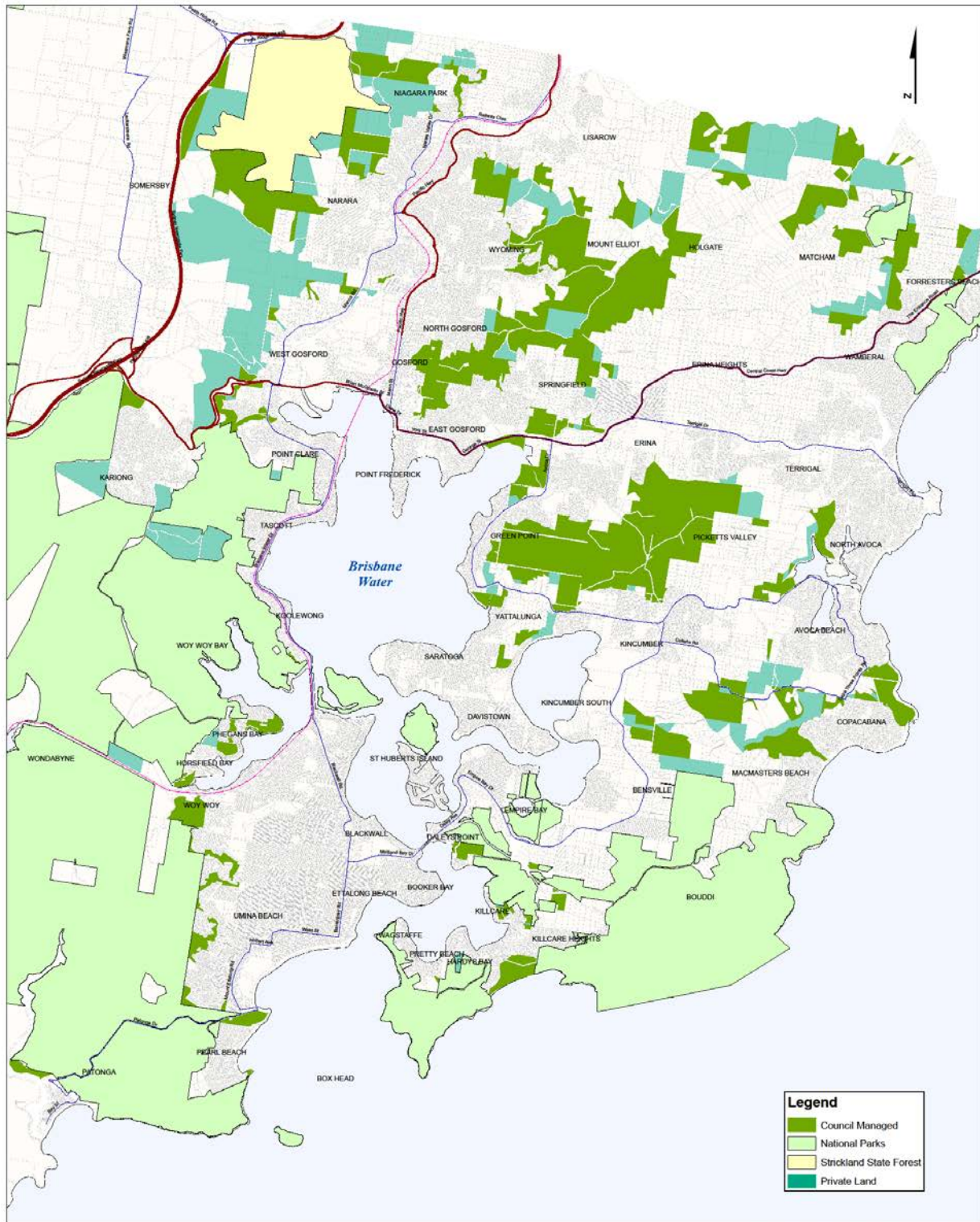
12 Report to the Environment Committee on actions undertaken by the Task Group.

- The aim of this term of reference acknowledges the fact that the Task Group is an advisory body to the Environment Committee.
- Staff will document the activities of the Task Group.
- The Task Group will review, debate and evaluate reports from staff prior to forwarding a resolution to the Environment Committee.



# APPENDIX IV: COSS BOUNDARY 2008

## COASTAL OPEN SPACE SYSTEM (COSS) 2008





## APPENDIX IV: COSS PROPERTY ASSESSMENT MATRIX

Attribute	Score
Mt Mouat/Mt Elliot	6
The Ridgeway, Holgate and Matcham Ridges (The Long Ridge)	16
MacMasters Ridge	4
Lagoons	8
Wetlands	10
Western Escarpment	12
Kincumber Mtn	2
Cullens Ridge	14
<b>Scenic Value of Land</b>	
Part of lot above 60 m contour line	2
Part of lot between 0 - 5 m contour lines	2
<b>Potential for liability associated with ownership.</b>	
low	3
medium	2
high	1
<b>Disturbance</b>	
Disturbance < 10%	4
Disturbance between 10 - 25%	3
Disturbance between 25 - 50%	2
Disturbance > 50%	1
<b>Development</b>	
no development on land	5
Development covers < 10% of land.	4
Development covers < 25% of land.	3
Development covers < 50% land	2
Development covers > 50% of land	1
<b>Endangered Ecological Communities</b>	
EEC 1 Sydney Freshwater Wetlands	5
EEC 2 Freshwater Wetlands on Coastal Floodplains	5
EEC 3 Swamp Sclerophyll Forest on Coastal Floodplains	5
EEC 4 River-flat Eucalypt Forest on Coastal Floodplains	5
EEC 5 Umina Coastal Sandplain Woodland	5
EEC 6 Pittwater Spotted Gum Forest E15bi - E15biv	5
EEC 7 Littoral Rainforest E4	5
EEC 8 Coastal Saltmarsh E47a	5
EEC 9 Swamp Oak Floodplain Forest on Coastal Floodplain	5
EEC 10 Themeda grassland on seacliffs and coastal headlands	5
EEC 11 Coastal Warm Temperate Rainforest	5
EEC 12 Kincumber Scribbly Gum Forest E102	5
<b>Regionally Significant Vegetation</b>	
RSV1 Narrabeen Coastal Peppermint Forest E22c	5
RSV2a Coastal Narrabeen Ironbark Forest E6b	4
RSV2b Tumby Spotted Gum Forest E15ai, 15aii	4
RSV2c Katandra Hawkesbury Woodland E26b	4
RSV2d Killcare Hawkesbury Woodland E26c	4
RSV2e Coastal Headland Complex E51a-e	4
RSV2f Sandstone Hanging Swamps EE54a-b	4
RSV3a Somersby Plateau Forest E26d	3
RSV3b Coastal Sand Wallum Heath E34a	3
RSV3c Estuarine Mangrove Scrub E47	3
RSV3d Coastal Sand Beach Spinifex E53	3

RSV3e Swamp Paperbark Thicket E100	3
RSV3f Wamberal Low Open Heath Forest E101	3
RSV4a Sandstone Ranges Gully Rainforest E2	2
RSV4b Coastal Narrabeen Moist Forest (basalt variant) E6aii	2
RSV4c Coastal Narrabeen Moist Forest (Acacia regrowth) E6aiii	2
RSV4d Hawkesbury Dwarf Apple Woodland E28	2
RSV4e <i>Phragmites</i> Rushland E40a	2
RSV4f Coastal Sand Scrub complex E50a-b	2
RSV5 Alluvial Bluegum - Paperbark Forest E5a	1
<b>Endangered Species (TSC Act)</b>	
Each endangered species = 5 points*	5
<b>Vulnerable Species (TSC Act)</b>	
Each vulnerable species = 5 points*	5
<b>Connectivity</b>	
Adjacent to 'acquired' or 'yet to be acquired' COSS lots	5
Adjacent to National Park	5
Part of link connecting two or more COSS lots	5
Adjacent to non COSS public land of high conservation value	5
<b>Area of intact native vegetation on lot.</b>	
> 10 ha	3
1-10 ha	2
<1 ha	1
<b>Passive recreational opportunities</b>	
Low	1
Medium	2
High	3
<b>Riparian Habitat</b>	
Narrow less than 10 metres wide	1
Medium width between 10 to 30 metres wide	2
Width greater than 30 metres wide	3
<b>TOTAL SCORE</b>	

**Note:** The title and score of each of the attributes used in the assessment of the COSS.

\* denotes 5 points for each species.