

# ENVIRONMENT AND SUSTAINABILITY STRATEGY













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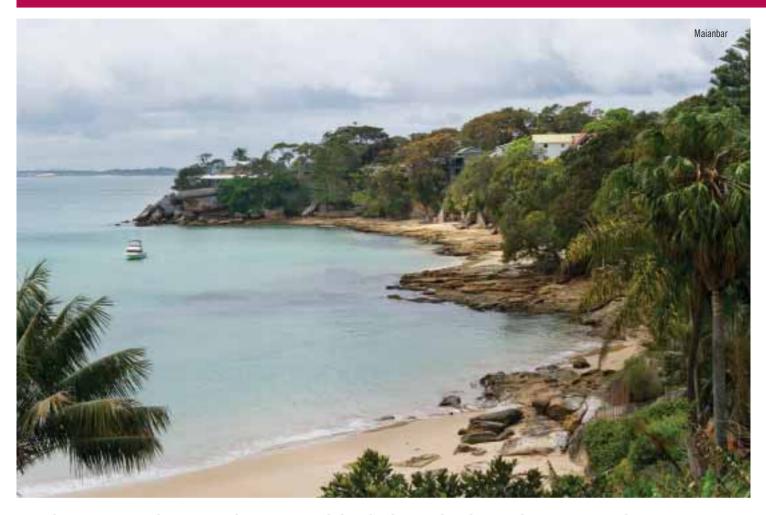






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# INTRODUCTION



THE SUTHERLAND SHIRE LIFESTYLE DRAWS STRONGLY FROM OUR RICH AND DIVERSE NATURAL ENVIRONMENT AND IS ENCAPSULATED IN THE SHIRE VISION:

Sutherland Shire, in Sydney's south, shaped by bays, rivers, beaches and national parks... 'A connected and safe community that respects people and nature, enjoying active lives in a strong local economy.'

Developed by the people of the Sutherland Shire in 1997, the Shire vision was reviewed in 2006 and 2011.

#### **OUR SUSTAINABLE FUTURE**

The Shire must be managed sustainably. The purpose of this document therefore is to bring together the environment and sustainability directions that will help to achieve this.

Sutherland Shire Council, along with all councils, is taking action for the environment. A survey in 2010 by the Local Government and Shires Association showed local councils are actively undertaking measures to address climate change. The majority of councils perceive that climate change will affect the way they conduct their operations. Council also sought direction from the community in the Environment and Sustainability Survey this same year.

The Mayoral Minute 15/06-07 on 25 June 2007 formalised the proposed development of an Environmental Strategy for the Sutherland Shire. The first draft strategy was released for internal consultation in April 2008. In October 2009, Council was successful in securing funding from the NSW Environmental Trust to prepare this document, the Environment and Sustainability Strategy (ESS).

Development of the ESS will also enable council to retain the important financial benefits of the Local Council Waste and Sustainability Improvement Payment Program (WaSIP), part of the NSW City and Country Environment Restoration Program.

#### ABOUT THE SHIRE

The Sutherland Shire is the southern-most local government area in the Sydney region. Located on the coast 25km south of Sydney CBD and 20 minutes from Sydney Airport, 'The Shire' as the area is affectionately known, covers an area of 370 square kilometres, including beaches, waterways, bushlands, parklands and national parks. The Shire is predominantly a residential area, but also has industrial and commercial areas.

The population is approximately 220,000 making Sutherland Shire Council the second largest council in terms of population in NSW. The Sutherland Shire's population is declining in every age group between the ages of 5 to 49 years; however each age group over 50 years is experiencing population increases. The proportion of the Shire's population born overseas is 16.6% compared with 31.8% of Sydney.

Overall, the Shire has a relatively low score on the socio-economic disadvantage index (1083.8), compared to other parts of Sydney.



The landscape of the Sutherland Shire is characterised by significant areas of bushland, beautiful waterways and a distinctive tree canopy. These elements combine to create a unique sense of place and identity. Community surveys have established that residents value this sense of place and identity which stems from a strong connection with the natural environment. This sense of proximity to nature and the access to varied recreational opportunities that natural areas deliver, provide a lifestyle focused on the outdoors. It is this natural legacy which helps create the Shire's unique local identity. Consequently residents place high importance on the protection and enhancement of the natural environment.

#### **OUR CHALLENGES AND CONSIDERATIONS**

Several of the challenges and considerations reported in the Shire's community strategic plan, Our Shire, Our Future will impact on our environment and sustainability. These include:

- Our reliance on the private car continues to increase. Car ownership continues to grow, with a 6.5% rise over the last four years. The car as the sole mode of transport for people leaving the Shire for work accounts for nearly 60% of all journeys to work.
- Council continues to receive a significant number of requests to remove trees on both public and private property. If this trend continues without appropriate replanting, the Shire's tree canopy will be reduced significantly by 2030.
- Across the Shire there are over 650 parks and reserves. Over 3,000 hectares of the Shire contain remnant vegetation. Both government and community support is required to restore and preserve these natural areas.
- Household and community energy and water use has been increasing rather than showing signs of plateau or reduction.
- Climate change has direct implications for the Shire and its community. The likely impact of sea level rise will need to be considered in our land use planning and infrastructure provision. An increased risk of the occurrence of natural disasters requires us to be ready to respond to any event, and manage its impacts on our community.
- The financial implications of considerable asset infrastructure which is ageing and needing to be updated or replaced, and continually maintained.

It is not clear what the Shire will be like in 2030, however, unless we respond appropriately to our existing challenges, achieving our 2030 community vision which is so dependent on the Shire's natural features will be compromised.

# SECTION 1 FEEDBACK FROM OUR COMMUNITY



Council has a commitment to 'manage by fact' and community feedback for the ESS was gathered through:

- A random sample telephone survey
- Internet survey
- A sustainability workshop with members of the public

As a result, local attitudes and priorities in the area of environment and sustainability have been established. Feedback will also inform future initiatives including council's Delivery Program and Operational Plan; environmental education activities, stormwater management plans and water sensitive urban design.

Included throughout this document is the community feedback in the sections on 'what did you tell us?'



#### WHAT DID YOU TELL US?

Community feedback from surveys provides information on environmental priorities over the next 20 years to support and inform current and future environmental programs.

From a list of 18 environmental items, the top three items of importance are:

- Cleanliness of beaches and the ocean
- Protection of our waterways
- Conserving the marine environment

From this same list of 18 environmental items, the top three items of satisfaction are:

- Condition of parks
- Cleanliness of beaches and the ocean
- Maintaining our local bushland

Gap analysis revolves around four key questions:

- What are our environmental concerns?
- Where are we headed?
- Where do we want to go?
- How will we get there?

By measuring importance and satisfaction, we have a view of what resident stakeholders think is important and how satisfied they are with these environmental concerns. Items with the highest gap score where the difference between the level of importance and the level of satisfaction is greater than 20 per cent are:

- Protection of our waterways
- Planning for increased droughts, bushfires and storms
- Management of noxious weeds and feral animals
- Reducing greenhouse gas emissions

Matters with the lowest gap score, i.e. where the difference between the level of importance and the level of satisfaction are closer to zero are:

- Preparing for sea level rise
- Condition of parks and gardens
- Management of trees on private property
- Protection of biodiversity our plants and animals

There has been discussion in the community about global warming and climate change; 16 per cent of respondents believe that climate change is 'not at all likely to happen'. So 84% are of the view that climate change is a real phenomenon.

#### TOP ACTIONS

The top three actions people had done for environmental reasons during the last 12 months were:

- Made an effort to reduce water consumption
- Taken active steps to reduce electricity consumption
- Reduced the amount of food that their household throws out

The least likely actions undertaken during the last 12 months were:

- Maintained a vegetable garden
- Composted food or used a worm farm
- Bought fewer items
- Taken active steps to reduce car use

Understanding what activities people see as a priority will help Council to identify gaps and design better programs in order to protect the environment.

There has been discussion in the community about global warming and climate change; 16 per cent of respondents believe that climate change is 'not at all likely to happen'. So 84% are of the view that climate change is a real phenomenon.



# SECTION 1 FEEDBACK FROM OUR COMMUNITY



#### BEING ACTIVE IN OUR ENVIRONMENT

Some research has made important links between the health of the environment and the health of the community. Respondents were asked about the frequency of visitation and their level of safety concerns for four types of natural areas.

Respondents visited 'the local park' most frequently (more than 20 times a year) followed by 'Cronulla beaches'; 'Royal, Heathcote and Botany Bay National Parks' and 'the local rivers and bays'. Generally, most respondents are not, or are only slightly concerned about their safety in these areas. Only 6% are very or extremely concerned at Cronulla beaches and less than 3% are very concerned when visiting the other outdoor environments. During the community workshop for the development of the ESS, residents identified many opportunities to improve sustainability in the Shire.

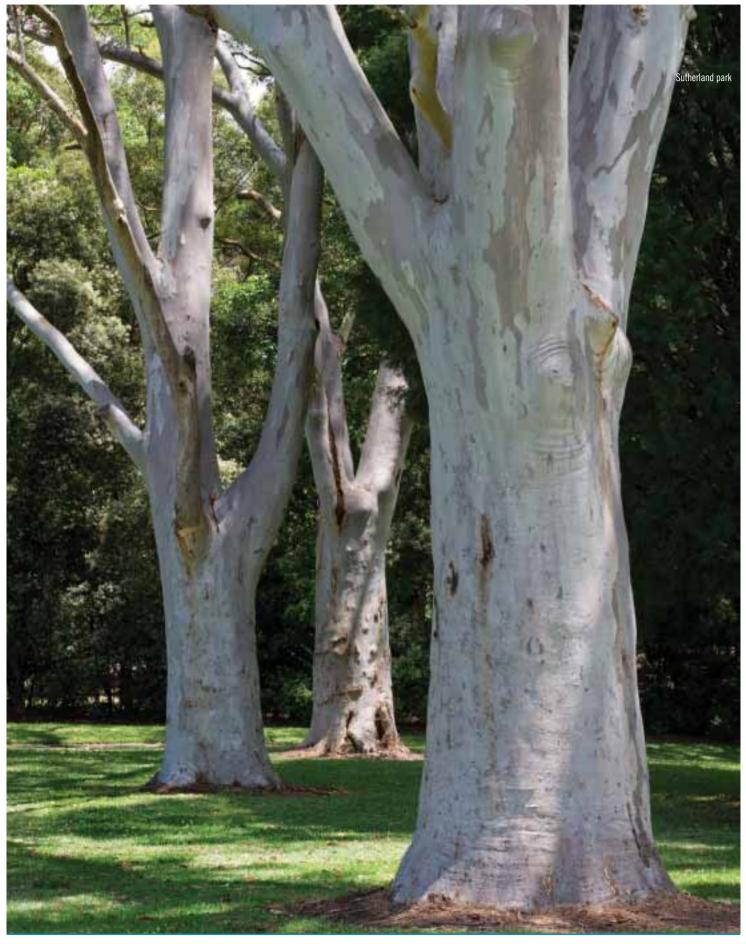
While these opportunities may not always be council's responsibility, participants suggested we can work with other government organisations and groups. For example:

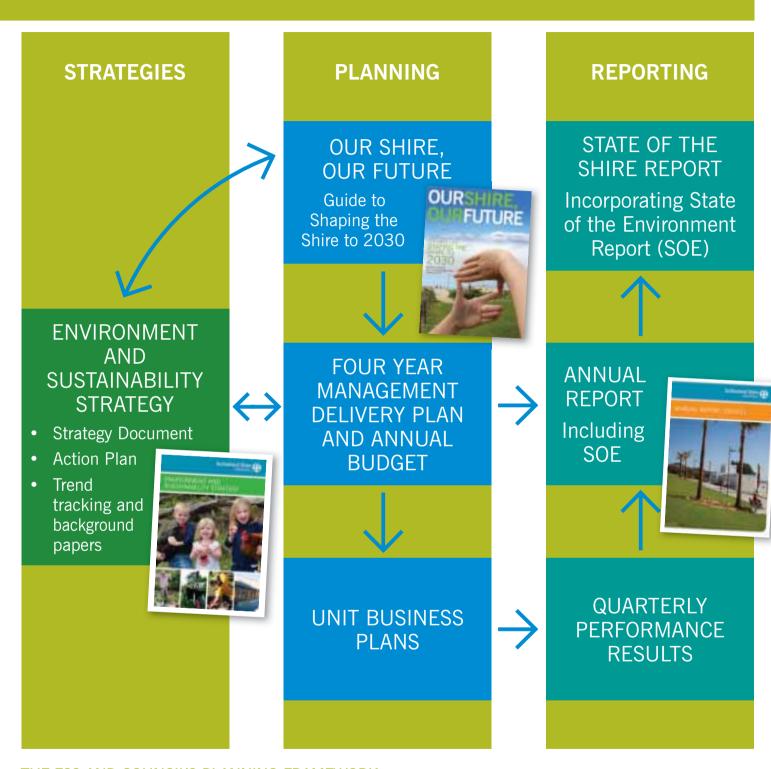
- Move power lines underground
- Provide walkways and cycle ways in order to minimise use of car
- Ensure water recycling and energy saving lighting is built into new and when possible existing developments
- Establish hubs to encourage walking and cycling to shops
- Ensure that cycle ways are safe, well lit and away from cars
- Look at innovative solutions such as LED lighting and highlight the long term cost savings these initiatives can achieve
- Maintain a strong education focus driven via schools
- Manage compression braking on the highway at Heathcote as well as in residential areas. Also consider the impact from truck stops that operate at service stations 24 hours a day
- · Work with other councils to improve sustainability
- Establish eco/renovation green dollar saver course for minimal and more substantial home renovations



# SECTION 2

THE ENVIRONMENT AND SUSTAINABILITY STRATEGY (ESS) AND COUNCIL'S PLANNING FRAMEWORK





#### THE ESS AND COUNCIL'S PLANNING FRAMEWORK

The Integrated Planning and Reporting (IP&R) framework for local government allows for 'satellite' plans and strategies. As the environment is of sufficient status and importance to the community, preparation of a standalone document provides a useful single reference point on the environment.

The ESS addresses the environmental aspects of the Guide and by addressing environmental impacts across all management areas; the ESS applies the quadruple bottom line approach adopted by council.

The ESS has been developed within the broad framework of council's existing vision, strategic direction and commitment to the community as outlined in council's Community Strategic Plan Our Shire, Our Future – Our Guide for Shaping the Shire to 2030 ('The Guide' 2011). This vision and commitment guide the daily operation of council and all policies and actions must be undertaken in accordance with these documents.

# SECTION 2

# THE ENVIRONMENT AND SUSTAINABILITY STRATEGY (ESS) AND COUNCIL'S PLANNING FRAMEWORK

Increases in dwelling density are best confined to areas generally within 800 metres of the centres These centres are served by public transport and have shops, schools and services within walking distance for future residents.

#### HOW WILL THIS STRATEGY BE MONITORED?

Evaluating our progress on meeting the desired community outcomes contained in the guide, and ultimately, the community's vision, will be achieved through monitoring a set of indicators every four years. These community indicators form the basis of the State of the Shire Report which will be prepared by council in the last year of each council term. This includes State of the Environment reporting for the Sutherland Shire. Together these show whether as a collective community, we are heading towards achieving our long term community vision. Ongoing review of the ESS will identify emerging issues.

The ESS recognises that not all strategies contained in the guide are the responsibility of council to implement, such as the initiatives aimed at improving public transport networks. Council is not a public transport provider and in most cases, does not own or build public transport infrastructure. Council does, however, play an active role lobbying the NSW Government and educating the community about public transport services available. Hence, it is

appropriate for these types of directions to be included in council's strategic planning documents including the ESS.

For a full description of all council's objectives, measures and indicators, please refer to council's Management Delivery Plan at www.sutherlandshire.nsw.gov.au/Council The Shire/Publications. Also available on council's website is the Ten Year Financial Plan which includes the infrastructure/capital program.

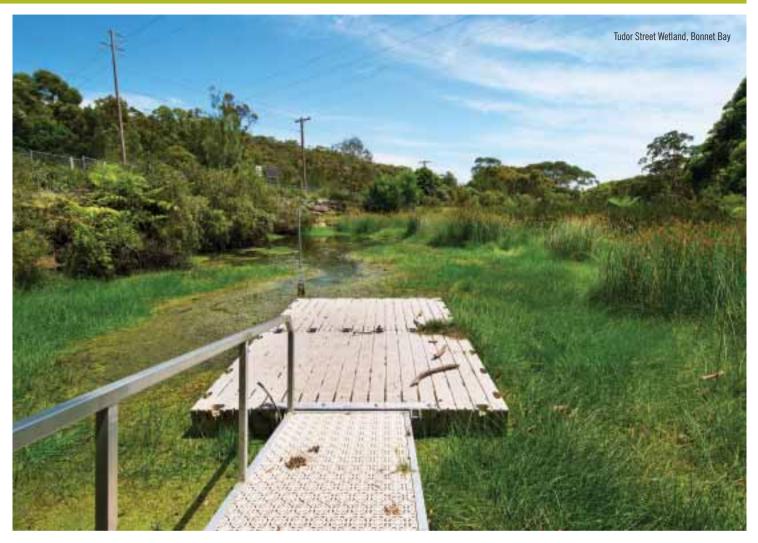
#### WHAT IS THE RELATIONSHIP WITH LAND USE PLANNING CONTROLS?

A local planning framework can have a big influence on environmental outcomes, both in terms of protecting the natural environment and minimising future impacts on the environment. This ESS is council's commitment as to how it will regulate development and land use to deliver sound environmental outcomes. This strategy guides the content of the Draft Sutherland Shire Standard Instrument Local Environmental Plan 2012 (DSILEP) and also highlights other actions that council is taking to further the objectives of this strategy.

#### HOW HAVE THESE OBJECTIVES BEEN INCORPORATED INTO THE DSILEP?

All councils in NSW have been directed by the Department of Planning and Infrastructure to prepare new comprehensive Local Environmental Plans in accordance with a rigid structure, known as the Standard Instrument Local Environmental Plan. A template plan has been issued by the Department which all councils must adhere to. It provides mandatory, optional and additional clauses from which a council may draft its local plan. There is also some opportunity for councils to draft local provisions, provided the Department of Planning and Infrastructure supports the intent and execution of the provision.





The introduction of the Standard Instrument has reduced Sutherland Shire Council's ability to reflect local issues and priorities in its plan. Working with the limited tools provided by the State Government, council has used land use permissibility, objectives, development standards and local provisions to address the environmental objectives stated in the ESS. The six elements of the DSILEP that specifically address these are:

#### 1. Urban densities will be balanced against the environmental capacity of the land and infrastructure capacity

Council has used land use zones within the standard instrument to manage the density of future development across the Shire. On the peninsulas where there is usually remnant bushland and lower density development, the adopted zones in the DSILEP will retain this character. Lot sizes are larger with a greater percentage of these lots to be retained for landscaping. Multi unit housing is generally prohibited. This approach will allow these neighbourhoods to better blend with surrounding bushland and natural areas assisting local biodiversity and water quality.

Opportunities for significant increases in dwelling density will be confined to areas generally within 800 metres of the centres. These centres are served by public transport and have shops, schools and services within walking distance for future residents.

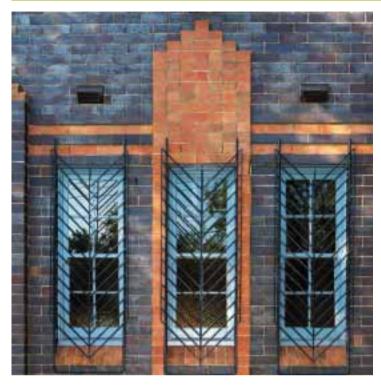
Elsewhere there will be opportunities for infill multi-dwelling housing and dual occupancies. This approach maintains the existing broad permissibility of multi-dwelling housing across much of the Sutherland Shire, but widens the opportunities for dual occupancies and villas. The density of infill housing is generally consistent with the permissible density of single dwellings throughout this area.

#### 2. Special considerations will be made for environmentally sensitive land

Council plans to introduce a specific provision within the DSILEP to ensure that development is sensitively designed and sited on land which has special environmental features. Such provisions will build on the specific environmental considerations currently contained in State Environmental Planning Policy (Kurnell Peninsula) 1989 which protect wetlands, ground water and special ecological features. This approach will give consideration to a number of environmental features including areas of native habitat, wildlife corridors, endangered ecological communities, steep slopes where natural bushland is a stabiliser of soil, wetlands, water courses, and ground water dependant ecosystems.

# SECTION 2

# THE ENVIRONMENT AND SUSTAINABILITY STRATEGY (ESS) AND COUNCIL'S PLANNING FRAMEWORK



The benefit of this approach is that council will be able to perform an analysis of risk on those lands identified as having higher susceptibility to inappropriate development. It allows environmental considerations that would have otherwise been addressed within the Development Control Plan (DCP) to be brought up and considered under the DSILEP, where it is given statutory weight in the assessment process.

It must be stressed that such a clause cannot prohibit development. The effect of the clause is to flag at the beginning of the development process that the land is constrained because of important ecological factors. This will ensure that all parties know of these constraints very early in the design process or prior to purchase of a property. The clause will function to ensure that development is sensitive to its site and that its design, sitting and construction methods reflect these constraints and minimise impacts.

#### 3. The natural qualities of the land water interface are protected and restored where practical

Residential lots fronting waterways, the coastline and foreshore reserves play a very significant role in maintaining the environmental and scenic quality of waterways. They also have an important ecological role which is critical to the health of waterways and the maintenance of biodiversity. The interface between residential dwellings and the waterway or reserve is the most important part of this land. The planning framework will better manage the use and development of land in this interface area. The plan will require for sensitive design at the land water interface so that natural qualities of the foreshore area, such as rock outcrops, trees, bushland, rock platforms and beaches are protected and enhanced over time. The plan will recognise that some forms of development are appropriate in this sensitive zone, such as boat sheds and water recreation facilities.

#### 4. The carrying out of development will be carefully managed to minimise environmental impacts

Poor management of the development process can have very significant impacts on local environmental quality. Provisions of the DSILEP will better manage the potential impacts of acid sulphate soils and any contaminated land are properly considered before development takes place. Provisions also seek to minimise the impacts of urban stormwater, particularly upon native bushland and receiving waters.

#### 5. Tree cover across Sutherland Shire is protected and will be enhanced

Trees make a fundamental contribution to the environmental quality of Sutherland Shire and provide many environmental, social and economic benefits that improve the quality of urban life. They soften the built landscape, temper the harsh climate, and connect us to the natural environment. Trees also assist in maintaining a healthy environment by protecting the soil, improving water quality, reducing stormwater runoff, producing oxygen and absorbing carbon dioxide.

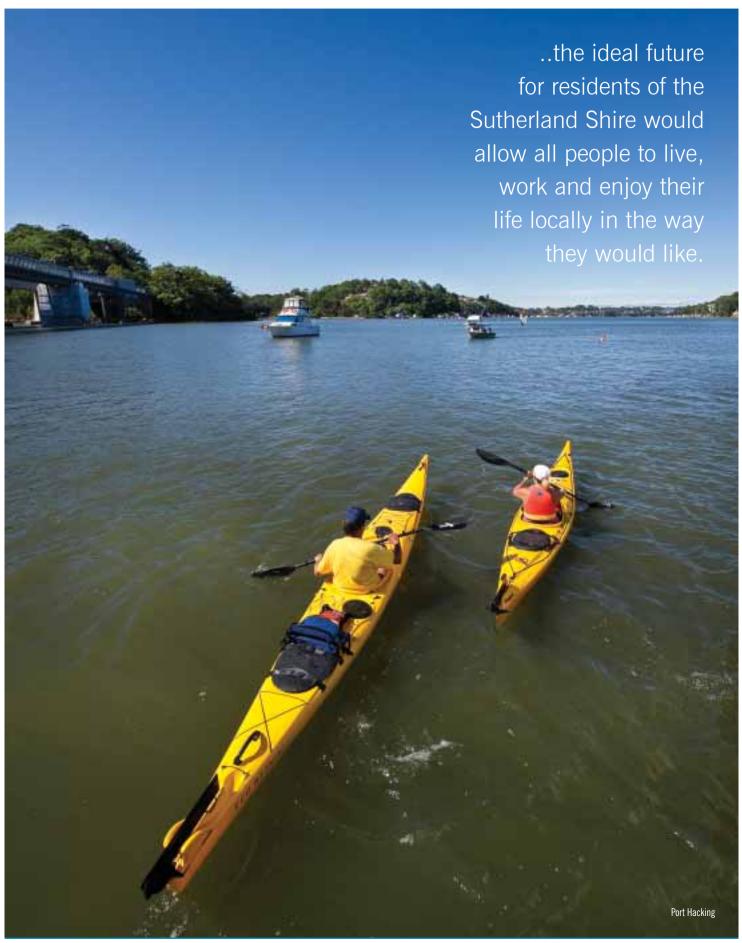
The planning framework protects all trees and vegetation from damage unless council has consented to the removal of the tree or approved the carrying out of work to it. Through this approach council encourages the sensitive design of buildings and other works, but recognises that trees will need to be removed to facilitate development.

Bushland is also protected through the provisions requiring sensitive design and construction of development on environmentally sensitive land.

#### 6. New development will incorporate energy efficiency design and sustainable building techniques

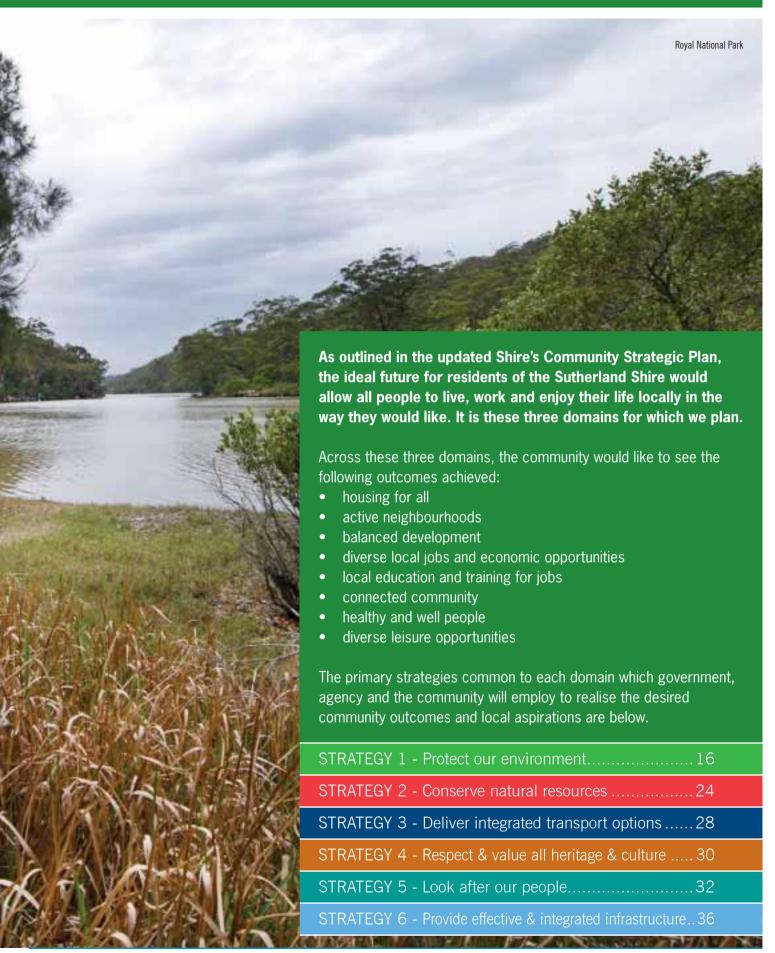
BASIX, the Building Sustainability Index, is a NSW Government initiative that sets energy and water efficiency targets for new residential development. Council enforces strict compliance with BASIX in the Sutherland Shire. However, there is no equivalent for commercial or industrial developments.

To address this shortcoming, future plans will address the performance of new industrial and commercial buildings. Consideration of the potential energy consumption over the life of the building and how it may be reduced, and the way in which passive elements such as solar access and natural ventilation have been used to reduce future energy consumption. Requiring consideration of these matters as part of the development application process will curtail excessive energy.



# SECTION 3 PRIMARY STRATEGIES





# STRATEGY 1 - PROTECT OUR ENVIRONMENT

NATIVE FLORA AND FAUNA



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#### **NATIVE FLORA AND FAUNA**

Planting indigenous vegetation in urban areas helps connect fragmented bushland, enhance habitat for native fauna and reinforce the bushland character of the Shire. To ensure the perpetual benefits of a healthy urban tree canopy, consideration must be given to a tree replacement strategy.

The Sutherland Shire has a legacy of small pocket parks scattered throughout urban areas that provide an opportunity for tree planting and revegetation. These parks were originally acquired by council to meet the needs of young families when neighbourhoods were first settled. However, demands have changed greatly over time with these parks now experiencing little use as families now seek high quality recreation facilities and are prepared to drive to them.

Small pocket parks are typically grassed and have become a maintenance concern to council as they require resources but contribute very little to neighbourhood amenity. Council is committed to utilising many of these parks to create new spaces with play equipment or picnic spaces where needed. The regenerated bush can act as creative play space for neighbourhood children once it is established.

Opportunity also exists for planting on the edges of the Shire's playing fields. Peripheral planting in left over spaces can be combined with walking tracks to enhance local biodiversity while also increasing the value of the reserves for passive recreation.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### **Bushcare**

Bushcare is a volunteer program with the aim of preserving and regenerating bushland on council owned land through maintenance of bushland and natural areas via bush regeneration programs, noxious weeds management and pest species controls. Volunteers work under the direction of Council's Bushcare Unit in accordance with recognised bush-regeneration techniques in active management of bushland and natural areas in public ownership. It is a hands-on volunteering program.

The environmental benefits of Bushcare are that it:

- Protects indigenous flora, fauna and remnant vegetation
- Rehabilitates natural areas for future generations
- Increases areas of native habitat, and
- Encourages active community involvement to manage bushland areas.

#### Greenweb

Council has developed a Greenweb network to protect and enhance native plant and animal populations by identifying key areas of bushland habitat and establishing interconnecting linkages between them to prevent fragmentation of bushland and re-establish wildlife corridors to link areas of core habitat. These corridors, which run through both public and private land, connect 'islands' of bushland habitat making it easier for the movement of and dispersal of flora. This strategy helps maintain healthy populations and species diversity, ensuring the long term sustainability of the natural environment.

A key component is the Greenweb Volunteers Program which encourages residents to manage their land so that its habitat value is maximised. Through the program residents can access expert advice, free plants and additional green waste removal if they are removing weeds.

Many of the provisions of the Greenweb Strategy are incorporated into the existing Sutherland Shire Local Environmental Plan 2006 and Sutherland Shire Development Control Plan 2006.

#### **Urban Tree and Bushland Policy**

This policy represents council's commitment to improving local biodiversity through increasing native habitat and enhancing links for wildlife across the Shire. It is a proactive policy that seeks to address the loss of canopy trees through the Shire and ensure the next generation of canopy trees is planted so that the unique local character we enjoy today will remain a fundamental quality of life in Sutherland Shire for the next generation.

#### Sutherland Shire Local Environmental Plan (SSLEP) 2006

Zone 3, Environmental Housing – Bushland Provides planning controls to ensure development remains consistent with this natural bushland setting.

- Clause 19 provides planning controls to minimise impacts on the wetland areas
- Clause 55 and 56 provide planning controls for the protection of significant natural landforms, trees and vegetation
- Clause 36 provides planning controls for the retention or provision of vegetation that contributes to biodiversity and to ensure adequate opportunities for tree retention and tree planting so as to preserve and enhance the tree canopy of Sutherland Shire

#### Sutherland Shire Development Control Plan (SSDCP) 2006

Chapter 4, Natural Resource Management Provides a range of development controls to protect and enhance biodiversity including:

- Greenweb
- Wetlands and waterways
- Threatened species
- Tree and bushland vegetation

Chapter 3, section 12, Landscape - Urban Design Provides that landscape design in new developments must recognise, protect and enhance existing trees, areas of habitat and natural systems. Landscaping guidelines specify the selection of native plants for revegetation and landscaping.

A key component is the Greenweb Volunteers Program which encourages residents to manage their land so that its habitat value is maximised.

# STRATEGY 1 - PROTECT OUR ENVIRONMENT NATIVE FLORA AND FAUNA



Sutherland Park

#### **Biodiversity Strategy**

This strategy aims to guide council in the effective management and conservation of its biodiversity by identifying the issues associated with biodiversity management; identifying actions for biodiversity management; assigning priority to these actions; and identifying responsibility for implementation.

#### **Tree Giveaway**

Council provides two native trees free of charge to residents on our tree giveaway days throughout the year.

#### **Green Street Program**

Council's Green Street Program revolves around a series of staged sustainability workshops for groups of interested residents held in their own street (or community group). Council has scope to vary the program to meet the needs and interests of that particular community. One session covers how to attract native wildlife to the garden and grow native plants.

#### Sutherland Shire Urban Bushland Plan of Management 1990

The Urban Bushland Plan of Management sets the broad objectives for the management of bushland under council's care control and management. This plan is gradually being superseded by our Natural Areas Plans of Management as they are developed for council's reserves and the Plan's current relevance should be reviewed.

#### Plans for the management of natural areas

Council has developed plans for the management of the following natural locations:

- Natural Areas Bundeena
- Natural Areas Maianbar
- Natural Areas North West Arm Catchment
- Natural Areas Oyster Bay West Catchment
- Natural Areas Warrangaree Drive Bushland
- Wanda Heritage Dune
- Marton Park Wetland Kurnell
- Still Creek Wetland Plan
- Burnum Burnum Wetland Plan

#### WHAT DID YOU TELL US?

In the theme of trees and vegetation, management of noxious weeds and feral animals is the highest priority followed by the management of street trees and maintaining local bushland. Trees on private property and the condition of parks and gardens are of a lower priority.

In the workshop, participants discussed the complexity of maintaining a diverse tree and vegetation cover. Development activities decrease the number of trees with the amount and quality of fauna habitat declining as blocks are redeveloped. Participants emphasised that the planting of big trees on public space is a priority. Trees change size and council needs to manage each element and part of the life cycle, particularly the end of the life cycle.



#### WHAT IS COUNCIL GOING TO DO?

Councils Urban Tree and Bushland Policy will guide decision making to provide a holistic and integrated approach to tree management. A street and public open space tree planting program will be developed to protect the declining tree canopy. Trees will be planted across the Shire with priority to areas of highest ecological benefit and visual amenity such as Greenweb areas, ridgeline planting and foreshore areas.

Areas of public open space will be assessed for indigenous tree planting to enhance the tree canopy, improve habitat for native fauna and increase public amenity. To ensure there is no net loss of tree canopy an offset planting strategy will be implemented. Compensatory tree planting will replace trees that need to be removed for development, public safety or during construction of infrastructure.

There are more than 800 volunteers involved in Bushcare, with over 50 per cent over 50 years of age. Given the Shire's ageing population, council is focused on increasing participation within this group.

The management of pest species identified in the Feral Animal Policy will continue through council funding as well as additional grants and in-kind support provided by other key stakeholders. Key species targeted as part of this program are deer, rabbits and foxes, as well as newer pest incursions such as cane toads and carp.

#### WHAT DO WE STILL NEED TO DO?

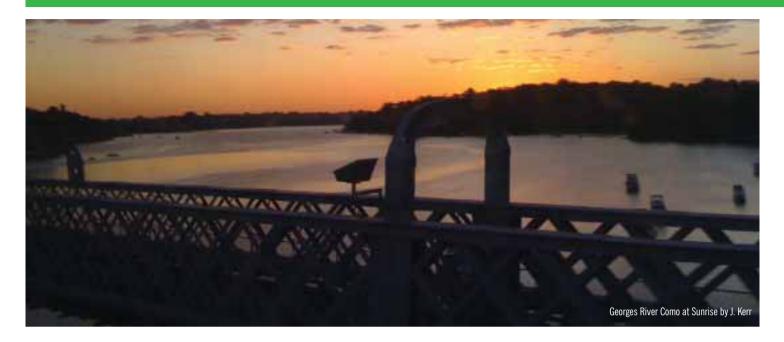
#### Community involvement and education

Increase community participation in council's programs such as Bushcare, Greenweb, Waste Wise Living Workshops and Green Street programs which all promote the protection and enhancement of local native flora and fauna.

#### **Biodiversity Strategy**

The Biodiversity Strategy was adopted by council in 2003, and is now due for review/update. Many actions identified within the Strategy have been completed, and new actions are now required.

## STRATEGY 1 - PROTECT OUR ENVIRONMENT WATERWAYS, BEACHES AND WETLANDS



#### WATERWAYS, BEACHES AND WETLANDS

The water quality of natural systems is a major influence on the variety of species that our waterways, beaches and wetlands can support.

Urban and industrial development can have a dramatic impact on water quality. Maintaining and enhancing local biodiversity requires the sensitive management of development throughout water catchments in order to minimise the pollution and sedimentation entering natural systems. Healthy waterways are also more attractive and allow greater recreational enjoyment by residents and visitors.

Sutherland Shire Council is committed to protecting and enhancing the quality of water bodies throughout the Shire, strengthening their value as environmental assets over time.

#### HOW DO WE HELP THE COMMUNITY MEET THESE OUTCOMES?

#### Sutherland Shire Development Control Plan 2006

Chapter 8, Section 3 - Environmental Site Management and the Environmental Site Management Specification Reducing sedimentation build-up in our waterways from building sites is achieved through the application of planning controls.

Chapter 8, Section 5 - Stormwater Management and the Stormwater Management Specification Managing stormwater sustainability improves the quality of development and helps to protect the quality of the Shire's waterways. This is also achieved through the application of planning controls.

#### Waste Wise Living Workshops

Council runs free Waste Wise Living Workshops several times each year for residents. They include information about how to reduce household waste and the contribution to pollution of local waterways. The water quality of natural systems is a major influence on the variety of species that our waterways, beaches and wetlands can support.

#### **Green Street Program**

Council's Green Street Program is a series of staged sustainability workshops for interested residents which are held in their own street (or community group). A session emphasising water saving activities in the home is provided using onsite examples.

#### Stormwater Management Plan

Council has developed stormwater management plans for the main catchment areas in the Sutherland Shire. The aim is to facilitate the coordinated management of stormwater and improve the health and quality of the catchment waterways. Management plans have been developed for:

- Woronora River
- Hacking River and Port Hacking
- Lower Georges River

#### **Strategic Water Quality Monitoring Program**

Council's Strategic Water Monitoring Program (SWaMP) aims to identify areas in the Shire which require actions for improving water quality. Samples are taken from up to 20 sites from each of the Shire's sub-catchments and tested for metals, nutrients, sediments, oil and grease, oxygen demand and bacterial indicators.

### STRATEGY 1 - PROTECT OUR ENVIRONMENT WATERWAYS, BEACHES AND WETLANDS

#### **Bate Bay Coastline Management Plan**

The Bate Bay Coastline Management Plan contains strategies for the protection and enhancement of the beaches of Bate Bay.

#### **Street Sweeping Program**

A comprehensive program to remove organic material and sediment from our roads which could be washed into waterways. The street sweepings collected are mixed with other organic materials and used for rehabilitation purposes.

#### Riverkeeper Program for Georges River and Port Hacking

Council participates in joint ventures with NSW Maritime Authority in two Riverkeeper programs for the Georges River and Port Hacking. The Riverkeepers develop policy and coordinate programs to involve the communities within the river's catchment to rehabilitate the waterway and its foreshores to benefit its natural, commercial and recreational values.

#### Water quality devices

Council's existing water quality devices are routinely cleaned and maintained to remove litter, organic material and sediment from our stormwater system which could be washed into waterways.

#### WHAT DID YOU TELL US?

In the waterways theme, protection of our waterways remains a priority. From a list of 18 environmental items, the top three items of importance were all from the waterways theme and included cleanliness of beaches and the ocean, protection of our waterways and conserving the marine environment.

In the workshop, participants recognised that water is significant to Aboriginal and non Aboriginal culture, providing life. The Shire is surrounded by water and the river systems are very important for fauna and flora survival. Waterborne rubbish and levels of stormwater nutrients detract from the Shire's beauty.

#### WHAT IS COUNCIL GOING TO DO?

Council will continue to work towards implementing the Port Hacking Integrated Environmental Management Plan and Estuary Management Plan for the Woronora River. Council will commence implementation of the Bundeena Creek and Marton Park Wetland Management Plans.

As part of the Port Hacking Integrated Environmental Management Plan, council will install marine sewage pump out facilities in Port Hacking.

Bate Bay will be maintained and upgraded as outlined in the Ten Year Financial Plan.

In 2012/2013 council will complete the Floodplain Risk Management Studies for Gwawley Bay (Sylvania Waters) and the Lower Georges River. The litter and street cleansing services assist in combating water pollution problems, resulting in improved stormwater quality.

In 2012/2013 the stormwater levy will raise almost \$2m which will assist with construction of new and maintenance of existing gross pollutant traps, implementing stormwater harvesting, creek restorations and drainage upgrades.

Council has commenced an environmental assessment of the Shire's watercourses. The study will examine the extensive network of open drains and creeks to determine their environmental condition, safety, hydraulic capacity, erosion potential, and habitat value. The results of the study will inform future decisions in relation to environmental management, development assessment and stormwater management.

#### Compliance

Council officers investigate all complaints about water pollution (as well as air and noise pollution). In addition, the Industry Environmental Audit Program (and environmental audit of industrial premises) targets high risk water polluting industries. Council undertakes follow up inspections to check for improvements on those found to have any problems. Council now also undertakes sustainability audits for larger sites, particularly electricity usage and other aspects of sustainability.

#### WHAT DO WE STILL NEED TO DO?

#### Improvement devices

Council's Stormwater Infrastructure Program details an ongoing program for stormwater quality improvement devices (SQID's) to be installed at key water quality hot spots - ranging from trash racks to gross pollutant traps, combination treatments and full wetlands development.

#### **Stormwater Management Plans and Catchment Management Plans**

Council's stormwater management plans were developed over eight years ago. They now require updating based on current water quality data, community priorities and management techniques. The Woronora River catchments should be updated and implementation of the recently upgraded Port Hacking Integrated Management Plan should be undertaken.

The development of Coastal Zone Management Plans will continue, including the preparation of a Coastal Zone Management Plan for North West Arm Estuary.

# STRATEGY 2 - CONSERVE NATURAL RESOURCES WASTE MANAGEMENT

We need to reduce the amount of waste we generate and increase recycling. This helps preserve our natural resources, reduce greenhouse gas emissions and by reducing the amount of waste going to landfill, can bring significant cost savings. RECYCLABLE

#### **WASTE MANAGEMENT**

Our growing population, increase in the number of dwellings and our thriving economy poses a significant waste challenge for the Shire. We need to reduce the amount of waste we generate and increase recycling. This helps preserve our natural resources, reduce greenhouse gas emissions and by reducing the amount of waste going to landfill, can bring significant cost savings.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Waste Wise Living Workshops

Waste Wise Living Workshops make a difference to our environment. Council offers residents of the Shire a number of free Waste Wise Living workshops, aiming to encourage more environmentally friendly practices to be carried out at home. Over 50 percent of what residents send to landfill from their red lid garbage waste bins is organic matter (fruit and vegetable scraps). This can take years to break down in landfill condition, not to mention the harmful gases which need to be carefully extracted for years to come. In this workshop residents learn how to reuse this valuable resource to their own benefit.

#### **Recycling Tour**

'Out of sight, out of mind' aims to educate residents about what happens to their waste. This visit shows what happens to the material from bins once it has been collected and taken away from the kerbside with a visit to the recycling and waste management facilities.

#### Clean Up Australia Day

Council supports local communities during the annual Clean Up Australia Day and Clean Up Schools Day.

#### Fridge Buyback

Council supports and promotes the pickup service provided by Next Energy for old refrigerators where the refrigerants are captured and the materials recycled.

#### **Green Street Program**

Council's Green Street Program revolves around a series of staged sustainability workshops for groups of interested residents held in their own street (or community group). Council has scope to vary the program to meet the needs and interests of that particular community. One session covers waste minimisation.

#### Household Chemical CleanOut

In partnership with the NSW Government's Office of Environment and Heritage, council offers regular household chemical cleanup days twice a year.

#### Council waste and recycling services

Council offers alternate fortnightly green waste and co-mingled recycling services to residents. These services play a key role in helping minimise waste that is sent to landfill.

#### WHAT DID YOU TELL US?

Reducing the amount of waste the community produces is quite important to 2010 survey respondents. (4.28 on a scale 1 to 5). There is a 20% gap between the level of importance and the level of satisfaction (3.28) indicating that waste should remain a priority for council.

#### WHAT IS COUNCIL GOING TO DO?

Council will continue to encourage recycling with a 240-litre recycling and green waste bins and limited to a 120-litre rubbish bin. Compost bins and worm farms are available at cost to residents.

Waste Wise Living Workshops will continue to be promoted to residents that request additional rubbish bins. Short courses cover topics such as energy and water savings, detoxing your home (chemical-free cleaning), composting and worm farming and organic gardening. An integrated five week course covers all of these topics and more.

The contract for waste disposal is currently being reviewed to determine alternatives to landfill. This will significantly improve waste diversion from landfill and reduce council's greenhouse gas emissions. The Parks Unit and Waste Services Unit mulch and compost the majority of green waste produced from council's operations. Road construction and building waste are recycled where possible and many road construction projects use recycled content materials.

#### WHAT DO WE STILL NEED TO DO?

The Local Waste Management Plan has been recently reviewed to better reflect current operations and services. The actions within this plan will be implemented.

### STRATEGY 2 - CONSERVE NATURAL RESOURCES GREENHOUSE GAS EMISSIONS AND AIR QUALITY

The installation of photovoltaic cells (solar panels) aims to offset council's energy use.

#### **GREENHOUSE GAS EMISSIONS AND AIR QUALITY**

Personal vehicles are a key generator of greenhouse gases and there are three primary ways to improve this; reduce vehicle travel, increase fuel economy and switch to fuels with a lower life-cycle carbon content. Carbon emissions associated with transportation are simply a product of three factors that include reducing the distances travelled, fuel economy, and alternative fuel availability. Personal travel is not the only generator of greenhouse gases and actions need to be taken in a number of spheres.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Fridge Buyback

Council participates in a fridge buy-back scheme, which has so far resulted in savings equal to approximately 314 tonnes of carbon dioxide a year.

#### **Compliance and Environmental Audit Program**

Council officers investigate and undertake follow-up checks on all complaints about air pollution from commercial and industrial premises. The program targets high risk polluting industries in particular.

#### Waste Wise Living Workshops Program

Council runs Waste Wise Living Workshops courses several times each year for residents which among other topics, incorporates reducing household greenhouse emissions through the reduction of energy use in the home and encouraging the use of alternative transport.

#### **Green Street Program**

Council's Green Street Program revolves around a series of staged sustainability workshops for groups of interested residents held in their own street (or community group). Residents are informed of ways to reduce vehicle use and emissions and opportunities for alternative transport are explored.

#### Sutherland Shire Development Control Plan 2006

Clause 2a.1 in Chapter 9 of SSDCP2006 provides that child care centres and facilities are not located or designed so as to pose a health or safety risk from poor air quality to children.

#### Installation of photovoltaic cells

The installation of photovoltaic cells (solar energy) aims to offset Council's energy use. Council's main administration building and Sutherland Leisure Centre were the first facilities to be fitted with this energy saving initiative.



#### WHAT DID YOU TELL US?

Air quality, reducing electricity and reducing greenhouse gas emissions were all high priority environmental concerns. In the 'longer term change' theme, planning for increased droughts, bushfires and storms was the highest priority followed by reducing greenhouse gas emissions and air quality. Preparing for sea level rise was identified as the lowest priority in this theme.

In the workshop, participants recognised that changing behaviour is the key to making achievements to what we want in the environment. We need to recycle a greater range of products and materials including plastic bags and increase the promotion and capacity for managing e-waste. Council needs to be able to facilitate this for all people through kerbside collection and more regular pickups for paint and chemicals, including home pickups. In the area of water, we need to think big, not only about consumption reduction, but also about harvesting water too as we prepare for increase in population density and growth across Sydney. Access to services by walking and cycling and through improvements in facilities, lighting and paths will assist sustainability and reduce the production of greenhouse gas.

#### WHAT IS COUNCIL GOING TO DO?

#### Organisation Sustainable Water and Energy Strategy

Council has recently completed an Organisational Sustainable Water and Energy Strategy, which reviewed council's resource consumption profile and past performance in delivering efficiency improvements. Based on site visits and detailed modelling, preliminary recommendations have been made in terms of future projects and initiatives that could be pursued delivering further efficiency gains, and the organisation structure and arrangements that would best support the delivery of these, to meet their projected outcomes. Council is now progressing some of these projects through its WaSIP funding.

#### Staff vehicle usage

Council currently uses alternative fuels across its fleet where possible, such as E10, LPG and diesel. A policy has been implemented that requires staff to select lease back vehicles that are three star green rated vehicle and a four star Australian New Car Assessment Program (ANCAP) rating for the light vehicle fleet.

#### WHAT DO WE STILL NEED TO DO?

#### Climate change mitigation and adaption

Report on new options for greenhouse gas reduction and carbon offsetting. This will largely supersede the Local Air Quality Management Plan and incorporate any outstanding actions.

#### **Energy efficient council facilities**

Develop and adopt a policy that requires council to consider increased greenhouse gas emissions as part of triple bottom line assessment when planning new council facilities or upgrades to existing council facilities.

## STRATEGY 2 - CONSERVE NATURAL RESOURCES

ENERGY AND WATER CONSUMPTION



Sutherland Community Garden

#### **ENERGY AND WATER CONSUMPTION**

One of the simplest ways to take pressure off the natural environment is to prioritise energy and water efficiency. While the actions of individuals are critical to reducing consumption, the design of new development plays a very important part in future energy consumption levels. Encouraging sensitive design that will result in efficiencies across the local community is a council priority.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Sustainability of playing fields

Water Savings: Council's Cronulla-Woolooware Wastewater Reuse Scheme will treat effluent from the Cronulla Sewerage Treatment Plant for irrigation of playing fields, schools and commercial uses. The installation of back-to-base monitoring to control irrigation of council's playing fields has commenced which allows better control of watering of ovals. Council also constructed two dams at The Ridge Sporting Complex at Lucas Heights to assist in watering the golf course without the need for town water.

Electricity Savings: Savings in electricity will be achieved through the controlled use of floodlighting at playing fields using the same back-to-base monitoring system used to control irrigation.

#### Water Saving Action Plan

Council has developed a Water Savings Action Plan in conjunction with the then NSW Department of Environment and Climate Change and Water which has been submitted to the NSW government. The plan targets council's top ten water using facilities and provides a comprehensive analysis of council's water use and management strategies. Actions will involve determining current water use, undertaking a management review, undertaking a detailed technical review and assessing and identifying specific savings measures.

#### WHAT DID YOU TELL US?

In the Sustainability Action Plan - Telephone Survey (2010) respondents told us some of the things they were doing to offset the impacts of climate change and to conserve resources. Actions included 'Educating myself and looking to get involved in assessing buildings and helping them to become efficient. Looking for a job to be able to work in residential building improvements to make them more environmental sustainable'. Other actions included the installation of water tanks, keeping the gutters clean, reducing electricity use and increasing tree coverage.



#### WHAT IS COUNCIL GOING TO DO?

Whilst the cessation of NSW Government water restrictions in June 2009 has impacted upon council's water savings objectives, there are still actions which council intends to pursue.

The strategies outlined in the Water Savings Action Plan target council's top ten water using sites which use over 40 per cent of council's water consumption. Savings will be achieved by retrofitting water efficient appliances in council facilities, installing rainwater tanks and water efficient appliances in new buildings.

Through the Cronulla-Woolooware Recycled Waste Water Scheme (CWRWWS), council is creating a new water distribution system. This ongoing initiative will generate up to four mega litres of recycled water per day and is council's major water saving initiative. This project derives income as well as water savings providing an alternate supply of water not subject to restrictions.

Further grant funding will be sought to continue with the installation of back-to-base controls and irrigation to the balance of council's 120 playing fields. Funds are used to finance further water saving initiatives, mainly in council buildings.

There will be savings in electricity through the controlled use of floodlighting via a back-to-base system.

#### WHAT DO WE STILL NEED TO DO?

#### Water and energy efficient council facilities policy

Develop and adopt a policy that requires council to consider reduced water consumption as part of triple bottom line assessment when planning new facilities or upgrades to existing facilities. Through installation of water tanks and solar panels on major council buildings with high visibility, the features also serve as an example and educational tool to all residents.

#### **Environmental audit**

Conduct an environmental audit of council's operations to determine areas that could be altered to use less water and energy and produce less waste and act on this information.

#### **Green Purchasing Policy**

Ensure council's Green Purchasing Policy incorporates consideration of life cycle analysis including energy and water use in production.

#### Reuse of backwash water at council pools

Examine the feasibility of reusing backwash from council swimming pools for irrigation and other purposes.

#### Stormwater harvesting

Examine the feasibility and implement stormwater harvesting programs to maximise our use of alternative water sources.

# STRATEGY 3 - DELIVER INTEGRATED TRANSPORT OPTIONS



Cycleway at Sutherland

#### DELIVER INTEGRATED TRANSPORT OPTIONS

The pattern of development across Sutherland Shire has a direct impact on access to public transport and other community infrastructure. The topography of the Sutherland Shire consists of ridges, peninsulas and valleys. This landform has resulted in railways and high traffic roads being sited along the ridges. Most centres also have ridge locations because they are more convenient central places.

In comparison, the peninsulas such as Kurnell experience little through traffic, are poorly served by public transport and often isolated from other services. There needs to be improved transport options, including well-integrated cycle and footpaths and high quality public transport infrastructure.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Accessibility constraints map

Council has developed a map which is regularly updated and provides information about the degree of accessibility across Sutherland Shire which assists in the provision of infrastructure that supports public transport and active transport nodes such as walking and cycling.

#### Cycling maps

Cycling maps are being developed and updated to inform the community about local cycleways. Informative and educational, the maps encourage cycling activity for all sectors of the community.

Council will continue to lobby the state government to include a shared pedestrian and bicycle corridor as part of the Sutherland-Cronulla rail link.

#### Public domain strategies that prioritise pedestrian and cycling activity

Council develops and implements strategies in which pedestrian and cycling facilities can best support and encourage residents to walk and cycle.

#### Implement the cycleplan

During 2010/2011 Council substantially completed the bicycle link between Menai and Sutherland.

#### Sutherland Shire Local Environment Plan 2006

Clause 53 of SSLEP2006 provides for planning controls to ensure development maximises provision of efficient links to identified transport nodes and corridors, such as railway stations, bus routes, pedestrian and cycle paths, facilities to cater for bicycle users and good access to public transport nodes; and which encourages walking, cycling and the use of public transport.



Sutherland train station

#### WHAT DID YOU TELL US?

You told us you had taken many steps to improve sustainability such as increasing recycling and 56% had taken one or more steps to reduce climate change. Alternative transport modes such as cycling or walking scored only 3.8 and ranked as the lowest gap score after reducing waste, electricity use and water use.

#### WHAT IS COUNCIL GOING TO DO?

#### **Footpath Construction Program**

Council will continue to commit funds to its ongoing Footpath Construction Program. The strategy is to link existing sections of footpath in areas radiating out from activity generators such as shopping centres, railway stations, schools, major sporting and cultural centres, medical practices and aged persons' accommodation.

With an ageing population, accessibility of footpaths and pedestrian links is increasingly important. All new and repaired footpaths will incorporate kerb ramps and aim to bring these up to comply with current standards.

Work continues towards implementing the Cycling Network Plan. Council will extend the existing off road shared pathway along the Woolooware Bay foreshore at Taren Point through to North Cronulla.

Design and construction of a new off road shared pathway has commenced along Old Illawarra Road between Barden Road and Recreation Drive, Barden Ridge. The work is to be fully funded by the RTA as part of Stage 2 of the north-south link of the Bangor Bypass project.

#### Pedestrian Access and Mobility Plan

New seats at bus stops and rest points and will be provided as well as undertake additional Pedestrian Access and Mobility Plan (PAMP) work in Woolooware. Caringbah. Miranda. Kirrawee and Sutherland. These projects are an important part of ageproofing the Shire and will contribute to the Ageing Well in Sutherland Shire Strategy.

Council will design and construct pedestrian access near medical facilities in Sutherland, and design and commence the construction of accessible streetscape near medical facilities in Gymea.

Council will implement outdoor signage to encourage travel by alternative modes, as well as continue to inform the NSW Government on Shire transport needs e.g. the upgrade of Sutherland Transport Interchange and the provision of metro bus transport.

#### WHAT DO WE STILL NEED TO DO?

#### Community education

Continue the development and production of information for the community such as walking maps and recreational guides.

#### Shared pedestrian and bicycle corridor

Council will continue to lobby the state government to include a shared pedestrian and bicycle corridor or alternative as part of the Sutherland-Cronulla rail link.

# STRATEGY 4 - RESPECT AND VALUE ALL HERITAGE AND CULTURE



#### RESPECT AND VALUE ALL HERITAGE AND CULTURE

The Sutherland Shire has a unique character that is reflected in its cultural and natural heritage. It has an extensive history of Aboriginal occupation and European settlement. Its cultural, historical and archaeological sites are a record of the past, and while many are known and documented, there are potentially many other sites and artefacts yet to be discovered. Significant trees and landform features also make up much of the Shire's natural heritage. In many cases the landscape setting of the cultural, historical or archaeological site is as important to preserve as the actual item itself.

With an extensive number of heritage items within the Shire, heritage is seen as an element that creates the uniqueness of the area. With this heritage comes a sense of identity and association for residents of the Shire.

The major pressures on the Shire's heritage are through neglect, theft, vandalism, deterioration caused from exposure to the natural elements and urban development. Particularly at risk are Aboriginal sites of heritage significance.

There are more than 100 archaeological non-Aboriginal sites and over 350 built and landscape heritage items in Sutherland Shire. Sites that are of Aboriginal significance have been identified and recorded for their conservation and protection.



#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Sutherland Shire Local Environment Plan 2006

Clause 54 provides a planning framework designed to conserve the environmental heritage of Sutherland Shire including locally significant buildings, trees and natural landforms.

#### **Natural Areas Plans of Management**

Council's plans of management for natural areas are prepared on a catchment basis covering council owned property that has been classified as a natural area. The plans of management identify strategies, which includes objectives and performance targets, means of achievement and assessment criteria for items within these areas that are identified in the SSLEP. The plans of management provide a tool for the efficient management of community land, the protection of biodiversity and the identification of areas of cultural, historical and environmental conservation significance.

#### **Conservation Management Plan (CMP)**

A site specific CMP is an important tool in caring for a heritage item and are required as part of the DA process for larger items. The CMP provides a guide to future care and use, for sites and heritage elements such as parks, ruins, natural features and groupings of buildings and historic activities.

#### Heritage grants

Council provides support to preserve a heritage listed building or funding to initiate a heritage project annually. Owners of heritage buildings may apply for dollar for dollar grants to assist in the restoration of heritage listed properties, under the council's Heritage Building Grants Program. Authors may apply for funds up to \$5000 to publish works contributing to the information and education of the public about the heritage of Sutherland Shire, under the Heritage Publication Grant Program. All funding decisions are made at the discretion of the Heritage Sub Committee.

#### WHAT DID YOU TELL US?

In the consultation for the Community Strategic Plan, survey respondents indicated that they sought greater understanding and appreciation of our indigenous, European, natural and man-made heritage and culture. Protection of the Shire's significant heritage and its sustainability was a key concern, as was its promotion through community education particularly of children and young people was considered. Of particular concern was Kurnell's place in Australia's history and the Shire's heritage. Participants expressed a desire that it is revitalised, protected and respected as a community asset. This also linked to its ability to be better promoted for the purposes of tourism. The local sand dunes were frequently cited as of particular heritage importance and needing preservation. Recognition of the Shire's indigenous history was also important to participants, as was making people proud to be Australian, living in the Shire and the celebration of the 'Australian way'.

#### WHAT IS COUNCIL GOING TO DO?

Council is undertaking Stage 1 of the documentation of individual local heritage items and classes of heritage items, specifically the review of all foreshore heritage items.

#### WHAT DO WE STILL NEED TO DO?

Council is engaging heritage experts to review the status of heritage items and prepare updated, electronic inventory sheets. This will ensure that council's data on each item and can be provided to property owners and the community and will facilitate the better protection of existing items and the provision of clear advice to all parties.

# STRATEGY 5 - LOOK AFTER OUR PEOPLE

DISASTER PLANNING AND MANAGEMENT



#### **DISASTER PLANNING AND MANAGEMENT**

Climate change will bring significant risks to the coastal zone. By the turn of the century, a significant number of residential buildings may be at risk of inundation and damage from a sea level rise. We need to plan now for the future changes as well as accommodating the current levels of risk from bushfire, flood and storms.

# WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

# The Sutherland Shire Local Environmental Plan (SSLEP) 2006 and the Sutherland Shire Development Control Plan (SSDCP) 2006

Both plans assist this outcome by providing planning controls to assist in protection from flood, bushfire risk, manage risks from hazardous industries, including Caltex and the nuclear reactor at ANSTO.

Floodplain Management Plans and Coastline Management Plan Floodplain Management Plans exist for Oyster Creek, Woronora River, Bundeena Creek and the Georges River. These plans identify potential flood levels under various scenarios and identify works and controls necessary to minimise these risks.

The Bate Bay Coastline Management Plan identifies land within Bate Bay at risk from coastal processes, including sea level rise, and proposes management strategies, works and controls to minimise these impacts.

#### WHAT DID YOU TELL US?

Planning for increased droughts, bushfires and storms and reducing greenhouse gas emissions are priorities. In contrast, preparing for sea level rise is a lower priority.

- 16% believed climate change is not at all likely to happen
- 84% believed climate change was likely to some extent
- 56% reported having taken some action to prepare for or offset climate change impacts

#### WHAT IS COUNCIL GOING TO DO?

#### Natural disaster risks

In 2010 council completed the upgrade of Kurnell Rural Fire Brigade Station. The provision of the innovative Woronora Rural Fire Brigade Station is now complete. Planning for new stations at Bundeena and Menai will continue. Grays Point Fire Station extensions will commence in 2012. Council will enforce bushfire compliance and risk for building works submitted through the development application assessment process. The NSW Rural Fire Service (RFS) is responsible for monitoring and enforcing bushfire vegetation buffer zones.

Council is conducting studies on floodplain management. In 2010/2011 the Risk Management Plan for the Botany Bay Floodplain will be finalised.

#### **Development risk**

Council will review available information and represent the community's interests in consultation processes for hazardous industries that operate in the Sutherland Shire such as Caltex at Kurnell and ANSTO at Lucas Heights.

Council has significantly completed the preparation of Stage 1 of the Contaminated Sites Information Register that identifies contaminated and potentially contaminated sites within Sutherland Shire. These sites are mapped on GIS layers and noted on the property information. Stage 2 commencing soon for adjacent properties.

#### Assess the risks from climate change

The Sutherland Shire is surrounded by tidal water and has large tracts of natural bushland. This could mean that changes to the climate through global warming have a significant impact on the Shire. Council will conduct its own studies of the possible risks, based on local and international research. This will enable the development of appropriate strategies to minimise or deal with the potential risks.

A report detailing the impacts of sea level rise on the Shire will be completed in 2011 and information will be used to identify strategies for the management of council assets and input into the Sutherland Shire Local Environmental Plan 2011. Sea level rise maps have been developed by the federal government to assist the community understand the longer term climate change risks. Climate change will be a factor in future flood studies.

#### WHAT DO WE STILL NEED TO DO?

#### **Climate Change Mitigation and Adaptation Strategy**

Climate change has the potential to change the magnitude and frequency of natural disasters in the Sutherland Shire. In order to adequately respond to this threat, we need to firstly anticipate the scale of the risk then develop a range of responses to minimise it.



## STRATEGY 5 - LOOK AFTER OUR PEOPLE A SAFE AND CONNECTED COMMUNITY



#### A SAFE AND CONNECTED COMMUNITY

Within the Sutherland Shire there is a wide array of non-government and not-for-profit organisations that support their members and individuals to participate in community life. Their interests and values are based on diverse cultural, political, scientific, religious or philanthropic themes.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Graffiti Removal Program

Council operates two graffiti-removal vehicles with dedicated staff who respond to incidents of graffiti on council-owned or councilmanaged property (including parks, street furniture, local road infrastructure and council buildings).

If you are a local resident wishing to remove graffiti from your own property you can contact council and request a removal kit. The kits contain environmentally friendly graffiti-removal products and protective equipment.

#### **Community Environmental Education Programs**

Council develops and delivers a number of community environmental education programs including Bushcare, Greenweb, Waste Wise Living Workshops and Green Street. These programs empower residents to take responsibility for their impact on the environment.

#### The Sutherland Shire Crime Prevention and Community Safety **Precinct Committee**

The Sutherland Shire Crime Prevention and Community Safety Precinct Committee is the network through which the NSW Police Force and Sutherland Shire Council identify and address the diverse community safety issues of the Sutherland Shire in partnership with the community and other key stakeholders.

The Sutherland Shire Crime Prevention and Community Safety Precinct Committee meet quarterly. It is co-chaired by Sutherland Shire Council's mayor together with the NSW police local area commanders for Sutherland and Miranda Police.

#### Road Safety Strategic Plan

This plan will be implemented through the annual Road Safety Action Plan.

#### WHAT DID YOU TELL US?

The environmental education programs Clean up Australia Day, Household Chemical Clean up and Bushcare were all well recognised programs. Less recognised were the Fridge Buy Back Scheme, Environmental Education, Streamwatch, Greenweb and green street programs. All activities were rated moderate to good.

Respondents reported that in the last 12 months, 16 per cent of respondents had installed solar hot water. 14 per cent had installed rainwater tanks, 10 per cent had installed solar services for power and two per cent had kept chickens to recycle waste.

#### WHAT IS COUNCIL GOING TO DO?

#### Inclusive events

Council will facilitate activities and events that are inclusive of the many different sections of the community and which make provision for intergenerational links. This objective will become increasingly important as the number of older people in our community increases.

#### **Education activities**

Council will continue to conduct educational activities to encourage older people to explore their natural environment and raise awareness of environmental issues.

#### Regulation activities

Council provides regulation and compliance activities including littering and illegal dumping.

#### WHAT DO WE STILL NEED TO DO?

#### Hazardous industries

Continue to actively oppose any new or intensification of existing hazardous industries through which pose a threat to human health and the environment.

## STRATEGY 5 – LOOK AFTER OUR PEOPLE

A HEALTHY AND ACTIVE COMMUNITY



#### A HEALTHY AND ACTIVE COMMUNITY

The way we design our cities and where we provide our services can assist with increasing the health of our population. To have a healthy community, we need to combine activity with a good diet. This means eating a wide variety of nutritious foods including plenty of vegetables, legumes, fruits, breads and cereals (preferably wholegrain). It also involves choosing foods that are low in fat (particularly saturated fat), salt and include only moderate amounts of sugars.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Accessibility constraints map

Council has developed a map which is regularly updated and provides information about the degree of accessibility across Sutherland Shire which assists in the provision of infrastructure that supports public transport and active transport nodes such as walking and cycling.

#### **Cycling maps**

Cycling maps are being developed and updated to inform the community about local cycleways. Informative and educational, the maps encourage cycling activity for all sectors of the community and thereby promoting healthier lifestyles.

#### Public domain strategies that prioritise pedestrian and cycling activity

Council develops and implements strategies in which pedestrian and cycling facilities can best support and encourage residents to walk and cycle.

#### **Healthy Cities Grant**

Apply for funds to provide additional opportunities for community members to move more and improve their health.

#### WHAT DO WE STILL NEED TO DO?

#### **Explore alternative transport options**

Continue to investigate ways to reduce car dependency in the Sutherland Shire and facilitate greater active participation in walking and cycling activity and thereby improving community health, accessibility and choice.

#### State of the Shire Report

Every year council produces a State of the Shire Report which informs the community of the State of the Shire's natural environment, the key pressures on this environment and what is being done to address those issues.

The State of the Shire Report is to be reviewed to make the report more directly relevant to council's Guide and Management Plan.



# STRATEGY 6 – PROVIDE EFFECTIVE & INTEGRATED INFRASTRUCTURE HOUSING



#### **HOUSING**

When exploring opportunities to provide for new housing, it makes sense to focus on those locations that can benefit from existing services. Residents who are located within walking distance to public transport, shops and services often drive less. This takes increased pressure off the road network while also reducing potential green house gas emissions. Central locations also allow new residents to benefit from the existing investment in schools and public facilities.

## WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### **BASIX**

There are provisions in the SSDCP2006 relating to environmentally sustainable development and natural resource management. These initiatives will work with BASIX as a minimum standard to help improve the energy and resource efficiency of both housing and surrounding landscaping. This means that all development approvals granted will need to conform to BASIX standards.

#### Sutherland Shire Local Environment Plan 2006

Clause 51 provides planning controls to ensure ecologically sustainable development in the Shire. Clause 52 addresses energy efficiency and sustainable building techniques.

#### Sutherland Shire Development Control Plan 2006

Chapter 8 Ecologically Sustainable Development contains planning guidelines to ensure specific aspects of development must be carried out having regard to the principles of ESD. These principles are part of all council's land use, development and environmental management decisions.

There are also provisions for the Greenweb program which ensure that development in identified habitat corridors does not significantly impact on the habitat values of that area.

#### WHAT COUNCIL WILL DO?

#### Council will adopt the DSILEP

In preparing its DSILEP Sutherland Shire Council has used the land use controls to build efficiencies into the urban fabric as one element in managing long term emissions.

#### WHAT WE STILL NEED TO DO

Council will need to continue to incorporate trends and accommodate local needs such as the ageing population.

## STRATEGY 6 - PROVIDE EFFECTIVE & INTEGRATED INFRASTRUCTURE LEISURE AND RECREATION

#### LEISURE AND RECREATION

Leisure and recreation pursuits are reported to improve mood and reduce stress as well as delivering preventative health benefits. As the population includes more elderly people new opportunities to exercise and recreate will be required. But these opportunities will need to be sensitively designed to protect environmental quality whilst providing exercise facilities.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### **Accessibility Constraints Map**

Council has developed a map which is regularly updated and provides information about the degree of accessibility across Sutherland Shire which assists in the provision of infrastructure that supports public transport and active transport nodes such as walking and cycling.

#### Cycling maps

Cycling maps are being developed and updated to inform the community about local cycleways. Informative and educational, the maps encourage cycling activity for all sectors of the community.

#### **Public domain strategies**

Council develops and implements strategies in which pedestrian and cycling facilities can best support and encourage residents to walk and cycle.

#### Sutherland Shire Local Environment Plan 2006

Clause 53 provides for planning controls to ensure development maximises provision of efficient links to identified transport nodes and corridors, such as railway stations, bus routes, pedestrian and cycle paths, facilities to cater for bicycle users and good access to public transport nodes; and which encourages walking, cycling and the use of public transport.

#### WHAT DID YOU TELL US?

Visits to natural areas are an important part of recreation. Respondents told us in our 2010 telephone survey that during the last 12 months, 93 per cent had visited Cronulla beaches; 81 per cent had visited the Royal, Heathcote and Botany Bay National Parks; 96 per cent visited local rivers and bays and 98 per cent visited their local park.

#### WHAT IS COUNCIL GOING TO DO?

#### Improve playing fields

Demand for playing fields continues to grow in the Shire. Currently, the majority of council's sporting fields are operating at or above capacity. Over the next three years council will be working with local schools to upgrade their sporting facilities for community use under relevant licence agreements. This will include the installation of oval irrigation systems, lighting, improved playing surfaces and fencing.



In addition, council is working on the new Greenhills site which will deliver 10 new playing fields into the system under a Voluntary Planning Agreement with Australand/Breen. Council has also instigated the Sports Forum to discuss environment and sustainability issues (amongst other matters) for sporting fields with community organisations. Finally the Active Communities Committee has been established to enhance planning around a wide variety of healthy lifestyle issues. This committee will include the sustainability of community sporting assets as part of their charter.

#### Park upgrades

Park upgrades at Taren Point Shorebird Reserve, Taren Point is complete and the newly acquired extension of Oak Park, Cronulla is nearing completion. Council is also improving land access to the Shiprock Aquatic Reserve.

Council has committed over \$200,000 a year for the following five years for playground modifications and upgrades.

The proposed infrastructure levy has funded the following upgrades to existing parks: Ballar Avenue playground, Canberra Road, Leonay Street Sutherland and Parc Menai frontage.

#### WHAT DO WE STILL NEED TO DO?

#### Community education

Develop and produce information for the community such as walking maps and recreational guides for the Shire.

#### Shared pedestrian and bicycle corridor

Council will continue to lobby the State Government to include a shared pedestrian and bicycle corridor adjacent to the duplicated Sutherland-Cronulla rail link.

#### **NEW OPPORTUNITIES**

Continue to identify new opportunities to improve the health and fitness of Shire residents.

## STRATEGY 6 - PROVIDE EFFECTIVE & INTEGRATED INFRASTRUCTURE LOCAL SUBURBAN ACTIVITY CENTRES



#### **LOCAL SUBURBAN ACTIVITY CENTRES**

Quality local suburban activity centres can assist communities to become more involved in their local environment. This will bring communities together through sharing activities in a space or place that is fit for all purposes and supports the local economy. Council and communities can work together to improve the appearance, functionality, accessibility, effectiveness and sustainability of local spaces and places including buildings.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### Upgrade of infrastructure

Council has a program to upgrade shopping centre landscape, pavements, facilities and other infrastructure to provide fit for purpose community spaces.

#### **Cycling Maps**

Cycling maps are being developed and updated to inform the community about local cycleways. Informative and educational, the maps encourage cycling activity for all sectors of the community improving access to centres.

#### Provision of cycling links

Council provides on and off road cycling facilities in accordance with its Cycling Plan.

#### **PUBLIC HEALTH**

Council monitors registered local businesses to ensure they meet prescribed health related standards.

#### WHAT DID YOU TELL US?

In a recent survey of the Gymea Shopping Centre:

- 80% of respondents were moderately to extremely satisfied overall with the management of the Gymea Centre
- Atmosphere rated moderate to good, followed by cleanliness and maintenance and visual appearance of trees and vegetation
- Toilets, the visual appearance of the paving and the street furniture rated lowest

#### WHAT IS COUNCIL GOING TO DO?

Council has commenced an \$8 million program of works over two years to upgrade Caringbah, Gymea and Sutherland shopping centres, with \$4 million of the cost funded by the Federal Government's Economic Stimulus Package. Works at Caringbah are nearing completion and works at Gymea and Sutherland began in late 2010. The works will include undergrounding of overhead power cables, quality paving, tree planting and provision of street furniture as well as improved energy efficient lighting to provide vibrant centres by night.

#### WHAT DO WE STILL NEED TO DO?

Continue to investigate strategies and actions to support a sustainable urban environment through improving transport access, choice and linkages with land use planning and economic development.

## STRATEGY 6 - PROVIDE EFFECTIVE & INTEGRATED INFRASTRUCTURE CRITICAL INFRASTRUCTURE



#### CRITICAL INFRASTRUCTURE

Infrastructure has become a priority for all levels of government and includes water, energy, communications and transport all of which are fundamental to the delivery of economic, community, and environmental objectives. Council needs a long term, coordinated approach to infrastructure planning and management to meet the current and future needs.

#### WHAT IS COUNCIL DOING UNDER THIS STRATEGY TO HELP THE COMMUNITY?

#### **Asset Management Policy and Strategy**

Council has an adopted policy for asset management and is developing the Asset Management Strategy, which will be finalised in 2012. The strategy aims to improve council's asset management practices and capabilities. As part of this process, an action or improvement plan will form part of the Strategy and will include targets and milestones in which to measure progress in its implementation. The action plan will be reported on regularly (specific timeframe is yet to be determined but likely to be either six monthly or annually). The Strategy will also be reviewed and amended on a regular basis, to reflect progress in its implementation.

#### WHAT DID YOU TELL US?

Many of the priorities identified by survey respondents will be dependent on well maintained and efficient critical infrastructure. Specifically, the matters with the highest gap score i.e. the difference between the level of importance and the level of satisfaction and therefore requiring attention are:

- Protection of our waterways (1.19)
- Planning for increased droughts (1.10)
- Bushfires and storms (1.10)
- Management of noxious weeds and feral animals (1.06)
- Reducing greenhouse gas emissions (1.03)

Other aspects that will impact on infrastructure had lower gap scores, such as 'preparing for sea level rise' (0.45).

## Infrastructure has become a priority for all levels of government.

When asked about climate change, 38% of respondents thought it would not have an impact on their property or assets. On the other hand, 44% thought that there would be some or moderate impact and a further 18% thought that there would be substantial or extreme impact. More than half (56%) of respondents have taken one or more steps to prepare for or offset possible impacts.

#### WHAT DO WE STILL NEED TO DO?

#### **Climate Change Mitigation and Adaptation Strategy**

Climate change has the potential to result in changed magnitude and frequency of natural disasters in the Sutherland Shire. The strategy will identify infrastructure at risk and develop strategies to deal with anticipated change.

# SECTION 4: SUSTAINABILITY ACTION PLAN



The following table provides a summary of council activities that comprise the ESS. These activities will be supported by effective asset management, budgetary considerations and continuing engagement with our local community.

KEY FOCUS AREA	ACTIONS (BY WHOM)	HOW
Waste	Encourage residents to divert maximum waste from landfill.  Waste Services (WS)	<ul> <li>Strategic Waste Action Plan (SWAP) developed and implemented</li> <li>Waste Not DCP developed and implemented</li> <li>Households limited to a 120-litre rubbish bin; 240-litre recycling and greenwaste bins and compost bins and worm farms are available at cost to residents. Short courses available. Continue analysis of waste for dry recyclables and food organics to divert these from the residual waste bins.</li> </ul>
	Minimise waste to landfill <b>WS</b>	<ul> <li>Review Council's contract for waste disposal alternatives to landfill</li> <li>Continue household chemical collection</li> </ul>
	Manage Councils waste effectively <b>WS</b>	The Parks Unit and Waste Services Unit mulch and compost greenwaste. Road construction and building waste are recycled and construction projects to use recycled materials
	Address emerging waste issues <b>WS</b>	<ul> <li>Review demographic and other changes eg the impact of an ageing population means that new waste issues such as providing additional bins for on-going medical related conditions</li> <li>Develop and implement events waste management policy</li> </ul>
Biodiversity	Maintain the Council Greenweb program Environmental Science and Policy Unit (ESPU)	Incorporate Greenweb biodiversity strategy in the Sutherland Shire Development Control Plan 2006 (SSDCP2006) and maintain voluntary participation through Greenweb Financial Assistance Grant program
	Prevent fragmentation of bushland and re-establish wildlife corridors to link areas of core habitat.  ESPU/ Infrastructure Planning and Services (IPS)	<ul> <li>Assist property owners with ecological restoration works on their land. Use provisions within SSDCP2006 for tree management.</li> <li>Implement 2011 Tree Policy</li> <li>Undertake projects within park and other upgrades to strengthen bushland links eg Silver Beach</li> </ul>
	Maintain Council's Bushland Unit Group Manager Engineers (GME)	Council's Bushland Unit provides for maintenance of bushland and natural areas via bush regeneration programs, noxious weeds management and pest species controls. The Bushcare program provides for resident involvement in active management of over 120 Bushcare sites and natural areas in public ownership.
	Management of pest species <b>GME</b>	Management of pest species is via council's Feral Animal Policy and arrangements with other organisations such as the NSW National Parks and Wildlife Service which attracts council funding and is augmented with additional grants and in-kind support provided by other key stakeholders. Key species targeted as part of this program are deer, rabbits and foxes, as well as new pest incursions such as cane toads and carp.

# SECTION 4 SUSTAINABILITY ACTION PLAN

KEY FOCUS AREA	ACTIONS (BY WHOM)	HOW
Water	Undertake effective bays, estuary and wetland management ESPU/IPS	<ul> <li>Implement the Port Hacking Integrated Environmental Management Plan, Woronora River Estuary Management Plan and the Bundeena Creek and Marton Park Wetland Management Plans. Bate Bay will be maintained and upgraded as outlined in the Ten Year Financial Plan.</li> <li>Effectively use the stormwater levy for construction according to the Stormwater Levy Management Plan.</li> <li>Complete the Floodplain Risk Management Studies for Gwawley Bay (Sylvania Waters) and the Lower Georges River.</li> <li>Undertake a Coastal Zone Management Plan for North West Arm Estuary and a Flood Study for Woolooware Bay Catchment.</li> </ul>
	Install marine sewage pumpout facilities IPS	Identify funding source and location.
	Manage risk to councils built and natural assets and infrastructure Environmental Planning (EP) / ESPU / IPS	Council will continue rehabilitation of riparian habitats in Oyster Creek based on the Oyster Creek Floodplain Risk Management Plan. Council will develop a Sea Level Rise Adaptation Plan to address identified risks.
	Make environmental decisions based on evidence and knowledge value IPS	Council will complete an environmental assessment of the Shire's watercourses. The study will examine the extensive network of open drains and creeks to determine their environmental condition, safety, hydraulic capacity, erosion potential, and habitat value. The results of the study will inform future decisions in relation to environmental management, development assessment and stormwater management and provide priority based works for rehabilitation of the Shire's watercourses.
	Council monitors and is proactive in managing water pollution.  ESPU /Environmental Health and Regulation (EHR)	Council officers investigate all complaints about water pollution. In addition, the Environmental Industry Audit Program targets high risk water polluting industries. Council undertakes follow up inspections to check for improvements on those found to have any problems.
	Implementation of Water Savings Action plan ESPU /Property Planning and Commissioning (PPC)	<ul> <li>Council has developed a Water Savings Action plan in conjunction with the NSW Department of Environment and Climate Change and Water. This plan applies to council's top ten water using sites which use over 40% of council's water consumption. Savings will be achieved by retrofitting water efficient appliances in council facilities and installing rainwater tanks.</li> <li>Cronulla Woolooware Recycled Waste Water Scheme (CWRWWS) becomes operational. Installation of back-to-base controls and irrigation to the balance of council's 120 playing fields. Updated audit to be undertaken every four years from first audit date. Continue implementation of initiatives to reduce water consumption at these 10 sites.</li> </ul>

KEY FOCUS AREA	ACTIONS (BY WHOM)	HOW
Transport	Construction of footpaths and improved access IPS, ESPU	Council is committed to an ongoing Footpath Construction Program. The strategy links existing sections of footpath in areas such as shopping centres, railway stations, schools, major sporting and cultural centres, medical practices and aged persons' accommodation. With an ageing population, the accessibility of footpaths and pedestrian links will be increasingly important. All new and repaired footpaths will incorporate kerb ramps to comply with current standards.
	Provide safe cycle link between Cronulla and Sutherland IPS, ESPU	Study of options for a bicycle link between Cronulla and Sutherland are complete and now looking to confirm preferred route with State government. This will provide an alternative to the rail trail which was proposed to be developed in conjunction with track duplication works currently in progress.
	Implementation of the Bicycle Network Plan to continue IPS, ESPU	Council has completed the bicycle link between Menai and Sutherland and is extending the existing off road shared pathway along the Woolooware Bay foreshore.
	Constructed bicycle link between the Menai and Sutherland bicycle path and the Princes Highway at the intersection with Waratah Street IPS, ESPU	A \$395,000 federal government grant has enabled the construction of a shared bicycle/pedestrian off-road pathway between the Menai and Sutherland bicycle path and the Princes Highway at its intersection with Waratah Street. Council will look to build on these recently completed cycle and pedestrian works as funds become available.
	Design and construction new off road shared pathway along Old Illawarra Road between Barden Road and Recreation Drive, Barden Ridge.	Design and construction of a new off road shared pathway will commence along Old Illawarra Road between Barden Road and Recreation Drive, Barden Ridge. The work is to be fully funded by the RTA as part of Stage 2 of the north-south link of the Bangor Bypass project.
	Improvements will be made to the bus shelter network.  IPS, ESPU	New seats at bus stops and rest points and will be provided as well as undertake additional Pedestrian Access and Mobility Plan (PAMP) work in Woolooware, Caringbah, Miranda, Kirrawee and Sutherland. These projects are an important part of addressing the needs of the Shire's ageing population and will contribute to the Ageing Well in Sutherland Shire Strategy.
	Design and construct pedestrian access near medical facilities in Sutherland and Gymea.  IPS	Council will design and construct pedestrian access near medical facilities in Sutherland, and design and commence the construction of accessible streetscape near medical facilities in Gymea.
	Transport Strategy <b>ESPU</b>	Commence the development and implementation of Council's     Transport Strategy

# SECTION 4 SUSTAINABILITY ACTION PLAN

KEY FOCUS AREA	ACTIONS (BY WHOM)	HOW
Sustainable Purchasing	Council implements the Get it Green Purchasing Policy and sustainable timbers policy. Financial Services/ Administration and Governance	<ul> <li>Council has in place a program to increase council's sustainable procurement. All tender documents require evaluation of environmental performance under the Get it Green Purchasing Policy. Successful tender applicants meet the minimum environmental requirements.</li> <li>Purchasing decisions made in accordance with 'Get it green Purchasing Policy'.</li> </ul>
Energy	Implement the Energy Savings Action Plan for the NSW Department of Water and Energy (ESAP) ESPU /PPC	<ul> <li>ESAP provides a framework for energy savings at council's top ten energy consuming sites, with monitoring and with online metering systems. Installation of photo voltaic cells (solar energy) to generate electricity for sale back to the supply grid firstly at the administration building and Sutherland Leisure Centre</li> <li>Complete and review councils energy audit and upgrade works</li> <li>Implement the Organisation Sustainable Energy &amp; Water Strategy</li> </ul>
Climate Change	Reduce greenhouse gas emissions from landfill <b>WS</b>	The greenhouse gas could be reduced by selection of a waste processing technology which will turn residual garbage into compost and energy.
	Councils own fleet is more energy efficient GME	Council has in place a program to reduce council's fleet emissions.     Council is now using alternative fuels such as E10, LPG and diesel.     For staff, lease back vehicles must be three star green rated and a four star Australian New Car Assessment Program (ANCAP).
	Prepare the Shire for Climate change <b>EP/IPS/ESPU</b>	Council will finalise a detailed sea level rise risk assessment with a view to developing a climate change adaptation plan. Council will examine Climate Change Risk and apply this to Council operations.

# SECTION 5 GLOSSARY AND ACRONYMS

GLOSSARY AND ACRONYMS \* Document or link is available on council's website.

WHAT	DESCRIPTION
Accessibility Constraints Map*	A map that provides information about the degree of accessibility across Sutherland Shire. This supports public transport and active transport such as walking and cycling.
BASIX*	The Building Sustainability Index (BASIX) is a minimum standard to help improve the energy and resource efficiency of housing and associated development.
Biodiversity Strategy*	Aims to guide council in the effective management and conservation of its biodiversity by:  identifying the issues associated with biodiversity management  identifying actions for biodiversity management  assigning priority to these actions  identifying responsibility for implementation
Climate change	A process where rainfall, temperatures, bushfire frequency, health, heritage and biodiversity is changed from previous patterns for current and future generations.
Climate Change Mitigation and Adaptation Strategies	Mitigation strategies seek to reduce greenhouse emissions. Adaptation strategies propose ways of responding to climate change impacts.
Community environmental education programs	Council develops and delivers a number of community environmental education programs including Bushcare, Greenweb, Enviro-Works and Green Street.
Compliance and Environmental Audit Program	Periodic review of adherence to environmental regulations of business and construction activities.
Cronulla Woolooware Recycled Waste Water Scheme (CWRWWS)	This scheme supplies recycled wastewater to irrigate ovals and recreation areas in the eastern part of the Shire. The users of the recycled water include Woolooware High School, Toyota Stadium, Captain Cook and Solander playing fields, Cronulla and Woolooware golf course and Toyota Australia's commercial facility.  The project, which was jointly funded by council, the NSW Government's climate change fund and private users, replaces the use of 350 megalitres of domestic water used each year by council and surrounding large private property owners.
DSILEP	Local environmental plans (LEPs) guide planning decisions for local government areas. Through zoning and development controls, they allow councils and other consent authorities to manage the ways in which land is used. On 31 March 2006, the NSW Government gazetted a standard instrument for preparing new LEPs, also known as the LEP template. Local plans across NSW now use the same template for their local area.
Energy efficient council facilities policy	A policy adopted by council to consider increased greenhouse gas emissions as part of triple bottom line for new or upgraded council facilities.
Environment and Sustainability strategy (ESS).	This document includes the Sustainability Action Plan, background papers, monitoring and evaluation process and community engagement strategy.
Environmental Audit	An audit of council's operations to reduce water, energy and waste.
Feral Animals Policy*	Strategies to reduce environmental, social and economic impacts of feral animals through a cooperative approach with other agencies and land owners.
Fridge Buyback Scheme	A recycling program funded by the NSW Government and local councils, which provides residents to have their second fridge collected, so its materials can be recycled and landfill waste is avoided.
Green Purchasing Policy	A Green Purchasing Policy incorporates consideration of life cycle analysis including energy and water use in production.
Greenweb Strategy*	Strategy to identify and manage significant vegetation and vegetated links throughout the Shire.

# SECTION 5 GLOSSARY AND ACRONYMS

## GLOSSARY AND ACRONYMS \* Document or link is available on council's website.

WHAT	DESCRIPTION
Hazardous industries	For development proposals categorised as 'potentially hazardous industry', applicants are required to prepare a preliminary hazard analysis (PHA) to estimate the risk to people, property and the environment at the proposed location.
New Game – Sustainable Practices for Local Sports Delivery (draft)	Documents the broad directions for sports fields and playing strategies.
NSW Environmental Trust	An independent statutory body established by the NSW government to support exceptional environmental projects that do not receive funds from the usual government sources.
Sea Level Rise Maps	The Department of Climate Change and Energy Efficiency has released maps identifying areas at risk of sea level rise including in and around Botany Bay and the Georges River. The maps are designed to help the community understand the longer term climate change risks.
State of the Environment Report (SoE)	This report was incorporated into Council's State of the Shire Report (SoS) in 2007. The combined document provides a scorecard for both the environmental and social well being of the Sutherland Shire.
Stormwater Harvesting	Examine the feasibility and implement stormwater harvesting programs to maximise our use of alternative water sources.
Stormwater Management and Stormwater Specification	Environmental Specifications are essentially matters of technical policy. The specifications are referred to in provisions of the Sutherland Shire Development Control Plan (SSDCP) 2006 and Sutherland Shire Local Environmental Plan (SSLEP) 2006.
Waste and Sustainability Improvement Program (WaSIP)	Funded by the NSW Government to assist councils invest in additional actions and programs that improve resource recovery and sustainability outcomes across their local government areas. Typically, these are undertaken in the areas of waste, energy and water.
Water and energy efficient council facilities policy	A policy that requires Council to consider reduced water consumption as part of triple bottom line assessment when planning new Council facilities or upgrades to existing Council facilities. Through installation of water tanks and solar panels on major council buildings with high visibility, the features also serve as an example and educational tool to all residents.

# SECTION 5 LIST OF PLANS

LIST OF PLANS \* Indicates that plan is available on council's website.

PLAN	DESCRIPTION
Air Quality Management Plan*	A set of guidelines for the development of long term goals to protect the Sutherland Shire's air quality.
Bate Bay Coastline Management Plan	Comprises a series of objectives, strategies and actions corresponding to a range of issues identified in the management studies and as agreed with the Bate Bay Coastal Management Committee.
Conservation Management Plan (CMP)	A site specific CMP is an important tool in caring for a heritage item and is required as part of the DA process for larger items. The CMP provides a guide to future care and use, for sites and heritage elements such as parks, ruins, natural features and groupings of buildings and historic activities.
Cycling network (plan)	Outline of Sutherland Shire Cycling Network and Maps.
Estuary Management Plans*	Under the NSW Estuary Management Policy, local councils are responsible for preparing and implementing detailed management plans for estuaries in their jurisdiction. Sutherland Shire Council has developed the following estuary management plans to cover estuaries in the Shire.  • Yowie Bay Estuary Management Study & Plan  • Gunnamatta Bay Estuary Management Plan  • Gunnamatta Bay Contaminated Sediment Study  • Gymea Bay Estuary Management Plan  • Woronora Estuary Management Plan  • Bundeena Creek Management Plan  • Marton Park Wetland Management Plan
Floodplain Management Plans	In March 2004, Council carried out an initial assessment to identify land likely to be at risk of major flooding. This assessment helped set priorities for the development of Floodplain Risk Management Studies and Plans for various catchments. Based on past flood studies and the Initial Assessment of Major Flooding report, Council developed maps of flood-prone land, which can be viewed on Shire Maps. Floodplain Management Studies and Plans have been completed for:  • Woronora River Floodplain  • Bundeena Creek  • Ewey Creek  • Deadman's Creek  • Dents Creek Flood Study  • Woronora Flood Preparedness  • Georges River Floodplain  • Ewey Creek Flood Study  • Oyster Creek Floodplain  • Gwawley Bay Catchment Floodplain  • Lower Georges River  • Kurnell Township
Hacking River Stormwater Management Plan	Developed for management of stormwater within the catchment.
Local Waste Management Plan	Outlines Council's strategic and operational direction for waste management to 2015. Includes Waste and Sustainability Improvement Program.
Lower Georges River Stormwater Management Plan	Developed for management of stormwater within the catchment.
Management/ Delivery Plan	Each year Council prepares a management plan in accordance with the requirements of the NSW Local Government Act 1993.

# SECTION 5 LIST OF PLANS

LIST OF PLANS \* Indicates that plan is available on council's website.

PLAN	DESCRIPTION
Natural Areas Plan of Management	The land that is covered under the Natural Areas plan of management exhibit biodiversity or habitat or features of natural beauty or significance. Plans have been developed for:  Natural Areas Bundeena Natural Areas Maianbar Natural Areas North West Arm Catchment Natural Areas Oyster Bay West Catchment Natural Areas Warrangaree Drive Bushland Reserve Woronora
Port Hacking Integrated Environmental Management Plan*	Developed for the holistic management of the Port Hacking catchment.
Road Safety Strategic Plan	Provides framework for council's implementation of annual Road Safety Action Plan.
Strategic Plan 'Our Shire, Our Future'*	Our Guide for Shaping the Shire to 2030 gives us a clear basis for our actions and decisions well into the future.
Urban Tree and Bushland Policy	Urban tree and bushland policy (public land) has been adopted.
Standard Instrument Local Environmental Plan	All councils must adhere to a template plan issued by the Department of Planning. It provides mandatory, optional and additional clauses from which a council may draft its local plan.
Stormwater Management Plans	Developed for management of stormwater within the water catchments.
Sustainability Action Plan	A component of the Environment and Sustainability Strategy.
Sutherland Shire Development Control Plan 2006*	Sutherland Shire Development Control Plan 2006 guides development within the area. Flood risk and wetlands management in the DCP places controls on the development of land to reduce risk to life, property and the resultant cost and to provide environmental protection to sensitive land.
Sutherland Shire Disaster Management Plan	The Georges River District Disaster Plan developed by Emergency NSW, describes the arrangements at the District level to effectively and efficiently prevent, prepare for, respond to and recover from emergencies. The regional Displan provides policy direction for the preparation of Local Displans, Local and District Supporting Plans and Local and District Sub Plans.
Sutherland Shire Local Environmental Plan 2006*	Contains controls for height, landscaping and zoning.
Sutherland Shire Urban Bushland Plan of Management 1990	The land that is covered under this plans of management exhibit biodiversity or habitat or features of natural beauty or significance.
Ten-year Financial/ Infrastructure Plan	Under the NSW Government's 2009 Integrated Planning and Reporting (IP&R) framework, all NSW councils must develop, at minimum, a 10-year strategic and corporate planning framework.
Water Saving Action Plan	Targets council's top ten water using facilities and provides a comprehensive analysis of council's water use at these facilities and assessing and identifying specific savings measures.

# SECTION 5 RESOURCES

#### **RESOURCES**

LGSA plus Climate Change resource information www.lgsa-plus.net.au/www/html/3637-needs-of-local-government-.asp

Sea level rise maps

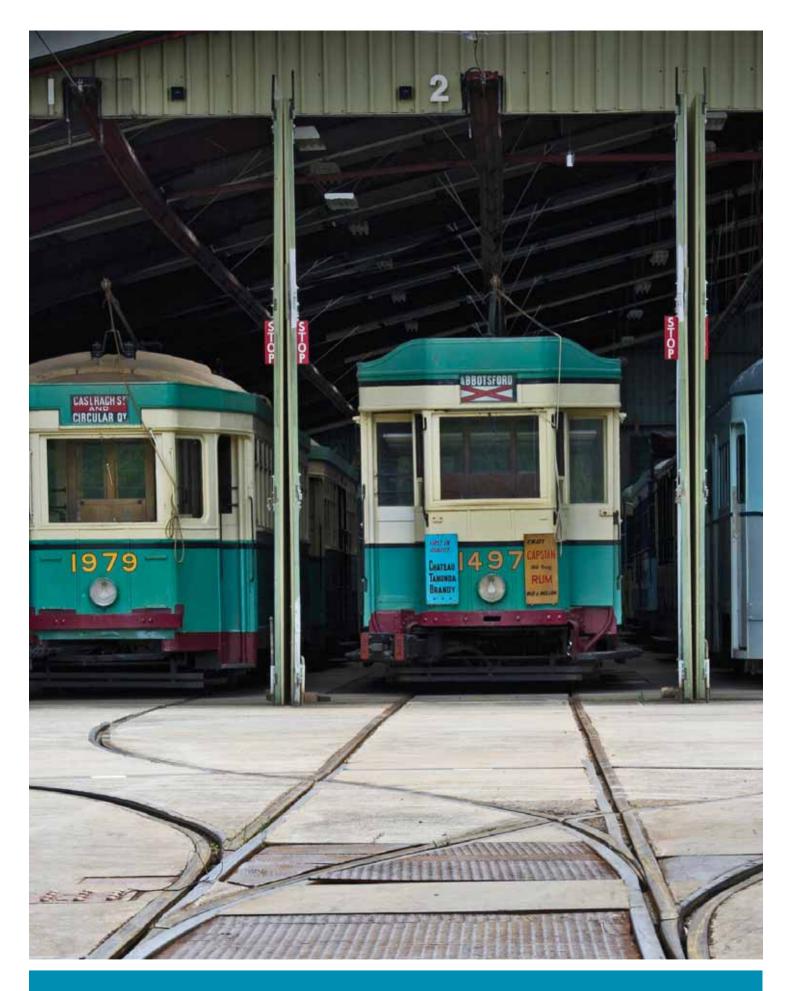
www.climatechange.gov.au/government/initiatives/australias-coasts-and-climate-change/adapting/mapping-sea-level-rise.aspx

Georges River Displan www.emergency.nsw.gov.au/plans/district

Department of Environment and Climate Change www.environment.nsw.gov.au

Department of Sustainability, Environment, Water, Population and Communities www.environment.gov.au





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