



Middle Creek, Narrabeen in 1957

1906 - 2006



# living environment

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## OUR AIMS

### **Protecting Nature**

Maintaining the health and diversity of the natural environment

### **Your backyard at home and at work**

Living in harmony with the environment

# LIVING ENVIRONMENT

## Protecting Nature

### Threatened Species

Warringah is home to more than 75 threatened plants and animal species. Warringah Council is actively improving habitat for all threatened species that live in Council managed reserves with community education programs, bush regeneration, noxious weed removal, feral animal control, fencing and other protection measures.

Warringah's Natural Area Survey identified all known areas containing rare or endangered plants during the year along with areas or habitats for rare or endangered animals. In a third of Warringah's 15 reserves the numbers of pest species decreased and in the remaining ten reserves the numbers were constant due to Council's fox, cat and rabbit threat abatement programs. A number of bandicoot, Swamp Wallaby and possum sightings indicated a trend towards sustainability and residents noted the return of the Long Nosed Bandicoot to Manly Dam and Dee Why Lagoon after many years of absence.

Council continues to participate in ongoing feral animal monitoring and control programs with 15 foxes and 34 feral cats removed from bushland reserves, golf courses, open space recreational areas and private properties. Six successful rabbit control programs were conducted in 580 hectares as part of the threat abatement program.

### Manly Dam

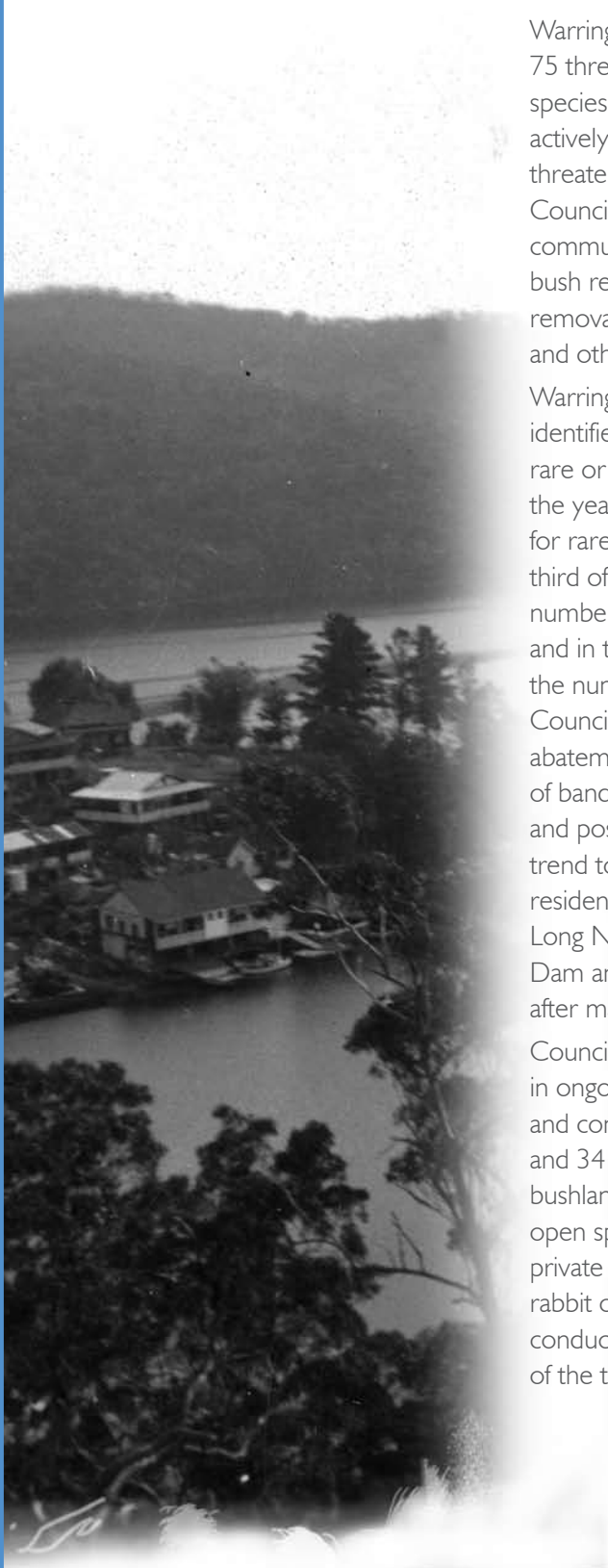
Manly Dam, also known as the Manly Warringah War Memorial Park, is the largest individual bushland reserve managed by a local council in the northern beaches area and covers 375 hectares. This was the first year of a three-year \$1.5million funded project to support bush regeneration, protect water quality and educate local residents on how to look after the waterway and surrounding bushland.

A survey conducted during the year found 66% of respondents had directly changed their actions around the home as a result of the 'Keeping Our Dam Alive' educational program.

Manly Dam is a major recreational area for a wide range of activities such as swimming, kayaking, fishing and water skiing. More than 400 people took part in a series of spotlight walks and bird and breakfast walks organised by Council. We also hosted four community days focusing on different environmental messages such as native plants and weeds, flora and fauna, history and Aboriginal heritage.

All residents in the Manly Dam area received a copy of a booklet on how to care for the catchment from home and more than 300 students from local schools attended excursions to Manly Dam.

A major stormwater quality program was undertaken in the Manly Dam catchment this year to target pollution hotspots and look at the impact of stormwater on downstream creeks.



Cottage Point 1906

## Water Catchments

Warringah and Manly Councils commenced a five-year action plan for the Manly Lagoon Catchment to improve water quality by removing polluted sediment and increasing tidal flushing. An entrance clearance operation was completed this year while dredging under and adjacent to Pittwater Road bridge is set for the coming year.

We also began implementing a new water quality-monitoring program to determine the status and trends in water quality and ecological health of Warringah's creeks. Additional components of the program that measure the status of our lagoons and determine the impact of stormwater will be launched next year.

A Floodplain Risk Management Study and Plan commenced to provide information on the level and velocity of floodwaters and on the distribution of flows across various sections of the floodplain at South Creek. The plan examines possible flood mitigation and management measures as well as helping to develop options for the creek rehabilitation plan.

Five coastal monitoring cameras were installed at Collaroy/Narrabeen Beach to monitor movements in sand over time. This information will assist in emergency responses for residents along the beach and become a tool for management decisions for programs such as sand replacement on the beaches.

## Lagoons

Council continued to actively manage the entrances of coastal lagoons in order to minimise flooding and maintain lagoon health. A number of mechanical breakouts were conducted during the year when water levels reached certain levels.

Warringah Council formed an Advisory Board in October 2005 to oversee the Narrabeen Lagoon Restoration Project. The first stage of the project will focus on Middle Creek and its environment with the second stage focusing on the central basin area of the lagoon. A Foreshore Management Plan for Narrabeen Lagoon was developed to address foreshore erosion and habitat enhancement. Particular points around the lagoon have been identified as needing protection from wind generated waves and mechanisms have been implemented to protect the banks from further erosion.

Dee Why Lagoon Bush regeneration works are continuing throughout the wildlife refuge area. Bush regeneration works were also undertaken along Greendale and Brookvale Creeks and on the northern fringe of Manly Lagoon.

## Bushland

Some 7,300 hours of bush regeneration work was carried out in high conservation reserves in Warringah this year. More than 380 volunteers worked on 80 different sites and planted 10,000 native trees and shrubs as part of the Warringah Friends of the Bush Volunteer Program.

A group of ten keen participants carried out weed control at Mermaid Pool and a team of weekend detainees from Silverwater Gaol were also instrumental in reducing weeds downstream of the site at Manly Creek.

The Stony Range Flora Advisory Committee and volunteers worked with Council to reduce the amount of weeds and protect bushland along the Stony Range boundary. Council also undertook 546 inspections of private land that border or support key bush regeneration sites as part of our noxious weeds education and eradication program.

More than 300 students from five schools were involved in the Duffy's Forest Education Program encouraging students to appreciate and care for bushland areas and native animals. The program involved a series of lessons on Warringah's threatened species followed by an excursion to one of the last remaining examples of Duffy's Forest Bushland.

# LIVING ENVIRONMENT

## Your Backyard at Home and Work

### Education

A number of educational initiatives were undertaken this year to support the community and their awareness of the local environment. Warringah participated in a number of community consultation sessions providing Council with feedback on ways to improve the communication of waste and recycling issues to the local community.

Warringah Council won two Local Government Excellence in Environment Awards this year with the Education category for our Business of Air Quality Program and the Biodiversity category for Sydney-North Regional Fox Baiting Program.

A World Environment Day Youth Expo attracted 2,500 school students over a period of three days to participate in interactive workshops in June 2006. More than 10,000 people attended a Community Expo Day at Dee Why's James Meehan Reserve on Saturday 24 June with a range of activities to show the community how they can reduce their impact on the environment.

Warringah and Pittwater Councils worked with the Department of Environment and Conservation on an extensive environmental education - Northern Beaches Sustainable Living Program. Educational activities under the program included 'Water Wise Gardening' and 'Green Cleaning' workshops as well as rock platform walks, bird watching walks and native garden workshops.

### Educating Children

Warringah Council provides funding to schools for environmental projects each year as part of the Eco Schools Grant Program. Schools can apply for up to \$2,500 for the development and implementation of a wide range of environmental projects including the establishment of vegetable or native gardens, installation of rainwater tanks or environmental excursions. More than \$52,000 was provided to 23 local schools this year.

Each term Council produces the Warringah Environmental Education Newsletter (WEEN) for local schools and school children again participated in the Warringah Kids Care Calendar designing posters to highlight how we can all work together to protect our environment.

The Waste Education Trailer visited 1,481 students at 15 schools during the year helping to promote the message of buying goods with less packaging. The trailer was repainted to reflect a new 'Being Waste Wise' campaign and was used 22 times at a variety of community locations including shopping centres, fairs and events. The trailer was also used for displays on how to establish a worm farm and compost food and vegetation.



Collaroy Beach in the 1940s

## Waste and Recycling

The total amount of waste collected in Warringah this year increased to 62,039 tonnes as the population increased by almost 1,000 people although the amount of waste collected per person decreased slightly. While we recycle more waste than we landfill the proportion of waste being recycled has slightly decreased from 53% to 51%.

Recycling rates amongst Warringah residents remained high this year and the Kimbriki Waste and Recycling Centre reached a major milestone of using 1.5 million tonnes of renewable resources from waste deposited at the site. Kimbriki is a solid waste landfill site directed by a Joint Services Committee of Warringah, Manly, Mosman and Pittwater Councils. During the year Kimbriki recycled 52,000 tonnes of vegetation, 60,000 tonnes of concrete/brick and 3,000 tonnes of metal products with 46,000 tonnes of waste going to landfill.

Council held two free chemical collections with more than 71,000 kilograms of waste collected from more than 2,200 residents. A further nine tonnes of computer waste was collected from 340 residents this year. Some 40 sites in Warringah were registered for Clean Up Australia Day with 428 tonnes of waste collected.

## Energy and Water Use

Council achieved three stars under the 'Every Drop Counts Business Program' and a total saving of 6,800 litres of water per day – more than two Olympic swimming pools every day. During the year we also completed and submitted a Water Savings Action Plan to the Department of Energy, Utilities and Sustainability. Council is now using bore water for sportsgrounds and investigating other opportunities to replace town water.

Warringah Council is also developing an energy savings action plan and continuing our commitment to the international Climate Change Protection Program. We reviewed our vehicle fleet to improve operational costs and reduce emissions by switching the majority of vehicles to four cylinders.

Ongoing energy efficiency upgrades at Warringah Aquatic Centre continue to reduce energy use and some 500 tonnes of greenhouse gas is saved each year with energy efficient heat pumps and lighting as well as solar heating for outdoor pools.

A grant of \$3,000 was received from the Department of Energy, Utilities and Sustainability to educate residents about alternative energy and promote Green Power within the Warringah area.

## Companion Animals

Warringah Council developed a Companion Animals Management Plan during the year and registered 1,097 dogs and cats in the area.

Two Pet Expos were held for Vacation Care Centres with children aged 5-12 learning more about the impacts of dogs and cats on native wildlife as well as safety with dogs. More than 700 pre-school children throughout Warringah received face-to-face lessons about safety around dogs in a bite prevention program.

Council undertook three 'Operation Cat' programs with the Cat Protection Society to offer a discounted desexing and microchipping service for local domestic cats.

More than 3,500 people and 800 dogs attended the sixth annual Dogs Big Day Out at Frenchs Forest in October. The event provides Council with a valuable opportunity to communicate with dog owners and raise awareness of responsible dog ownership.

Some 32 dogs were declared dangerous during the year and an inspection program was developed to monitor properties where dangerous dogs are kept to ensure compliance with the requirements for child proof enclosures, warning signs and restrictions.