

state of the environment report



Language Assistance

English

This document contains important information. If you need help to understand or read it, please ask a friend or call into the Civic Centre, Devlin Street, Ryde. Staff can assist by contacting the Telephone Interpreter Service.

Ryde City Council can be contacted on 9952 8222.

Italian

Questo documento contiene informazioni importanti.

Se hai bisogno d'aiuto per capirlo o leggerlo rivolgiti ad un amico o recati al municipio: Ryde City Council, Civic Centre, Devlin Street, Ryde. Il personale può assistere coloro che non parlano inglese tramite il servizio telefonico d'interpretariato (TIS).

Puoi contattare il Municipio telefonando al 9952 8222.

Chinese

這份文件包含有重要的資料。如果您需要人幫助您弄明白和閱讀這份文件,您可以請您的一位朋友幫助您,或致電給 Ryde 的市議會市民中心。 (地址是 Ryde City Council, Civic Centre, Devlin Street)市 議會的職員可以為那些不會認英語的人,通過電話傳譯服務,提供幫助。您可以致電 9952 8222 聯絡市議會。

Arabic

غتوي هذه النشرة على معلومات هامة. إذا احتجت إلى مساعدة في قراءتها أو فهمها يُرجى طلب المساعدة من صديق لك أو الذهاب إلى مجلس مدينة رايد فيCivic Centre, Devlin Street,Ryde يستطيع الموظفون مساعدة الأفراد الذين لا يتحدثون الإنكليزية وذلك باستعمال خدمة الترجمة الشفهية. يمكن الإتصال بالجلس على الرقم ATTY 242

Korean

이 서류는 아주 중요한 내용을 담고 있습니다. 만일 이해하시는데 어려움이 있으시면 친구분의 도움을 받으시거나 Devlin Street, Ryde의 Civic Centre안에 있는 Ryde City Council로 연락 주시기 바랍니다. 직원들이 전화 동역 서비스를 통해서 도와 드릴것입니다. 전화번호는 9952 8222 입니다.

Armenian

Այս փաստաթուղը կը պարունակէ կարեւոր տեղեկութիւններ։ Եթէ զայն ճասկնալու կաժ կարդալու ճաժար օգնութեան պէտք ունիք, դիմեցէք ընկերոշ մը և կամ ճեռաձայնեցէք Բայդ Քաղաքապետարան Chic Centre, Devlin Street, Ryde: Քաղաքապետարանի անձնակազմը օգտուելով ճեռաձայնային թարգմանութեան սպասարկութենէն, կրնալ ձեզ օգտակար ճանդիսանալով։ Քաղաքապետարանին կարելի է կապուիլ ճեռաձայնելով 9952 8222 թիւին։

Foreword

Striking the right balance between urban development, environmental protection, economic and social needs is a challenge for all levels of government around the world.

While national and state governments set overall policy frameworks, many environmental, economic and social issues originate at a local level. As the arm of governance closest to the community, councils have a pivotal role to play in anticipating, understanding and responding to those issues.

In fulfiling its role Ryde City Council continues to build on the many avenues of community consultation which are now open. These extend from negotiations over large and small building developments to strategic plans of regional significance, such as stormwater management, estuary and catchment management. Consultation undeniably slows decision-making but it reduces the likelihood of poor decisions made in haste, and is inherent in a democratic system.

This State of the Environment Report is an annexure to the 1999 Annual Report and relates to the activities of Council and the community in the 1998/99 financial year. It will be followed up by a more comprehensive report in the year 2000, which will set the tone of environmental reporting for the next four year period of Council.

May I take this opportunity of paying tribute to the many individuals and groups who have contributed in a positive way to the state of the environment of Ryde in the past year.

Councillor Edna Wilde

Edna Wilde

Mayor

September 1999



Contents

3	General Manager's Perspective
4	Ryde is planning for "now and the future"
7	How are we coping with transport issues?
10	What about stormwater management and water quality?
12	Air quality - a metropolitan problem
15	Responding to pressures on bushland and biodiversity
20	Why worry about mosquitoes?
22	How are we handling garbage and waste?
25	Noise - a problem for some
26	How is heritage managed in Ryde?
30	Our open spaces
33	Managing the environment
34	Indicators and Trends
35	Recommendations for the Management Plan
37	Acknowledgements

General Manager's Perspective



In my introduction to the 1998 State of the Environment Report I spoke of the need to involve the community in the development of environmental management strategies.

To further that aim a Community Environmental Management Strategies Group has been established following public advertisement for expressions of interest. Members have a range of expertise in areas of natural resource management, biodiversity, water and waste-water engineering, environmental and public health.

The group has the following terms of reference:

- To examine Council's State of the Environment Reporting process, and linkage between the current State of the Environment Report and Council's 1999/2002 Management Plan.
- To consider issues of environmental monitoring.
- To make recommendations to me for the development of environmental management strategies, so that the recommendations can be considered in policy development. (Such strategies being consistent with the proper management, development, protection, restoration, enhancement, and conservation of the environment, and promotion of the principles of ecologically sustainable development.)
- To make recommendations for ongoing community involvement in environmental management strategies beyond the adoption by Council of the 1999/2002 Management Plan.

This current State of the Environment Report primarily addresses the situation in the year ending 30 June 1999. As always, your feedback on this report will be most welcome. We are however looking forward, and consideration will be given to the opportunities for regional or catchment based reporting in future years.

Mrs G Brus General Manager

Ryde is planning for "now and the future"

Population and Housing

State

Council has continued its positive response to the issue of urban consolidation by encouraging the construction of high quality medium density residential development. This has included the publication of a new *Villa Homes Development Control Plan* which emphasises the need to ensure that development is designed in such a way as to erect good quality development.

It should be noted that in the past 12 months Council has received 1510 development applications, 261 building applications and 647 construction certificates.

Given the length of time since the last detailed planning provisions were introduced for the City there has been the need to update these 1979 planning provisions to ensure that they are compatible with a City emerging into the 21st Century.

Response

There have been a number of important planning provisions introduced since the last SoE report. These planning provisions include:

- A new comprehensive Local Environmental Plan for the City (at time of writing on community exhibition).
- An extensive study (including mapping) of the City's vegetation on both private and public land.
- A number of Local Environmental Plans designed to ensure appropriate development is permitted within the City including a Local Environmental Plan that prohibits telecommunication facilities in residential zones. This is accompanied by a Development Control Plan which places further restrictions on where these facilities can be constructed, e.g. they must be at least 300 metres from residential areas or public places such as schools.

The new comprehensive draft Local Environmental Plan No. 99 is entitled "For Now and the Future". This document will replace the Ryde Planning Scheme Ordinance. This new LEP addresses concerns of the community such as the protection of amenity and provides for long term protection of the environment and the economy.

The LEP has many new features such as:

- Protection of heritage
- Protection of significant vegetation
- Limit on advertising signs
- Restrictions on commercial vehicles in residential areas





Recent residential development in Ryde Road

New opportunities are also created as the LEP introduces the concept of place controls which enable the character of specific areas to be protected and directed. These controls relate to business centres at Top Ryde, West Ryde, Meadowbank, Eastwood and the North Ryde Employment area. By having specific controls applicable to each centre, developments can be designed to fit better with the character of the area in terms of both the natural and built environment.

"For Now and the Future" has ecologically sustainable development as one of its main aims and objectives. Additionally other issues such as the use of grey water together with the quality of storm water will be addressed by way of Development Control Plans. This new planning instrument has been designed to ensure that the most appropriate and latest best practice procedures are followed. The draft plan is presently on community exhibition.

Business and Employment Centres

In the development of any area it is important to achieve a balance between the built and natural environments.

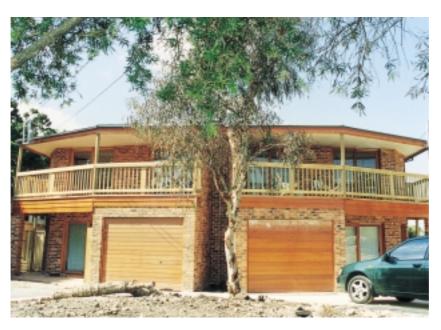
The business and employment centres in the City of Ryde offer the residents of Ryde opportunities for work, recreation and the purchase of goods and services. These centres are seen as important indicators in the quality of life and the environmental well-being of the City.

A healthy and active network of centres, in which residents draw upon the full range of resources, is a key element in creating sustainable environments.

Pressure

There is a continuing pressure to ensure that the business and employment centres evolve in an orderly way which ensures that they provide good environmental amenity, accessibility and the opportunity for the establishment of retail and commercial uses. The urban village concept which was detailed in the last State of the Environment Report continues to be the focal point for the planning of these centres.

There continues to be pressure to rezone surplus government land in the vicinity of the M2 Motorway.



Negotiations continue with representatives of the State Government with regard to these and other surplus land throughout the City.

Infill development - duplex in Badajoz Road

Ryde is planning for "now and the future"

Population and Housing

Response

The masterplan for the West Ryde urban village was implemented by way of a Local Environmental Plan which rezoned West Ryde in accordance with the urban village concept.

In February Council adopted a masterplan for the Eastwood business centre and action is currently underway to transfer this masterplan into a statutory document.

Council has also placed the Meadowbank masterplan on public exhibition since the publication of the last State of the Environment Report. This occurred in October 1998.

Subsequent to this the Minister for Urban Affairs and Planning placed a State Environmental Planning Policy on the area of Shepherds Bay. While this SEPP calls for the preparation of a masterplan, the requirements are slightly different to those adopted in Council's preparation of a masterplan. Consequently, discussions are ongoing with the Department of Urban Affairs and Planning which has been giving consideration to Council's masterplan. Once resolved the masterplan will be transferred into a statutory document.

Tree Preservation and Management

Council has also acted in relation to the question of trees by introducing a new Tree Preservation Order and Tree Management Policy. This policy encourages residents to remove noxious trees. The new policy provides that where Council grants approval to remove a tree it can require the applicant to replace the tree with an advanced tree of an appropriate species and to maintain that tree for a specified period.



Construction well underway at Nile Close

An interesting concept at Riverside Corporate Park



How are we coping with transport issues?

Public Transport

Statistics on the use of public transport in Ryde have not been updated since previous State of the Environment Reports. However, it is apparent that the great majority of Ryde residents and workers continue to use motor cars. The use of public transport would still appear to be predominantly for journeys to work by persons living in close proximity to railway stations and bus routes.

Response

Ryde City Council continues to advocate the early commencement of construction of the Parramatta - Chatswood Railway, subject to stringent environmental protection controls and selection of the optimum route. The outcome of the Environmental Impact Study (EIS) is still keenly awaited.

During 1998/99 the following public transport projects have been commenced:

- An additional wharf at Kissing Point to serve the Parramatta Circular Quay Rivercat route spill over
- Installation of a continuous transit lane along Victoria Road, between Cressy Road and Gladesville

During 1998/1999 public transport projects under investigation include:

 Bus priority measures to facilitate bus operations and discourage through traffic in the Top Ryde Shopping Centre.

Private Transport

The efficiency of the operation of the arterial road network is considered a paramount concern. Any overloading of the arterial system tends to divert traffic to local residential streets.

However on a positive note the completion of the Devlin Street/Victoria Road Interchange project in early 1999 was a significant improvement.

Response

The installation of traffic calming measures along selected local roads continues in order to reduce the impact of through traffic spill-over on the local traffic network.

In the North Ryde Industrial Area, upgrading of the intersection of Lane Cove Road and Waterloo Road was completed. Further upgrading of the intersections of Lane Cove Road/Talavera Road and Epping Road/Wicks Road is being planned.

Victoria Road Olympic Route

Victoria Road will be the key Olympic route linking Sydney and the Homebush Olympics site. The route follows Victoria Road to Church Street and across the Ryde Bridge to the Olympic site. In consultation with Council, the RTA is proceeding to implement a continuous transit lane from Top Ryde to Gladesville Bridge by providing three through lanes in the peak direction, by elimination of the "S" lane, road widening or tidal flow arrangement. This will increase road capacity and improve travel times for buses and multi-occupancy vehicles.

How are we coping with transport issues?

Macquarie Park/North Ryde Transport and Traffic Project

The existing road system of the Macquarie Park/North Ryde area remains at capacity. There is a continuing need to review the transport infrastructure of the area having regard to likely future building development. Consultants were commissioned to carry out a traffic and land use study in the area but this has been held in abeyance awaiting the EIS for the rail link between Parramatta and Chatswood.

Top Ryde Traffic Transport Management

Council has endorsed the Top Ryde Transport Study and the preparation of detailed design plans is underway. Implementation of all recommendations of the Top Ryde Study are to be completed in three years time, dependant upon funding from an external source.



Motor vehicles major contributors to air pollution

M2 Before and After Study

Council has resolved to request the Roads and Traffic Authority to advise Council as to the current status of the Eastwood County Road and all studies pertaining to this route.

The traffic on Epping Road west of Herring Road has decreased from 74,000 to 40,200 vehicles per weekday since the opening of the M2.

Since the opening of the M2 there has been marginal or no decrease in traffic volumes along Lane Cove Road and Delhi Road.

Since the opening of the M2 there has been an increase in traffic volumes east of the intersection of Epping Road and Pittwater Road. The study confirms the need for a link between the M2 and the Gore Hill Freeway.

Pittwater Road Traffic Study

More than half of the recommended improvements have been implemented. Further works are dependent upon funding from an external source.

Road Safety and Pedestrian Bicycle Amenity

There has been a continued decline in motor vehicle accidents/casualties on Ryde Roads over the past ten (10) years, however the recent downward trend in accident numbers and casualties is levelling off. Accident and casualty trends are shown in the following table:

Accident and Casualty Trends	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Accidents	1149	1115	1156	983	898	912	986	928	952	919	895*
Killed	13	14	7	4	9	5	3	3	4	5	1*
Seriously Injured	108	108	109	99	72	83	76	64	95	85	•
Other Injured	476	428	428	353	333	281	241	205	308	226	•
Total Casualties	597	550	544	456	414	369	320	272	407	316	•

^{*} Provisional data • Data not published

Response

Council has continued its policy of improving safety and traffic flow at the most critical locations in the City.

Traffic calming measures and blackspot programs have improved safety and amenity in Council's road system.

Completion of the Devlin Street/Victoria Road Interchange project will change the traffic patterns and eliminate several 'blackspots' along Victoria Road and Church Street.

Council has requested the Roads and Traffic Authority to investigate and improve two other intersections - Epping Road and Culloden Road, and Marsden Road and Lawson Street, as both intersections have a bad accident history. In conjunction with Ryde Hospital and Community Health Services, and the Roads and Traffic Authority (RTA), a number of projects were launched in 1998/1999 to increase community awareness and support of pedestrian safety issues in Ryde.

Council has continued implementation of the Pedestrian Amenity Projects. The following identifies the key traffic facilities completed during 1998/1999:

Traffic Flow Improvements

Intersection of Waterloo Road and Lane Cove Road

Traffic Calming

- Pittwater Road between Epping Road and Victoria Road
- Denistone Road at Ryde Hospital
- Rowe Street one way between Trelawney Street and Shaftsbury Road

Roundabouts

- Vimiera Road and Pembroke Road
- Charles Street and Parry Street
- Pittwater Road and Venus Street (by Hunters Hill Council)
- Pittwater Road and Rene Street Reconstructed Pedestrian Refuge Island
- Herring Road at Dora Street and at Patricia Street
- Watts Road at North Road Intersection

50 kph Urban Speed Limit

Council supports 50kmh general urban speed limit in its entire area including all collector roads but excluding industrial precinct in North Ryde. The most significant benefit of 50kmh general urban speed limit is in crash avoidance and injury severity. RTA has indicated that fatalities have dropped in the areas where the trial was conducted. The NSW Police Service support the implementation.

Bicycle Networks

Several bikeway projects in progress during 1998/99 include:

- Shrimptons Creek Herring Road to Kent Road route
- Eastwood to Meadowbank Route
- The bikeway link from Talavera Road via Fontenoy Road to De Burgh's Bridge, then Riverside Drive in the Lane Cove River National Park
- John Whitton Bridge for access across the Parramatta River



50 kph urban speed limit

What about stormwater management and water quality?

Council's Management Plan

The Management Plan for 1998/1999 "has built its strategy around properly managing, developing, protecting, restoring, enhancing and where appropriate, conserving the natural, physical, social, cultural and economic environment of the City of Ryde".

These strategies continue to be implemented through:

- stormwater management plans completed
- flood control management with construction continuing on the West Ryde Stormwater Drainage Tunnel
- maintenance of the drainage infrastructure with reconstruction in Smith, Henry, Forsyth, Rowe, Brendon, and Bygrave Streets as well as Kinson Crescent and Burrows Park
- street and gutter cleaning
- gross pollutant traps
- leachate collection and disposal from Porters Creek landfill
- development and building controls
- regulation enforcement on illegal discharges
- remediation of Shrimptons Creek commenced including bush regeneration and the installation of a number of gross pollutant traps. This work is being funded with a Stormwater Trust Grant

Recommended Indicators

The Department of Local Government "Environmental Guidelines To Promote Ecologically Sustainable Development' provide 'recommended indicators' to monitor environmental conditions and trends. For the water environment these include:

Climate

In previous SoE reports, average monthly rainfall figures have been graphed to indicate any trend in climate change. Rainfall figures are obtained from Macquarie University, and from 1 July 1998 to 30 June 1999, excluding November 1998, a total of 1341.4 mm was recorded. Figures for November 1998 were unobtainable due to technical problems at the time of going to print. The 28 year average for the 11 month period is 1057.8mm, making 1998/1999 a wetter year than average, and up 22% on 1997/1998.

Stormwater Management Plans

Council was served notice by the Environment Protection Authority to prepare Stormwater Management Plans by July 1999 for the Mid Parramatta River, Lower Parramatta River and the Lane Cove River catchments. These plans have been completed and after being placed on public exhibition in draft form, have been submitted to the EPA for approval. Provision has been made in the 1999/2002 Management Plan of Council to implement the measures recommended in these Plans.

Buffalo Creek - litter spoils the picture



Water Quality:

The Stormwater Management Plans endorse:

- An audit of existing discharge points to confirm the locations where the installations may be contributing to poor water quality
- Implementation of education programs
- Development of restoration, monitoring and works programs supported by policy and funding reviews

Monitoring of the water quality of Porters Creek continued on a monthly basis, with the following results obtained from sampling up and downstream of the Porters Creek Depot Landfill.

Nitrite and Nitrate as N	Max. difference 1.06 mg/l	Min. difference 0.12 mg/l
Ammonia as N	Max. difference 4.8 mg/l	Min. difference 0.1 mg/l
Total Kjeldahl Nitrogen	Max. difference 9.5 mg/l	Min. difference 0.1 mg/l

Collection of silt and litter from the street and drainage pits is carried out on a regular basis to prevent these materials entering the natural waterways. Figures for 1998/1999 are:

- Street sweepings: 1070.1 tonnes (up 1% on last year)
- Ryde Gross Pollutant Trap: 17.1 tonnes from January 1998 to date.

A further emptying of the trap is scheduled for October 1999 as part of Water Week activities.

Council participated in the Lane Cove River Catchment Day (11 March, 1999). This is a Streamwatch event organised and co-ordinated by Cheltenham Girls High School and Hornsby Council. It involves taking water samples at numerous places across the Lane Cove River Catchment. A report, available in the Ryde Library, has been compiled detailing the results of this water quality testing.



Room for improvement - we all need to work on this!

Air quality - a metropolitan problem

State of Regional Air Quality

Air Pollution Indices

The air pollution indices published daily by the NSW Environment Protection Authority (EPA) are our primary indicator of local air quality - these indices combine measurements of fine particles, nitrogen dioxide, and ozone in the lower atmosphere. Each of these pollutants is primarily due to human activities and play a major role in the development of visible pollution of modern cities.

Ryde is located at the junction of the three metropolitan air regions. The following table indicates the figures for air quality obtained from the EPA's web page www.epa.nsw.gov.au

Ryde City Council Bikeways Network



Air Pollution Index	Total No of Days
	Total Ho of Days
Low	
North West	260
Central	296
South West	302
Total	858
Medium	
North West	877
Central	68
South West	54
Total	209
High	
North West	8
Central	1
South West	9
Total	18

Regional Air Indices, July 1998 - June 1999

Pressure on Regional Air Quality

Homebush Bay

During 1998 dust from the Olympic Co-Ordination Authority (OCA) siteworks at Homebush Bay was an intermittent source of nuisance to residents of Melrose Park.

Public concern over air quality was further heightened by a proposal to treat scheduled chemical wastes on site at Homebush Bay North; the site is 400 metres from the nearest residences at Melrose Park.

Response for Regional Air Quality

Homebush Bay

Representations were made to the EPA and to the Olympic Organising Committee (OCA) about the dust issue, and additional dust controls were implemented.

OCA responded to toxic air pollution fears by facilitating consultation through the Homebush Bay Environmental Reference Group. Local residents were represented through the Meadowbank West Ryde Progress Association and the Lancaster Environment Group.

Ryde City Council made political representations and a submission to the EPA during the licence application process. A licence was subsequently granted subject to stringent health and safety conditions, and the treatment will take place during the next State of the Environment reporting period.

Action for Air

Following the 1998 launch of its 25 year plan *Action for Air*, the NSW Government has released *Action for Transport 2010 - an Integrated Transport Plan for Sydney*. This strategy aims to improve Sydney air quality by meeting the following vehicle kilometres travelled (vkt) targets:

- Halting the growth in per capita vkt by 2011.
- Halting the growth in total vkt by 2021.

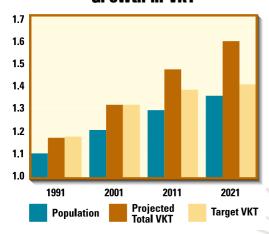
Meeting these targets will require a 43% reduction in the overall growth of vkt between 1991 and 2021. We need to change the way we travel to work.

To this end Council continues to support the Parramatta to Chatswood rail link, and improved bus routes throughout the City.

Vehicle Kilometres Travelled - Why use this indicator?

The relationship between the distance travelled by motor vehicles and pollutant emissions, energy use, noise and amenity impacts is not linear, due to factors such as vehicle age and type, fuel type, driving conditions and emission control technology and standards. However, vkt is important in reflecting community behaviour.

Growth in VKT



Another indicator of transport pressures is vehicle ownership which generally increases with economic growth. However, if ownership remains constant, a fall in average kilometres travelled by vehicles reflects a decrease in vehicle impacts.

In terms of air pollution, vkt is a useful way of tracking the contribution of motor vehicles to regional scale air quality problems.

Air quality - a metropolitan problem

State of the Local Air Quality

Local Complaints

The following table shows the drop in complaints from residents to Council about the quality of local air in the last year, ending June 30, 1999.

Number of Complain	its			
Air Pollution (Smoke, Dust, Odours)	July 1995 - June 1996	July 1996 - June 1997	July 1997 - June 1998	July 1998 - June 1999
Total	37	47	67 (+29 from EPA)	55

Air Pollution Complaints

Pressure on Local Air Quality

Motor Vehicle Registrations

The figures for this year's vehicle registration table are quite different to previous years, as the figures have been adjusted for postcodes shared by more than one local government area. The adjustments are based on the ABS postcode/Local Government Act 1993 population split statistics from Census 1996. Discussions with RTA indicate an increase of approximately 5,000 passenger vehicles this year in the Ryde LGA.

	Diesel	LPG	Unleaded Petrol	Petrol & LPG	Leaded Petrol	Fuel Type Unknown	Other Fuel Types	Group Total
Bus	107	0	13	0	8	9	0	137
Motorcycle	0	0	594	0	225	7	2	828
Domestic Trailer	0	0	0	0	0	0	4,461	4,461
Plant & Tractor	96	10	6	8	6	8	2	136
Prime Mover	38	0	0	0	0	1	0	39
Rigid Truck	632	11	414	24	164	54	1	1,300
Passenger Vehicle	e 78	97	37,201	146	7,254	1,640	34	46,450
Utility & Van	691	34	4,193	71	901	109	6	6,005
Total	1,642	152	42,421	249	8,558	1,828	4,506	59,356

Responses for Local Air Quality

Vehicle Registrations Ryde Local Government Area

Tree Plantings

Council continues to give trees to local residents, to bush regeneration groups and to the Greening of Ryde activities, and when we include the planting Council undertakes through its own projects, many thousands of trees and shrubs have been planted throughout the City.

Bike Ways

Council is involved with local bike groups and the RTA in the planning and development of bikeways throughout the City. There are 21 kilometres of established bikepaths, with a further 1,225 metres developed over the last 12 months.

Ryde's Local Air Quality Management Plan

No further progress has been made in the development of the LAQMP for Ryde.

Responding to pressures on bushland and biodiversity

Indicators of local biodiversity change

An environmental indicator is defined as an aspect of the natural world that can be monitored to provide information on environmental conditions and trends.

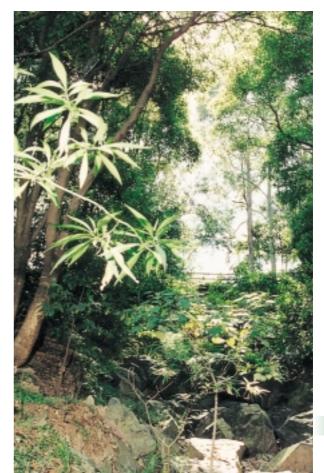
Possible indicators for the Ryde area

- Weed invasion of bushland is a significant factor adversely affecting local biodiversity. Adequate funding is required to address this problem.
- Habitat destruction by clearing of bushland. All remaining bushland in the Ryde area is important for the conservation of biodiversity. The Draft Ryde Local Environment Plan will have significant implications for management of local biodiversity.
- The apparent absence of bandicoots in the Field of Mars Wildlife Reserve is a cause of concern. This may be consistent with a decline in bandicoot numbers in the whole of Ryde and Sydney metropolitan area. Foxes may be implicated in this decline.
- Some bird species have become rare in recent years and others have become locally extinct, these declines further highlight the need to conserve all remaining bushland. (Mr. E. Hoskin local ornithologist). An Environmental Management Strategies Group (EMSG) was formed early in 1999 to coordinate community involvement in Council's environmental management strategies. This group has recognised that Council needs to set further defined goals for biological diversity reporting an overall statement of Council's intent.

Transportation Corridors

- The construction of the proposed rail link from Parramatta to Chatswood via Epping may impact on bushland in Lane Cove National Park. The outcome of an Environmental Impact Statement (EIS) is awaited.
- Eastern M2 link to Gore Hill Freeway. These works could impact on bushland and may result in further degradation of the Lane Cove River valley. Other concerns in this area include;
- Weed invasion from Delhi Park i.e.
 Paspalum quadrifarium, which was present before the M2 was constructed.
- Access road off Epping Rd to Energy
 Australia facilities not secured and dumped material pushed into bushland
- General servicing of M2 drainage devices required at Busaco Rd, Marsfield
- Completion of bushland rehabilitation at Terrys Creek bridge
- Wicks Park and other surplus bushland areas need protective zone classification.

Creekline rock treatment - Brush Farm Park



Responding to pressures on bushland and biodiversity

Response

- Roads and Traffic Authority, community representatives and Ryde City Council are assisting Hills
 Motorway Consortium in addressing ecological rehabilitation of selected areas of the M2 Tollway corridor.
- Council Officers are preparing an eradication plan for Paspalum quadrifarium in consultation with NSW Agriculture and Lane Cove National Park.
- The south-east corner of the Epping and Pittwater Roads intersection has undergone a \$15,000 rehabilitation works program, including the removal of exotic vegetation and storm water drainage works.
- Revegetation works commenced at Terrys Creek Bridge have been vandalised and the situation is under review.
- The Roads and Traffic Authority funded a bicycle track access to Shrimptons Creek, a \$10,000 bush regeneration project and a \$5,000 "rock ramp" structure at Epping Road.

Development pressures and responses

Some major developments of vacant land have occurred this year in Ryde City including;

- AMP tower on Herring Road at Macquarie Park.
- Riverside Corporate Park at North Ryde has impacted on bushland, including a protected species, Darwinia biflora. National Parks and Wildlife Service (NPWS) is preparing a general Recovery Plan for all Darwinia biflora in the Sydney area. The North Ryde Residents Group and Ryde-Hunters Hill Flora and Fauna Preservation Society will submit a report to the Parliamentary Standing Committee to recommend preservation of the remaining remnant bushland at Riverside Corporate Park.
- Proposed developments may impact on the remaining bushland in Wicks Park. Consultation continues between Council and the Department of Land and Water Conservation.
- Development of land adjacent to Marsfield Park on Culloden Road has resulted in the loss of approximately 56,000 sq. m of horse paddocks. However, plans are in hand to increase the native bushland area in Marsfield Park.

Protection and Conservation of Fragmented Remnant Vegetation

Several small parcels of land are in need of protection and negotiations are proceeding with owners and occupiers, e.g.

- Unprotected land owned by the Roads and Traffic Authority in Epping contains interesting bushland with a shale based floristic composition.
- A significant fragment of Blue Gum High Forest on the dry clay Marsfield ridgeline is currently unprotected.
- Turpentine-Ironbark Forest at Marsfield Park in an area leased by the Ryde Pony Club requires protection.
- Crown Land containing remnant bushland on Wicks Rd adjacent to the Waste Transfer Station is in need of protection and management.
- Macquarie Park Cemetery contains isolated remnant native canopy trees and a small section of shale based understorey vegetation. Major landscaping improvements are planned utilising locally sourced native trees.
- Ecosystem and species diversity across Ryde have not been thoroughly surveyed, mapped and digitised. However, some of the vegetation cover has been recorded into Council's Geographic Information System (GIS) with the aim of measuring changes in vegetation cover between 1995 and 1998.

To assist protection of vegetation communities and rare plants Council commissioned a survey of bushland vegetation communities within the Ryde Local Government Area (LGA). The plant species *Melaleuca deanei* F Muell. has received Preliminary Determination as a VULNERABLE SPECIES on Schedule 2 of the Threatened Species Conservation Act 1995. This plant occurs in a bushland reserve in Ryde.

Bushfire Management 1998/99

- A number of ecological burns have occurred in parks across Ryde. Two of the larger burns were at Pembroke Park (May 1999) and Pages Creek (October 1998). The latter was undertaken in association with a grant awarded to Ryde Hunters Hill Flora and Fauna Preservation Society for bush regeneration works in the same area.
- A joint regional plan for bushfire management and operations has been prepared covering the local government areas of Willoughby, Ryde, Hunters Hill and Lane Cove. This will soon be released for public comment

Current status of Plans of Management for bushland in Ryde

- Significant legislative changes to the formulation of natural areas Plans of Management have been directed by the state government
- The adopted Plans of Management for Lane Cove National Park, Wallumatta Nature Reserve and the final report of the unpublished Fairyland Conservation Management Plan are available in Ryde City library.

Pest Species - pressures and response

- Weed infestation is increasing at the interface between Boobajool Reserve and the North Ryde RSL sports oval. Rehabilitation actioned.
- Bushland at Ryde Hospital is slowly degrading with exotic vine infestation.
 Negotiations for restoration are underway.
- A large infestation of Alligator weed Alternanthera philoxeroides has established in eighteen foreshore parks along the Parramatta River. In consultation with NSW Agriculture and Parramatta City Council trial treatments will be conducted.



Lantana - a pretty flower - a noxious weed

- A population of Paspalum Paspalum quadrifarium has been identified in an area adjacent to Delhi Park, Delhi Road and along Epping Rd.
 Eradication will be undertaken in consultation with interested parties.
- Rabbit and fox populations are a cause of concern in Ryde and across northern Sydney.
- A regional fox baiting campaign is being undertaken by local councils and the National Parks and Wildlife Service.
- Council has formally adopted the Sydney North Regional Weed Strategy.
- "Stop the Spread" noxious weed pamphlet has been produced by the Northern Sydney Region Noxious Weed Committee and is available at Council.

Responding to pressures on bushland and biodiversity

Creek line pressures

Many bushland creek lines have eroded and afford minimal aquatic habitat:

Brush Farm Park - Archers Creek

- Under the Stage Two Stormwater Trust grants Ryde City Council received a \$82,085 grant for Brush Farm Park and Marsden High School. Works include a fauna survey before and after the project and the construction of creek bed channel demonstration structures. These structures are designed to assist in the creation of improved aquatic habitats and water quality by creating subtle vortexes, which affect the flow dynamics and therefore water temperature.
- The Denistone Catchment Reserves Urban Bushland Study (Brush Farm Park and Lambert Park Natural Areas Appendix II) to the Natural Areas Draft Plan of Management outlines a management plan indicating the future works financed in 1999/2000.
- A \$7,000 grant was received from the Department of Land and Water Conservation for the construction of seven Schauberger Off-Set Log Sill V-Weirs in Brush Farm Park. A \$5,000 grant was also made by the Duck River/Homebush Bay CMC for a gross pollution trap and associated works at Eric Street and Brush Road.

Burrows Park - Buffalo Creek

The design and construction of remedial works to the storm water outlet, adjacent to Princes Street, is completed. The National Trust is currently undertaking bush regeneration.



Horsing around in Marsfield

Macquarie Hospital Grounds - Kittys Creek Headwaters

A second \$5,000 grant has been awarded to Macquarie Hospital to build a second water quality and frog pond at the headwaters of Kittys Creek in the grounds of Macquarie Hospital.

Pryor Park- Kittys Creek

An Environmental Trust grant application for \$65,000 has been lodged by a community group for the restoration of eroded stream banks on Kittys Creek.

Darvall Park Stream Remediation Survey and Design

Council selectively tendered for the survey and design of construction works to create a naturally functioning creek line that will arrest erosion, stabilise the steam bed and banks and convey a natural appearance.

Mallee Reserve Creek Restoration Project

A detailed design and construction brief has been completed for this project. The restoration of the creek in Mallee Reserve involves a combination of civil works and bush regeneration.



Laurel Park - Buffalo Creek

A design and construction brief has been completed for a stormwater outlet at Buffalo Road, which demonstrates a model for minor stormwater erosion works. The project incorporates a gross pollutant trap.

Restoration Funding - Upper Pages Creek

Council has accepted a funding offer of \$78,470 from the Roads and Traffic Authority. Council will manage a three-year project to upgrade the bushland in the Pages Creek Corridor.

Shrimptons Creek Drainage Catchment

Ryde City Council successfully applied for a \$415,000 Stormwater Trust grant to carry out rehabilitation and pollution reduction measures along Shrimptons Creek.

Nundah Reserve Outlet Works

Due to additional storm water being piped into the above reserve a drainage solution was required to address the increased water flow. An application has been submitted for a Rivercare award to acknowledge the unique design.

Ecological diversity base line data

Local ornithologist, Mr. Ern Hoskin, has written a brief history of the avian life of Ryde City and documented a six-page list of the birds of Ryde City. This sort of local data is rare, and resources within the community and in local government are scarce. However, Council is co-operating with the Key Centre for Biodiversity and Bio-resources at Macquarie University, allowing access to a variety of data sets from the University's nature reserve.

A stalwart of bush regeneration at Brush Farm Park



Why worry about mosquitoes?

State

In the 1998/99 mosquito "season" New South Wales recorded its highest ever number of notifications of human arborvirus infection (1,219 cases of Ross River and 238 Barmah Forest infections). Notifications were highest in the Greater Murray, Mid North Coast, Northern Rivers and Hunter Regions.

The major concern for the near future is that environmental models for predicting Murray Valley Encephalitis virus in south eastern Australia suggest possible activity for the 1999/2000 Summer.

Local Trends

Between December 1998 and March 1999, 10 mosquito complaints were recorded in Ryde, the lowest level since 1995/96.

This reflects a drop in the number of adult mosquitoes trapped and the continuing program to control saltmarsh mosquitoes at Homebush Bay.

Mosquitoes How you can bite back! Ryde City Council Mosquito Control Program

Facts and Figures

Between December 1998 and March 1999, 4,229 adult mosquitoes were trapped in Ryde compared to 7,771 in the comparable period the previous summer. A limited trapping program was extended until late April 1999, but it yielded only another 167 mosquitoes.

Larvacide usage dropped to 2,578ml compared to 5,119ml in 1997/98.

Virus Detection

No virus was detected in any of the mosquitoes collected in Ryde during 1998/99. It should be noted however that the species which carried virus in other locations in

Sydney are commonly present in Ryde.

In metropolitan Sydney two viruses were isolated from monitoring locations, one Ross River from Hawkesbury, and one Stratford from Parramatta. An additional four viruses (one Ross River, three Stratford) were isolated from other locations within the Sydney region; these are listed in the table of Coastal and Sydney Arbovirus Isolates 1998-99.



Aedes notoscriptus (courtesy Dr S Doggett)

Coastal and Sydney Arbovirus Isolates, 1998-99

LOCATION - Site	Date Trapped	Mosquito Species	VIRUS RR	ISOLATES STR ?	Total
BALLINA - Greenfield Rd	24.2.99	Cq. xanthogaster		1	1
BALLINA - Greenfield Rd	24.2.99	Ae. multiplex		1	1
BALLINA - Meeting Pool	30.3.99	Cx. sitiens		1	1
BATEMANS BAY - Council Depot	18.1.99	Ae. vigilax		1	1
BATEMANS BAY - Council Depot	1.2.99	Ae. notoscriptus	1		1
BATEMANS BAY - Mogo SF	11.1.99	Ae. vigilax	1		1
FORSTER - Tuncurry	3.2.99	Cq. linealis	1		1
FORSTER - Tuncurry	7.4.99	Cx. australicus		1	1
HOMEBUSH BAY*	16.2.99	Ae. vigilax	1		1
HAWKESBURY - Yarramundi	30.3.99	Ae. notoscriptus	1		1
PENNANT HILLS* - CSF	19.1.99	Ae. procax		1	1
PENNANT HILLS* - CSF	6.4.99	Ae. notoscriptus		1	1
PARRAMATTA - Pennant Pde	3.3.99	Ae. notoscriptus		1	1
PORT STEPHENS - Gan Gan	7.12.98	Ae. vigilax		1	1
PORT STEPHENS - Heatherbrae	15.3.99	Cq. linealis	1		1
PORT STEPHENS - Heatherbrae	15.3.99	Cx. annulirostris	1		1
PORT STEPHENS - Heatherbrae	23.3.99	Cx. sitiens		1	1
PORT STEPHENS - Karuah	11.1.99	Ae. vigilax	1		1
PORT STEPHENS - Karuah	1.2.99	Ae. vigilax	1		1
PORT STEPHENS - Saltash	15.3.99	Ae. procax		1	1
WERRINGTON* - ADI	8.4.99	Ae. notoscriptus		1	1
WYONG - Ourimbah	1.2.99	Ae. notoscriptus	1		1
TOTAL			10	4 8	22

RR = Ross River, STR = Stratford, ? = unknown, ADI = Australian Defense Industries, CSF = Cumberland State Forest. *These sites are not part of the NSW Arbovirus Surveillance Program, but are included as they provide valuable information on virus activity in Sydney.

Pressure

The move towards more constructed wetlands, silt catchments and rainwater tanks needs to be carefully monitored in terms of mosquito control. In metropolitan Sydney competing demands on funding makes adequate creekline maintenance a problem for local government.

Response

The NSW Government Green Paper, "NSW Arbovirus Disease Control Strategy" was published in January 1999. Ryde City Council made a submission on the options proposed, and the outcome is awaited. In response to predictions of potential Murray Valley Encephalitis virus activity in south eastern Australia the NSW Arbovirus Surveillance Team will be closely monitoring meteorological indicators over the last quarter of 1999.

At a local operational level in Ryde an independent survey of creeklines, foreshores and other potential mosquito breeding sites will be commissioned to review priorities.

How are we handling garbage and waste?

State

The Northern Sydney Waste Board, of which Ryde City Council is a member, has over the past year established the Northern Sydney Regional Waste Minimisation Plan. The plan requires Councils to establish various waste minimisation strategies, including a Development Control Policy for Construction & Demolition Waste, a Procurement Policy, a greenwaste strategy and an education program. These matters will be progressively addressed.

Ryde City Council's domestic waste is currently disposed of at Lucas Heights Landfill site. The Northern Sydney Waste Board is, however, negotiating with Collex Waste Management for the establishment of a landfill site at Woodlawn southern highlands to cater for future waste disposal.

Recyclable products go to Chullora Materials Recovery Facility for sorting. Due to the fall in market prices for these products, a gate price was established to cover processing. At this stage Ryde City Council remains exempt from this gate price due to our contract with Collex Waste Management.



Among the many heroes of Clean Up Australia Day Ryde City Council's Porters Creek Depot continues to recycle Council's excavated materials, bitumen, concrete etc from road works. These materials are crushed and stored before being re-used in the reconstruction and rehabilitation of Council's roads, footpaths and drainage works.

Pressure

Domestic Garbage

Approximately 36,000 residences receive a weekly garbage service and a bi-annual clean up collection.

In 1998/99 a total of 32,145 tonnes of solid waste was removed (average of 892 kilo per household).

Period (per annum)	Tonnages	Kilo Per Household	
July 1994 - June 1995	31,759	945	
July 1995 - June 1996	31,139	895	
July 1996 - June 1997	29,547	832	
July 1997 - June 1998	30,164	846	
July 1998 - June 1999	32,145	892	

Total Waste Tonnages July 1994 - June 1998

Note: These figures are based on data received from the North Ryde Waste Management Centre and the Collex Waste Management Greenacre Transfer Station.

Pressure

Recycling Service

Approximately 80-90% of residents continued to use the fortnightly recycling service. A total of 7,917 tonnes of recyclables were collected from 35,600 bins during 1998/99. Total Recycling tonnage collected as a percentage of the total waste stream dropped from 20.85% for the year ended June, 1998 to 19.77% for the year ended June 1999. This was due to an increase in greenwaste attributed to the wet summer and therefore increase in garbage.

Period of Garbage	Tonnages	Recycling Tonnes*	% of Waste Recycled
July 1994 - June 95	32,880.60	3,904.47	10.91%
July 1995 - June 96	31,139.29	5,395.24	14.77%
July 1996 - June 97	29,546.86	7,459.97	20.16%
July 1997 - June 98	30,164.33	7,947.50	20.85%
July 1998 - June 99	32,127.26	7,917.29	19.77%

Recycling Tonnages* as a % of total Waste Tonnages Collected

*These figures are based on data received from Waste Services, Collex Greenacre Transfer Station, and Waste Services Recycling Facility, Chullora.



We'll always have waste, but let's cut it down to a minimum

How are we handling garbage and waste?

Response

Garden Waste

A report on the banning of greenwaste from landfill is awaiting final approval from the State Waste Advisory Council. If approved, Council will be required to implement a separate greenwaste collection from January 2000.

Waste Education

A new brochure was sent to all residents, highlighting correct methods of recycling, composting and waste minimisation, and introducing Council's new mascot, "Harve the Hippo". "Harve" was seen at various promotional events during 1998/99.

Free demonstrations were held at Ryde Park on correct procedures for composting and wormfarming. The aim was to encourage reducing waste in the home.

Medical Waste Collection

A Medical Waste Collection program was implemented with 14 local Pharmacies taking part. Council pays for a locked mobile garbage bin at each location, to take syringes and dialysis tubing. This reduces a large quantity of dangerous items entering landfill.

Commercial Waste

A separate Commercial waste collection was implemented during the year, utilising 240 litre garbage bins with identifying orange lids. The bins are currently being computer chipped. Bintrak have been employed to develop a computer program for invoicing and tracking purposes.

Clean Up Australia Day - 30 March, 1999

Over 200 people took part in the Clean Up Australia campaign at 20 sites within the Ryde City Council area. Tonnages deposited in large skip bins are not available, however approximately 8.06 tonnes was collected in "Clean Up Australia" bags.



Harve Hippo - a popular lad

Toxic Chemical Collections

The Waste Management Centre at North Ryde, continued to accept up to 20 litres of waste oil, paint, solvents and household cleaners free of charge from domestic households in 1998/99. Figures on quantities received are not available.

Noise - a problem for some

Road Traffic Noise

State and pressures

Road traffic noise continues to be the major cause of environmental noise in Ryde.

Response

Council considers the impact of road traffic noise when assessing development applications for multi-unit developments adjacent to major road corridors and imposes conditions to minimise the impact on building occupants where appropriate.

Council also imposes weight limits on roads and resurfaces roads where required.

Aircraft Noise

State and pressures

Air Services Australia continues to receive sporadic complaints about aircraft noise from residents in the Ryde Council area.

At the time of printing a decision is still pending on the proposed second Sydney Airport at Badgery's Creek.

Response

Council continues to support the construction of a second Sydney Airport at Badgery's Creek.

Industrial Noise

State and pressures

The main causes of industrial noise complaints this year were building work and noisy plant and machinery.

Response

Council considers potential noise impacts when assessing development and building applications and imposes conditions restricting hours of operation and noise levels where appropriate.

Council officers also investigate complaints in relation to non-scheduled premises and take action where appropriate. This may include issuing notices and directions and taking Court action for non-compliance.

Domestic Noise

State and pressures

Domestic noise continues to be a significant cause of complaints to Council. The main causes this year were barking dogs, noisy intruder alarms, and musical instruments and amplified music.

Response

Council officers investigate complaints and take action where necessary.

How is heritage managed in Ryde?

Non - Aboriginal Heritage

State

In terms of heritage, Ryde has evolved from its aboriginal inhabitants through white settlement which led to the farming of the area, and finally into a residential and employment centre. Ryde's heritage beginnings have certainly not been forgotten in the transition to a multi-cultural society.

The Ryde Heritage Inventory was developed from the Ryde Heritage Study which was completed in 1988.



Willandra, Ryde

Pressure

While the Ryde Planning Scheme Ordinance contains some heritage provisions, it does not contain a full heritage inventory and this limits the extent of protection, although Council consent is required for demolition of any building.

Response

One of the purposes of the Local Environmental Plan (For Now and the Future) is to introduce significant protection for all identified heritage buildings and sites including conservation areas. While the existing Ryde Planning Scheme Ordinance contains protection for some heritage properties the new provisions will apply to many items of either local, state or national significance and will introduce for the first time conservation areas.

These heritage provisions will enable:

- the conservation and enhancement of heritage items,
- encouragement and facilitation of the continual use of heritage buildings,
- alterations and additions of heritage items to be in harmony with their historic and aesthetic character,
- development adjacent to heritage items to take into account the historic and/or aesthetic character of the heritage item.

Additionally, the new provisions will also allow a heritage item to be used for a development that is prohibited in a zone provided the proposed use:

- does not adversely affect the amenity of the locality,
- meets the intent and objectives of the zone,
- ensures the preservation and/or retention of the heritage item.

The draft Local Environmental Plan is at the time of writing on community exhibition and a public consultation program is to be undertaken in relation to the heritage provisions amongst other matters. The Draft LEP will combine the statutory controls which will ensure that heritage buildings are maintained while allowing for their viable use.



Addington - an historic Ryde landmark

How is heritage managed in Ryde?

Aboriginal Heritage

State

Council's role in Aboriginal heritage includes regulatory, conservation and educational activities. There were previously 50 recorded Aboriginal Sites in Ryde City on land under the jurisdiction of the Council and approximately forty recognised Aboriginal sites within the Lane Cove National Park. These sites include axe grinding grooves, engravings, middens and paintings. During 1999 a previously unrecorded Aboriginal site consisting of a scatter of stone artifacts was found in Bennelong Park in addition to the known shell midden on the shoreline of Parramatta River.



From the Reconciliation in Schools video, courtesy of Macquarie University

Pressure and response

There are competing demands on Council resources required to undertake in-house Aboriginal data documentation, research projects and site monitoring. Notwithstanding that, Council is currently upgrading its Data License Agreement with National Parks and Wildlife Services. When this is completed a 1999 listing of Aboriginal Sites in the Ryde LGA will be obtained and entered onto Council's Geographic Information System (GIS).

Social Plans

Plan. Aboriginal consultations will be taking place within the Social Planning framework, which will result in recommendations to Council on responses to the needs of indigenous people. The report will be made available by November 2000 as part of the Annual Report process.

A Northern Sydney Regional Aboriginal Social Plan is also being prepared that will provide information about the needs of Aboriginal residents across the 11 local government areas in this region, including Ryde. An Aboriginal person will be appointed to work on this activity on a part time basis over the next 12 months.

Resources

 The Australian Local Government Association (ALGA) has developed two new resources on behalf of the Aboriginal community. The first is the website RECONCILIATION IN THE COMMUNITY at www.alga.com.au/reconciliation



The second resource is a booklet entitled "JUSTICE AND EQUITY FOR ALL-Local Government and Indigenous Partnerships". This is one of a number of new documents and books on Aboriginal topics, which are available through the Ryde Library Service.

Reconciliation

The Council for Aboriginal Reconciliation has developed "National Strategies to Advance Reconciliation". Locally, the Bennelong and Surrounds Citizens for Reconciliation group is working towards reconciliation with the indigenous people of Australia:

- The Aboriginal flag was flown outside the Council Chambers during the week beginning 24 May 1999 to mark Reconciliation Week.
- Reconciliation week was commemorated in several activities at Macquarie University

The Metropolitan Local Aboriginal Land Council (MLALC)

The MLALC worked on the following projects in Ryde City in 1998/99:

- Kissing Point Wharf Aboriginal Sites Study, in association with Dr Val Attenbrow.
- Ryde Aquatic Leisure Centre Stage One Environmental Assessment for Aboriginal Sites undertaken in association with Mary Dallas Consulting Archaeologists.
- Federation Community Projects Program, "Field of Mars: track upgrade and signage". An Aboriginal Site falls within the drainage line of the proposed works.

Grant Applications

- A grant application has been lodged with the Natural Heritage Trust requesting \$100,000 to enable commencement of the Glades Bay-Bill Mitchell Park Aboriginal Heritage Walkway Stage 2 - Construction.
- An application has been made for a \$52,000 grant to evaluate the probable extent, nature and integrity
 of Aboriginal heritage within Ryde LGA.

Institute of Aboriginal Studies and Research-Macquarie University

As reported in the 1998 SoE Report, the Institute was granted \$150,000 to research how and where reconciliation is being advanced in schools. This project is still in progress.

Aboriginal and Torres Strait Islander Units at Macquarie University, Newcastle University and Sydney University are building the first national indigenous website and database of its kind. *Gurranora*, meaning "camp-place"- is an appropriate name for the website that will be a meeting place for learning and sharing ideas and resources. *Gurranora* at http://www.campsite.mq.edu.au/

Australian Museum

In 1999, the Australian Museum presented the findings from the "Aboriginal Prehistory of Port Jackson" study, including the findings from Sugarloaf Reserve, to a seminar at Sydney University (Prehistory and Historical Archaeology Department). Dr Val Attenbrow is currently researching the collation of a book called "Sydney's Aboriginal Heritage" and may include some sites found in the Ryde LGA, e.g., the engravings at Glades Bay Park. The book is planned to be published in 2000 to be available in time for the Sydney Olympic Games.

Darug sculpture at Macquarie University, courtesy of Macquarie University



Our Open Spaces

Passive Recreational Facilities

Demand and use remains high due to the attraction of the Parramatta River foreshores and other popular parks for both local residents and visitors from outside the city.

If anything this trend has further increased due to Council's policy of improving access to, and quality of, recreational facilities:

- This is reflected in the Public Space & Recreation Facilities Plan 1998.
- Projects in some areas, notably the central Ryde and East Ryde precincts are yet to be initiated and this has put pressure on other recently embellished reserves.

Sporting Facilities

Demand and use has continued to increase the maintenance and management costs on most sports fields.

Remnant Natural Areas

Pressures remain due to:

- Fragmentation and destruction of wildlife corridors and isolation of remnant plant communities.
- Stormwater runoff from residential development and sportsfields creating erosion, siltation and continuing gross pollutants.
- Poor water quality with high nutrient content feeding invasive weeds and reducing the natural tree canopy.
- Recreational use causing wear and disturbance.
- Illegal encroachments causing rubbish and weed problems.



Early morning at Eastwood Plaza

Response

Plans of Management

- Plans of Management are being developed to cover the broad generic planning issues and a number of specific issues associated with the management of Ryde's parks and reserves. The plans outline the existing conditions and the strategies needed to manage and develop the network of open space. Those are required to be named by Council following the introduction of the Local Government (Community Land Management) Act 1998.
- Specific embellishment and rehabilitation strategies have been developed for a number of environmentally sensitive natural areas (notably the Draft Buffalo Creek and the Parramatta River Foreshore Plans of Management) with many projects included in Council's Management Plan.

Master Plans

- Integrated Civic Policy includes renewed public landscaping and streetscapes with several "urban village" areas being developed as described in the 1998 SoE Report.
- Public Space and Recreations Facilities Plan with a new Section 94 Development Contribution Plan was adopted by Council in 1998.
- Implementation of a Master Plan for redevelopment of the Ryde Swimming Centre has commenced.
- A Master Plan for the embellishment of Shepherd's Bay on the Parramatta River has been completed. Detailed project plans are now developed for the high profile public space, as part of the Parramatta River Plan, Sydney 2000 and beyond. Stage 2 underway.

Land Acquisition

- Acceptance from the State Government of a 7 hectare site within the Macquarie Hospital for use as public open space. Lease agreements have been finalised, with agreements including minimum embellishments and management of the area as undeveloped "green" open space.
- Negotiations are in progress with the RTA for the acquisition of surplus land adjacent to Tasman Place and other locations along the M2 Freeway for use as public open space.
- The planned redevelopment of Shepherds Bay includes securing of "Operational Land" presently used as Council's Works Depot and the initiation of high quality public open spaces.
- Negotiations are in progress with the NPWS to transfer a number of Council's natural reserve areas contiguous to the Lane Cove NP to facilitate better management of these areas.
- Planned acquisition of several residential blocks in Denistone East, North Ryde and West Ryde for development of embellished open space are now as identified in the Public Space & Recreational Facilities Plan 1998.

Land Drainage

- Construction of the West Ryde Flood Management Project has begun. Plans include the installation of a gross pollutant trap, upgrade and drainage to 3 sportsfields at Meadowbank Park and the use of this park for stormwater retention purposes.
- Several creekline rehabilitation projects have been completed at the head of catchments which will assist
 with stormwater management further downstream, notably Brush Farm Park and Looking Glass Bay.
- Completed reconstruction of headwater of Buffalo Creek West Arm Burrows Park (\$72,000) using contemporary rock engineering structures and natural area rehabilitation.

Parks Embellishment Program

- Pellisier Road Embellishment completed, includes an amenities building, connections to Putney
 Park and conformity with new Australian Standards for playgrounds.
- Major park embellishments are planned at Shepherd's Bay.
- Stage 5 Playground Upgrade Program (\$85,000) completed.
- The Blenheim Park Working Group are preparing plans for the enhancement of Blenheim Park, North Ryde.

Our Open Spaces

Parks Access Program

- Stage 2 Parks Access Program (\$50,000) completed providing further equal access to a range of high profile sports and passive recreational facilities.
- Pellisier Road Embellishment includes equal access to premier parkland on the Parramatta River.
- Sub Regional Bikeway Routes completed at DeBurghs Bridge (\$120,000), West Ryde to Meadowbank (\$100,000) and Eastwood to West Ryde (\$250,000) as joint projects with RTA.
- Sub Regional Bikeway Routes (\$210,000) included in Capital Works Program for 1998/99.

Sportsfield Management

- Santa Rosa regrade & irrigation works completed.
- ELS Hall Park Baseball Upgrade Stage 2 (\$162,000) is in progress with a 100% contribution from club and state government to provide international standard facilities to be used as part of Sydney 2000 Olympic Games.
- Christie Park Upgrade (\$25,000) the Grandstand from the former Ryde Swimming Centre is being recycled and erected at Christie Park soccer complex.
- Provision has been made for significant upgrading at other locations as detailed in Council's Management Plan.

Creeklines, Bushland and Trees

- Brush Farm Park project (\$25,000) has been completed providing further stormwater erosion control within a significant bushland area.
- 21 Bush Regeneration Projects (\$212,000) completed as part of an ongoing program to rehabilitate significant and environmentally sensitive bushland areas. These projects will continue over the next 2 years.
- 10 Council sponsored volunteer groups are active in various bushland focus areas.
- The Greening of Ryde Taskforce carried out 2 treeplanting projects in McCauley Park and Mallee Reserve with 2500 native trees and shrubs planted.
- Schools Treeplanting Program continued with over 400 native trees and shrubs planted to enhance tree canopy and bird habitats.
- Community Tree Giveaways (\$20,000) completed with over 10,000 native tree and shrub seedlings given away to residents.



Jim Walsh Park

Managing the Environment

Environmental management will be enhanced by the introduction of the Ryde Consolidating Local Environment Plan "For Now and the Future", which went on informal community exhibition in May 1999. This allowed for community comment which will need to go on statutory exhibition.

At Development Control Plan level several site specific DCP's were introduced in 1998/99 to safeguard the environmental integrity of property.

Following completion of the survey of bushland vegetation communities within Ryde a management strategy is being finalised.

Preparation of final documentation for the Macquarie Park and North Ryde Project is also underway. This will influence traffic, transport, land use and employment in the area.

Stormwater Management Plans for the Lane Cove River, Mid Parramatta River (North), and Lower Parramatta River catchments were drafted in conjunction with other catchment councils and government agencies.

Work commenced on strategic plans for the newly formed Mid Parramatta River and Lower Parramatta River Catchment Management Committees. These committees have also undertaken Stage 1 of a data collection and compilation project. Access to this reference database will be available over the internet at http://tnd.tzo.com/cmc/

Consultants commenced work on the Lane Cove River Estuary Processes Study and Management Study in preparation for an Estuary Management Plan.

The Draft Landfill Environmental Management Plan for Porters Creek Waste Depot was reviewed by the NSW Environment Protection Authority. Comments are being addressed in the preparation of the final draft.

A Community Environmental Management Strategies Group was established specifically to make recommendations to the General Manager for the development of environmental management strategies. Recommendations will be considered in the formulation of policy and future environmental management planning.

As a preparatory step the group examined the linkage between Council's 1998 State of the Environment Report and the 1999/2002 Draft Management Plan and suggested possible changes.

Indicators and Trends

Selection of environmental indicators needs continuing scientific examination, discussion and debate. Some of the local indicators listed below are in need of refinement and the list is incomplete. However, some trends can be readily discerned, and their implications will be considered in the comprehensive year 2000 State of the Environment Report.

- Record numbers of development and building applications and construction certificates received: previous peak 1995.
- Motor vehicle registrations increased in Ryde: approximately 5,000 extra passenger vehicles.
- Motor vehicle accidents down 6% between 1996 and 1998.
- Fatal motor vehicle accidents down 25% between 1996 and 1998.
- Bikeways extended: extra 1,225 metres over last 12 months.
- Average annual rainfall: up 22% on 1997/1998.
- Street cleaning program: tonnes collected up 1% on 1998.
- Gross pollutant trap tonnage down: 38.3 tonnes trapped since January 1997.
- Paid hours spent on bush regeneration down 8% from 1997/98.
- Some remnant bushland still not fully protected.
- Extensive weeds in bushland (not quantified).
- Absence of bandicoots in Field of Mars Reserve is a concern.
- Some bird species have become rare in recent years and others locally extinct.
- Mosquito complaints down 370% from 1997/98.
- Number of mosquitoes trapped down 43% from 1997/98.
- Mosquito larvacide used down 50% from 1997/98.
- Average garbage collected per household up 3.89% from 1997/98.
- Average recycling collected per household down 0.87% from 1997/98.
- Recycling as a percentage of total waste collected down 1.08% from 1997/98.
- No losses or additions to inventory for non-aboriginal heritage.
- Previously unrecorded aboriginal stone artifacts found at one site.
- Listing of aboriginal sites on Geographical Information System (GIS) incomplete.
- Chemical use on public open spaces down 15% from 1997/98.
- Organic fertiliser use unchanged from 1997/98.
- Sporting facility bookings down 5%.
- Ryde Local Environmental Plan out for public comment.

Recommendations For Management Plan - 2000 And Beyond

Based on a review of the 1999 State of the Environment Report it is recommended that Council takes into account the following recommendations when considering the Draft Management Plan for 2000/2003.

- Progressive implementation in a statutory way of the adopted Master Plans for Eastwood and Top Ryde business centres.
- Completion of statutory exhibition and commencement of implementation of the Consolidating Local Environmental Plan.
- Continued support for Sydney Orbital route and link between M2 and Gore Hill Freeway.
- Continued safety improvement by appropriate traffic facilities for black spots and traffic calming.
- Continued support for the development of public transport facilities to reduce car dependency, pollution and congestion.
- Continued support for the development and implementation of Pedestrian Access and Mobility Plans (PAMP).
- Continued upgrading and maintenance of the existing bicycle network.
- Council seeks funds for the study on traffic calming of the precinct south of Victoria Road and east of Church Street.
- Continued support for the implementation of transport facilities in the Eastwood and West Ryde commercial areas.
- Staged implementation of measures proposed in stormwater management plans subject to budget constraints.
- The indicators of climate-weather, stormwater management plans, water quality, aquatic habitats be monitored in order to provide data on:
 - change in water quality,
 - type and condition of point source discharges,
 - extent of riparian vegetation.
- A strategy be developed to promote installation of further gross pollutant traps.
- Appropriate resources be allocated for sediment control and its enforcement.



Kissing Point Wharf under construction

Recommendations For Management Plan - 2000 And Beyond

- Works previously budgeted in the 1999/2000 Capital Works Program be expedited, notably:
 - additional funds for bush regeneration be made available
 - Darvall Park Creek line rehabilitation
 - implementation of recommendations of Buffalo Creek Plan of Management.
- Mammal surveys of key bushland areas be resourced.
- A Council Mosquito Control Program be funded again during 2000/2001.
- The allocation of funds for creek maintenance in 2000/2001 be considered in the light of data from the NSW Arbovirus Surveillance and Mosquito Monitoring Program.
- Council continues to work in partnership with the Northern Sydney Waste Board to minimise the disposal of waste to landfill.
- That a Greenwaste Management Plan be prepared in preparation for the January 2000 decision.
- In association with Collex Waste Management Service, Council continues the installation of the Bintrak system.
- Council continues investigations into the redevelopment of the Porters Creek site into a Waste Management and Recycling Park.
- Initiatives to secure funding for the restoration or conservation of Brush Farm House be pursued.
- Work budgeted in the 1999/2000 Capital Works Program be expedited, namely:
 - Glades Bay Aboriginal Heritage Walk Stage 2 Construction \$100,000 to match \$100,000 grant.
- Plans of Management for Community Land be reviewed.
- Opportunities for expansion of volunteer groups to assist currently unfunded bush regeneration projects be developed.
- A comprehensive street tree management and masterplan program be developed.
- Impetus for improvement of regional public space facilities be maintained.
- Impetus for improvement of the carrying capacity of sports facilities be maintained.



Acknowledgements

The assistance and contributions of the following organisations and individuals is greatly appreciated:

Australian Museum: Dr Val Attenbrow, Anthropology Division

Macquarie University: Dr J Mark Dangerfield, Centre for Biodiversity and Bio-resources

Nina Burridge, Institute of Aboriginal Studies and Research

Lane Cove River Catchment Management Committee

Ryde-Hunters Hill Flora and Fauna Preservation Society

North Ryde Residents' Group

John Constandopoulos, Guenter Hauber, Jennifer Hill, Ern Hoskin, Paul Kubiak, Cathy Merchant, Diane Michel, Vicky Sheppeard

Council Staff: Jude Colechin, Karl Cotter, Ramesh Desai, Alan George, Narelle Hanger, Greg Hunt, Warren Latham, Greg Lewin, Tony McDermott, Russell Nash, Craig Redfern, David Robinson, Stewart Seale, Rex Hamilton (Co-ordinator).

Reference

- Villa Homes Development Control Plan 1999 Ryde City Council
- Tree Preservation Order and Tree Management Policy 1999 Ryde City Council
- M2 Motorway Before and After Study 1999 Roads and Traffic Authority
- Pittwater Road Traffic Study 1998
- State of the Environment Guidelines 1998 Department of Local Government
- Lane Cove River Catchment Day Report 1999 Hornsby Shire Council and Cheltenham Girls High School
- Action for Transport 2010 An Integrated Plan for Sydney 1998 NSW Government
- NSW Arbovirus Surveillance and Mosquito Monitoring Program Annual Report 1998/99 Department of Medical Entomology, ICPMR, Westmead Hospital, NSW
- Northern Sydney Regional Waste Plan 1998 Three Year Strategy Northern Sydney Waste Board
- Ryde Heritage Study 1988 Ryde City Council
- "For Now and the Future" (Draft LEP No. 99) Ryde City Council
- "Justice and Equity for All" Australian Local Government Association
- Public Space and Recreation Facilities Plan 1998 Ryde City Council
- Draft Landfill Environmental Management Plan, Porters Creek Waste Depot 1998 Ryde City Council

