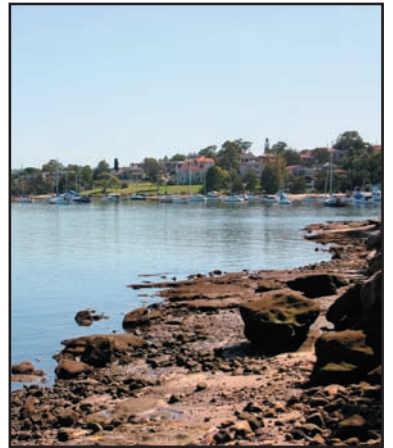




City of Ryde



State of the Environment Report 2005

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Acronyms

AAS27	Australian Accounting Standard 27
ANZECC	Australian and New Zealand Environment Conservation Council
ASS	Acid Sulfate Soils
AusRivAS	Australian River Assessment System
BASIX	Building Sustainability Index
CCP	Cities for Climate Protection™
CDS	Continuous Deflection Separation
CFL	Compact Fluorescent Light
DGP	Development Control Plan
DEC	NSW Department of Environment and Conservation
DIPNR	Department of Planning and Natural Resources
EPA	Environment Protection Authority
GIS	Geographical Information System
GPT	Gross Pollutant Trap
ICLEI	International Council for Local Environment Initiatives
IUCN	World Conservation Union
kWh	kilowatt-hour
LEP	Local Environment Plan
LGA	Local Government Authority
LRP	Lead Replacement Petrol
NFMRC	National Health and Medical Research Council
NSROC	Northern Sydney Region of Councils
NSW	New South Wales
PCD	Pollution Control Devices
PV	Photo voltaic
RPI	Regional Pollution Index
RTA	NSW Roads and Traffic Authority
SOE	State of the Environment Report
SOPA	Sydney Olympic Park Authority

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Introduction

This report has been prepared as a supplementary report covering the period 1 July 2004 to 30 June 2005 to satisfy the minimum requirements of Clauses 7E and 7F of the *Local Government (General) Regulation 1993*.

This report provides the community of Ryde with updated information about the current state of the local environment and the environmental initiatives undertaken since the 2003/04 State of the Environment (SoE) report. In many areas comparisons have been made between last year and this year showing how the City is progressing towards sustainability.

The report should be read in conjunction with last year's State of the Environment Comprehensive Report and will now serve as a building block for the next comprehensive report due out in 2008. This year's supplementary report is an update and allows the reader to easily track changes to the state of the environment and new initiatives implemented by the City of Ryde. The Comprehensive report from 2003/2004 provides background information on all issues discussed in this year's report.

The report highlights the many ways the City of Ryde is working to ensure the local environment is protected from threats and demonstrates how the City is applying the principles of ecologically sustainable development in all local area decision-making.

As in previous years the City of Ryde utilises the Organisation for Economic Co-operation and Development's State-Pressure-Response Model and each concludes with future actions and links to the City's Management Plan for each of the environmental themes covered in the report namely:

- Towards Environmental Sustainability
- Human Settlement
- Bushland and Biodiversity
- Water
- Air
- Soil and Landscape

The information contained in this report is from a number of sources but is primarily data held within the City of Ryde files, published documents and other data made available by the Department of Environment and Conservation (DEC).

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1. Towards Environmental Sustainability

Environmental sustainability is a framework for integrating economic, social and environmental decision-making into natural resource management. Community and individual concern for the environment and willingness to take action to reduce impacts are vital elements in achieving sustainable outcomes. This is increasingly reflected in the facilitation role local councils have adopted in organising and involving residential communities and business interests directly into environmental programs and actions.

The wide use of the concept 'sustainability' reflects a broad agreement that people living today have an obligation to protect the health, diversity and productivity of the environment for the benefit of current and future generations. This is because a healthy environment is a necessary element of a productive economy and a healthy society. By definition, unsustainable practices cannot continue indefinitely without degrading current conditions and reducing future opportunities.

The City of Ryde is committed to achieving environmental sustainability within both the internal operations and the City as a whole. The community in the City of Ryde is actively involved in various environmental protection and monitoring initiatives. In response to the community's desire for a more sustainable City, the City of Ryde continues to implement initiatives to improve environmental health and the well being of its residents.

The community initiatives discussed below demonstrate the City's progress towards sustainability. The City of Ryde's initiatives are discussed throughout the State of the Environment Report for 2004/2005.

1.1 Community Action in the Ryde LGA

Sustainability at School

Students in Year 8 at Holy Cross College spent a day making miniature landfills where they can observe changes in the decomposition of waste and test the leachate coming from the landfill.

A Plastic Bag Famine was conducted from midnight on the 20th through to Sunday 22nd August. Over 1000 students made a committed effort to refuse all plastic bags, from Eastwood Heights, Putney, St Michaels and St Kevins Primary Schools. Each student who returned their tally sheet received a special City of Ryde Reusable bag and a pen made out of recycled paper.

A class from Eastwood Heights Public School won an excursion to the Visy Education Centre where they watched the sorting of the recycling material and a trip to Kimbriki Ecogarden to learn about ecology and worms and taste bush food.

Water Quality Monitoring

Residents have been involved in the City of Ryde Water Quality Monitoring Strategy from its beginnings through the Community Water Quality Monitoring Steering Committee. The committee consists of City of Ryde residents and staff and provides guidance and direction for improving the health of creeks and waterways in the City and ensures community ownership of the program. Water quality is also monitored by the community through the Streamwatch program.

Community Education for Sustainability

At the 2004 Granny Smith Festival, two facilitators, funded by an 'Our Environment - It's a Living Thing' joint grant distributed information to interested members of the public on how to be more sustainable at home. The display contained information on green cleaning, energy, waste and water. Over 200 kits were handed out.

Residents participated in a number of workshops held by the City of Ryde on green cleaning, living sustainably at home and worm farming.

The City of Ryde's Environmental Education Team used the theme of Ecological Footprints to promote World Environment Day 2005. Residents participated in the day by making suggestions as to how they will decrease the size of their ecological footprint. Examples include worm farming and walking to work.

Volunteer Groups

The City of Ryde supports volunteer groups by providing them with resources and training, meeting room accommodation, offering grants, assisting in grant applications and holding an annual volunteer awards night.

The Greening of Ryde Task Force planted trees at Tuckwell Park for National Tree Day this year and was also involved with tree planting at Bremnar Park for Schools National Tree Day. Activities were again scaled down this year however due to drought conditions.

Volunteers were very active as part of the City's Bushcare Volunteer Program (see Bushland Management Section 3.1 of this report).

Many other community groups have been active in working towards a sustainable city including:

- The Brush Farm Preservation Group
- The Ryde -Hunters Hill Flora and Fauna Preservation Society
- Ryde District Historical Society
- Brush Farm Historical Society
- Friends of Glades Bay Park
- Friends of Darval Park
- Friends of Denistone Park



National Tree Day at Tuckwell Park

Management Plan 2004-2007 Progress Summary – Towards Sustainability

Objective	Strategy	Measures/Targets	Progress
To promote sustainable development.	Continue with the strategic initiative of the Urban Village program by preparing a draft LEP and DCP for Gladesville Town Centre.	Master Plan referred to the Council of the City of Ryde by May 2004.	Deferred pending outcome of Heritage study.
	Review the City's Dwelling House and Duplex Development Control Plan.	Completed by June 2004.	In progress
	Exhibit the draft LEP, DCP and Section 94 Plan for Macquarie Park Corridor. The draft documents will seek to both implement the principles of the Masterplan and introduce a raft of new ESD building principles.	DCP, LEP & S94 effective from December 2004.	Draft LEP approved by the Council of the City of Ryde on 14 Dec 2004 and was referred to DIPNR in January 2005. A Consultancy was engaged to prepare LEP, DCP AND section 94 Plan and is in process. Still awaiting DIPNR approval
		Implementation Program in place by December 2004.	An Implementation Program for the management of the Corridor and involving the landowners is in progress.
	Review the City's Section 94 Contribution Plan.	Completed by December 2004	Revised target date for completion of Section 94 Contribution Plan is September 2005
	Review landscaping controls for all future developments.	Controls are incorporated into relevant DCP's, to on-going program.	Review of Urban Housing DCP in progress. Process ongoing.

To promote Community Involvement in Environmental Issues	Foster and support community involvement in as many local environmental programs as possible to protect and conserve the local environment and to develop community ownership.	Calls for Expressions of Interest by 30 June 2004 to form a new Community Environmental Strategies Group.	Group established and first meeting planned October 2005
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2. Human Settlement

2.1 Urban Development in the Ryde LGA

Goal: To address current pressures and to minimise future impacts on land and the environment resulting from the continual increases in urbanisation and previous poor land management practices.

Population of the City of Ryde

Indicator	2001	2004
<i>Population</i>	95,750 ¹	99,662 ²
<i>Household size</i>	2.6	2.7
<i>Number of residential properties</i>	35,703	37,025

The most accurate population statistics are sourced through the National Census, which takes place every 5 years. The last Census took place in 2001. The 2004 population figure is an estimate also produced by the Australian Bureau of Statistics. The City of Ryde's population is increasing. Growth is occurring in new developments especially in areas such as Meadowbank and Macquarie Park.

Housing

The number of residential properties is also increasing, however, contrary to the general trend in Sydney, the average household size in the City of Ryde has slightly increased since 2001. A larger household size (as opposed to the same amount of people spread out over a number of households) is believed to decrease a person's ecological footprint, as fewer resources are required to sustain the person's living requirements.

In 2004, the City of Ryde had 37 025 residential properties. In the financial year 2004-2005 there were 123 new dwellings.

Land Use

Figure 1 is a graph that breaks down the land use in the City of Ryde into seven broad categories. The information has been obtained from the City of Ryde's GIS mapping system with land use as of August 2005 expressed as a percentage of the total land in the City of Ryde.

¹ Australian Bureau of Statistics 2001

² As at June 2004 (Australian Bureau of Statistics 2005)

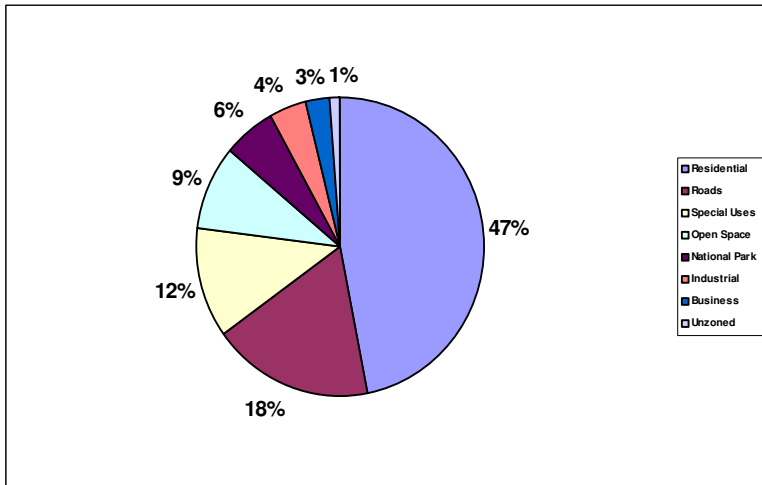


Figure 1: Land Use in the City of Ryde

Development Activity

Indicator	2003-2004	2004-2005
Development Applications approved	1397	1235

The amount of development applications approved remains stable at 1235 this year. This is close to last year’s figure of 1397 with a small, insignificant decrease of 162. The majority related to residential housing but also include continuing development in commercial and retail sectors.

Planning Responses in 2004-2005

The Master Plan for Macquarie Park was adopted in 2004 and the related Local Environment Plan will be submitted to the Department of Planning next year for approval. This Plan implements the strategic objectives of integrating land use and transport, reducing car dependency and creating opportunities for employment in areas supported by public transport.

A new citywide planning initiative began during this year that will provide a framework for deciding City progress, priorities and actions over the next 20 years. The City strategy to be developed from this process will include directions on a range of topics including transportation, arts, housing and the community to achieve a more vibrant and sustainable Ryde.

Environmental management provisions have been incorporated in new LEP’s and DCP’s. For example, the Master Plan for Macquarie Park includes a development control that specifies that Ecologically Sustainable Development measures must be incorporated into the design of new developments in the areas of energy conservation, waste management, water conservation, and ecological enhancement.

The Metropolitan Strategy is an initiative of the NSW State Government to guide growth and change in the Sydney Metropolitan Area over the next 30 years. Local Government is a key stakeholder in the development and implementation of the strategy, which began in 2003. A draft is expected to be released in the 2005/2006 financial year³.

There has been continuing work on the revision of the Meadowbank Master Plan, Development Control Plan and Section 94 Contributions Plan.

A review of the draft Exempt and Complying Local Environmental Plan and Development Control Plan is currently being undertaken

Research into opportunities for new housing opportunities within the City of Ryde is continuing with a review of the residential development strategy.

Future Actions

- Continued review of the City-wide Section 94 Contribution Plan.
- Review of the Dwelling House and Duplex Development Control Plan.
- A Section 94 Plan, identifying and costing infrastructure for the Macquarie Park Corridor to be prepared.
- Review provisions of Development Control Plan No. 28 (Advertising signs) to ensure that the controls meet current best practice.
- Review the provision's of Development Control Plan No. 21A – Urban Housing.
- A Contamination Development Control Plan that contains policies and procedures based on State Environmental Planning Policy No. 55 and current City of Ryde practices.
- Prepare a new Leisure Needs Study to identify what leisure facilities and services are available in the Ryde Local Government Area and determine whether or not they fulfill the needs of residents.
- A Local Environmental Plan and Development Control Plan will be developed to implement the Macquarie Park Corridor Master Plan.
- From 31 October to 28 November 2005 the City of Ryde is exhibiting new plans that will guide the way the Ryde Town Centre will look and function. The Master Plan and planning documents are recommending that:
 - Through traffic be removed from Blaxland Road;
 - New residential dwellings be developed;
 - Additional storeys be allowed to encourage new investment;
 - Improved pedestrian and bus facilities be put in place;
 - A unique historic precinct be created to protect St. Anne's church and other historic buildings so all can enjoy them.

³ Source: www.metrostrategy.nsw.gov.au

2.2 Heritage in the Ryde LGA

Goals:

1. To identify, protect enhance and manage places and items of indigenous, built, natural, cultural, social and historic significance in the City of Ryde.
2. To increase awareness and understanding of indigenous, social cultural, built and natural heritage.

2.2.1 Non-Indigenous Heritage

Indicator	03-04	04-05
<i>Number of Heritage Items</i>	174	174
<i>Number of Conservation Areas</i>	4	4

As well as the 174 listed Heritage items, 208 sites are heritage listed. Within the 4 conservation areas listed in the City of Ryde, there are 163 sites. As can be seen in the Indicator table above the number of Heritage items and conservation areas have reached a stable figure.

The City has a Heritage Advisory Committee, which has a membership comprising of councillors, representatives from local historical groups and interested residents. This committee provides ongoing advice and direction to assist in conserving the heritage of the City. One example of their work is the War Memorial Project that identified and documented memorials to war such as honour boards located within the City. The project was part of the City of Ryde's activities to celebrate the 90th anniversary of the landing at Gallipoli and the 60th anniversary of the ending of World War II.

The Landscape and Archaeological Assessment for the former Brush Farm Estate Eastwood was completed in early 2005

Community consultation has been ongoing with the residents of the Outlook Estate at Eastwood and adjoining areas regarding the preparation of a local environmental plan and a development control plan to guide future development in order to protect the dominant themes and character of the area.

The City also works to protect its own heritage properties. Details of works in 2004/2005 are listed in Table 1.

Table 1: *Details of work completed on heritage buildings in the City of Ryde in 2004/2005*

Property	Work completed in 2004/2005
Rockend Cottage	Current activities include investigations into renewal / replacement of the roof covering together with landscaping works, in accord with the Conservation Management Plan.
Brush Farm House	Approvals sought for the undertaking of Phase 1 of the restoration of the central building of Brush Farm House, in accord with the Conservation Management Plan. Associated activities including some elements of the required landscaping of the building's curtilage.
Willandra	A Conservation Management Plan will be commissioned to guide all future activities associated with the on-going conservation / maintenance of this building. On-going maintenance activities will be undertaken over the course of this year.
The Parsonage / Westward Cottage	A Conservation Management Plan will be commissioned to guide all future activities associated with the on-going conservation / maintenance of this building. Both buildings are in good condition, having being restored in recent years.
Addington	A Conservation Management Plan will be commissioned to guide all future activities associated with the on-going conservation / maintenance of this building. On-going maintenance activities will be undertaken over the course of this year.
Eastwood Town Hall	A Conservation Management Plan will be commissioned to guide all future activities associated with the on-going conservation / maintenance of this building. Current activities include investigation into the Halls' associated car parking area and its surrounding landscaping.
Eastwood Croquet Club	On-going maintenance works will be undertaken with a Conservation Management Plan scheduled for preparation in future years.

*The Parsonage*

2.2.2 Indigenous Heritage

Indicator	03-04	04-05
<i>Number of Identified Aboriginal Sites</i>	62	62

The number of Identified Aboriginal sites in the Ryde LGA remains at 62 this year. A new site was uncovered at Meadowbank last year and the Local Metropolitan Aboriginal Land Council have expressed interest in undertaking a joint project to research Aboriginal occupation at the site which was found near bushland.

In 2004/2005, consultation and research was completed for the Aboriginal Needs Paper.

Future Actions for Heritage in the Ryde LGA

- Preparation of a Heritage Development Control Plan.
- Continued support of Community Heritage Groups.
- Continuing to seek advice from the community on heritage matters.
- Ongoing identification of sites, buildings and features within the City that may be of heritage significance and worthy of protection by a heritage listing.
- Ongoing research into the cultural and architectural significance of the areas adjoining the Outlook Estate.
- Pending a submission to the Council of the City of Ryde a full Aboriginal Survey is planned to commence in the new financial year at Meadowbank Park to investigate Aboriginal occupation at the recently uncovered site.
- Final endorsement of the Aboriginal Needs Paper is expected to be completed by December 2005.
- Where possible to integrate heritage and existing elements and buildings into the new built fabric of Ryde so that the city reveals its layers.
- To ensure that the heritage street pattern is retained and enhanced as part of any redevelopment.

2.3 Waste Management in Ryde LGA

Goals:

1. To continue to make residents and businesses aware of their responsibility to reduce waste going to landfill through education programs, recycling, encouraging responsible purchasing by choosing minimally packaged products, avoiding the use of plastic bags at supermarkets and utilising on site composting and worm farming.
2. To encourage resource recovery and waste avoidance to minimise waste going to landfill.
3. To encourage residents to 'Close the loop' by purchasing products made from recycled packaging

Domestic Garbage

Indicator	03-04	04-05
Amount of solid waste removed from households in the City of Ryde⁴:		
<i>Per Household (kilograms)</i>	789	787
<i>Total for the City of Ryde (tonnes)</i>	30244	30566

Whilst there has been an increase in total tonnage from last year's figures, there has been a slight decrease in the amount of waste per household. A number of factors can influence these results, including an increase in the LGA's population, and increase in the number of dwellings. The figures can also reflect the success of the City's waste education projects that work to reduce waste at the source by encouraging residents to follow the principles of "Reduce, Reuse and Recycle" and be responsible for the waste we are creating.

The City of Ryde's domestic waste is currently being disposed of through the Collex Pty Ltd Transfer Station at Clyde, where it is packed into sealed 28 tonne containers and railed to their Bioreactor at Woodlawn. A tender for both the Waste Collection and Disposal is currently out and individual contracts for a 7 year period should be determined by November, 2005.

Recycling Service

Indicator	03-04	04-05
Amount of Recycling removed from households:		
<i>Total (tonnes)</i>	8766	9060
<i>Percentage of Total Waste Recycled</i>	22.5%	22.1%

The participation rate of residents has remained around the 80-90% with items such as glass, PET & HDPE bottles, steel and aluminium cans, milk and juice cartons, cardboard, newspaper, magazines and clean paper being recycled at the Chullora Materials Recovery Facility.

A total of 9,060 tonnes of recyclables were collected from 37,500 bins this year. This is an increase of 294.59 tonnes from last year's figures. In addition to the above, residents were able to recycle any excess recyclables at the Waste Management Centre, North Ryde, which is managed by Waste Service NSW.

The City of Ryde's metal and greenwaste collection, which is incorporated with the household cleanup, continues to assist in increasing the recycling tonnages.

⁴These figures are based on data received from the North Ryde Waste Management Centre and the Collex Waste management Greenacre Transfer station.

Porters Creek Recycling

Indicator	03-04	04-05
<i>Material Recycled from the City's Outdoor Operations⁵</i>	14 600	18 495

The recycling of construction and demolition waste from the City's public works road and drainage construction projects continued during the year with an increase on the 2003/2004 tonnages. Materials are crushed at Porters Creek Depot and reused in road projects, thus reducing the waste going to landfill and costs for the purchase of new quarry material. 18 495 tonnes of material was recycled in 2004/2005.

The City of Ryde also rehabilitates road pavement on the job by cement stabilisation resulting in 11,090 tonnes of material not having to be excavated for disposal in landfill. Pavement rehabilitation reduces the need for further quarry material and haulage, off site processing and is considered a substantive environmentally sustainable initiative.

Commercial Waste

The City of Ryde continued servicing around 1 400 commercial waste bins utilising the new Tiris computer tagging system. An average of 75% of these bins are serviced each week with a total of 3,806 tonnes of rubbish collected during the year, which is a significant increase on last year's figures. It is difficult to say whether this reflects a decrease in the amount of litter reaching the street or an increase in the production of waste. The continuing development in the retail and commercial sectors would also influence the increased amount of commercial waste.

Garden Waste

A new Waste Collection Tender goes out next financial year and the City of Ryde will include a 240 litre greenwaste bin collected fortnightly in the new contract.

Waste Education

The City of Ryde has been active in conducting a number of displays during the year. The display at the Granny Smith Festival focused on the themes of illegal dumping, sustainability at home and plastic bag reduction. A display was held at Gladesville Shopping Village on the 15th March 2005 in conjunction with Hunters Hill Council to promote Coles Cares for the Environment - Steel Can Recycling Week.

⁵ Including Concrete, Asphalt and Compost



Illegal Dumping Promotion at the Granny Smith Festival in Eastwood

The City of Ryde’s Migrant Information Expo was held on the 17th March 2005. Approximately 500 people attended and were provided with multi lingual information on recycling and waste management.

The City’s Waste Education Officer visited a number of schools, especially Truscott Street and Ryde Public, presenting a broad range of information about waste, recycling, composting and worm farming, to students ranging from Kindergarten through to year 8.

The Department of Environment and Conservation held comprehensive training sessions for Customer Service Staff and staff involved with assessing developments in the Waste Not DCP. This enables staff to provide advice and when assessing waste management for new developments.

During the 04/05 the City of Ryde implemented initiatives in recycling of toner cartridges and mobile phones for both residents and employees by supplying containers within City buildings.

The issue of cigarette butts was addressed by installing ashbins within the City. These are supplied and serviced by ASHBINS Australia at no cost to the City of Ryde as they are funded by advertising.

Medical Waste Collection

Indicator	03-04	04-05
Amount of medical waste collected (kilograms)	700	606

The City of Ryde carries out a Medical Waste Collection Service of syringes and dialysis tubing from twelve local pharmacies. Approximately 606 kilograms was collected during the year.

The City also promotes the Return Unwanted Medicines Program, which enables residents to take their unwanted pharmaceuticals to any pharmacy across Australia for free collection.

Clean Up Australia Day: 6 March 2005

The City supported the work of Clean Up Australia by encouraging and supporting community and corporate organisations to take part in the clean up of the City's bushland, foreshore and parks. The City of Ryde again supervised 20 Cleanup sites with a further 11 schools participating on the Schools Cleanup Day and 4 business participating on Business Cleanup Day. These sites targeted foreshore and bushland/park areas.



Clean Up Australia Day

Toxic Chemical Collections

The City of Ryde in association with Department of Environment & Conservation, Waste Service NSW and Chemsal conducted its third Household Chemical Collection at the City's EnviroServe Operational Centre on 7th May 2005. Over 600 participants used this service, which was double that on last year due to a flyer the City of Ryde put out in the rates notice.

The collection was very successful with around 21 tonnes of material being collected and therefore diverted from landfill.



Household Chemical Collection Day held at Enviro Serve Operations Centre in May 2005

Household Cleanup Service

Indicator	03-04	04-05
Waste collected from the City of Ryde Cleanup (tonnes)		
Metal	148	108
Greenwaste	309	365
Other	1659	1716
Total	2116	2189

The City of Ryde’s Household Cleanup Collection Program levelled out with a drop in metals from last year by 40 tonnes, however there was a small increase in the amount of greenwaste put out for collection of 56 tonnes.

Littering and Dumping

A special Waste & Illegal Dumping Enforcement Officer is employed to target illegal dumping and littering, particularly in medium density areas. Every unit block was sent information regarding the illegal dumping crackdown and the City of Ryde requested permission to install signage in the bin bays of each unit block. All incidents of illegal dumping were taped off using yellow ‘crime scene’ tape with ‘ILLEGAL DUMPING UNDER INVESTIGATION’ printed on it. Every unit at locations where illegal dumping was detected was posted a letter listing the implications of the dumping. This was very successful with approximately 40% of the illegal dumping being removed prior to the City of Ryde issuing notices.



The City of Ryde has been targeting illegal dumping and littering

In house Recycling and Waste Reduction Programs

The City of Ryde recycles its office paper by way of cardboard boxes under each desk with an average of 15 x 240l bins emptied each week. Cardboard items are placed in the Visy cardboard bale system with an average of 7 bales being collected every 4-5 weeks. This equates to approximately 4.0 tonnes of cardboard being collected last year, up 1 tonne from the previous year. Recyclable containers are also recycled via dedicated bins located on each floor.

Future Actions

- Evaluate and award the Tender for The Provision of waste, recycling, greenwaste & household cleanup Collections and the Tender for the Provision of Waste Disposal.
- Continue to install Butts Out Bins at various busy bus stops and shopping centre sites to reduce cigarette butt litter.
- Continue to enforce Illegal Dumping and Littering.
- Continue existing waste management programs.
- Advertise and distribute education material for the new Waste Collection Contract
- Implement a Trial “Door to Door” Chipping and Mulching Service for residents.

2.4 Noise in the Ryde LGA

Goal: To reduce the number of people that are impacted on by excessive noise levels

Indicator	03-04	04-05
<i>Number of Noise Complaints (excluding barking dogs)</i>	123	93
<i>Barking Dog complaints</i>	156	86

Excluding barking dog complaints, the total number of noise complaints was 93, which is 30 less complaints than last year. Significant domestic sources include amplified music and air conditioning. Industrial and commercial activities also contribute significantly to the over all noise pollution figure through the operation of plant and equipment, ventilation and refrigeration equipment, public address systems and through the traffic they generate.

The most common source of domestic noise complaints was barking dogs. However, this figure continues to decrease, falling by 37 complaints this year to a total of 86. This is less than last year's total of 123 and significantly less than the 2002/2003 total of 500.

The City's development assessment process considers the noise impact of developments at the approval stage and applies conditions that mitigate the impact of adjoining receivers.

Future Actions

Continue to deal with noise complaints in a timely manner to reduce impact.

2.5 Open Space in the Ryde LGA

2.5.1 Tree planting

Goal: To increase the total tree canopy in the City of Ryde for amenity purposes and to extend wildlife corridors.

Indicator	03-04	04-05
<i>Number of Street Trees Planted</i>	281	289
<i>Number of Trees planted in Open Spaces</i>	4500	300
<i>Total number of Trees Planted</i>	4781	589

The total number of trees planted decreased significantly in 2004/2005 due to severe drought conditions. Trees are generally not planted in times of drought, as the chance of survival is low without sufficient amounts of water.



Schools National Tree Day at Bremnar Park with Putney School

2.5.2 Improvement of regional public space facilities

Goal: To provide good quality, safe destination points for family recreation

2004/2005 has seen the development of the Ryde Park Master Plan (a plan of regional significance), improvement works at Trim Place and Blenheim and Anzac Park. The Foreshore Cycleway has also been extended.

2.5.3 Improved carrying capacity of sporting fields

Goal: To provide safe and playable venues for organised sport.

Again, drought conditions have placed significant pressure on the quality of sportsfields during the year. It became necessary to restrict the use of some fields during August and September to minimise excessive wear on the surfaces. The restrictions enabled the fields to recover and improve – protecting the facilities and users of the facilities from injury.

Levelling and drainage were undertaken at Monash and Pioneer Park to improve these sporting facilities.

Future Actions for Open Space in the Ryde LGA

The development of *Parks on Track 2025*, a strategic plan for the improvement of parks in the Ryde LGA is expected to be completed in 2006.

2.6 Water Conservation

Goals:

1. To minimize consumption of water in the City of Ryde
2. To encourage the use of rainwater saving methods, devices and materials for re-use through public education and development controls.
3. To encourage Water Sensitive Urban Design on private and community lands

Indicator	03-04	04-05
Water consumption of City of Ryde buildings (kilolitres)	131, 958	111, 780
Total water consumption of the City of Ryde LGA (kilolitres)	10, 960, 876	10, 447, 696

The water storage level in the main Sydney metropolitan dam dropped from 47.9% to 38.3% of capacity this year (see Figure 2). The severe situation saw the commencement of Level 3 Mandatory Water restrictions as at 1 June 2005.

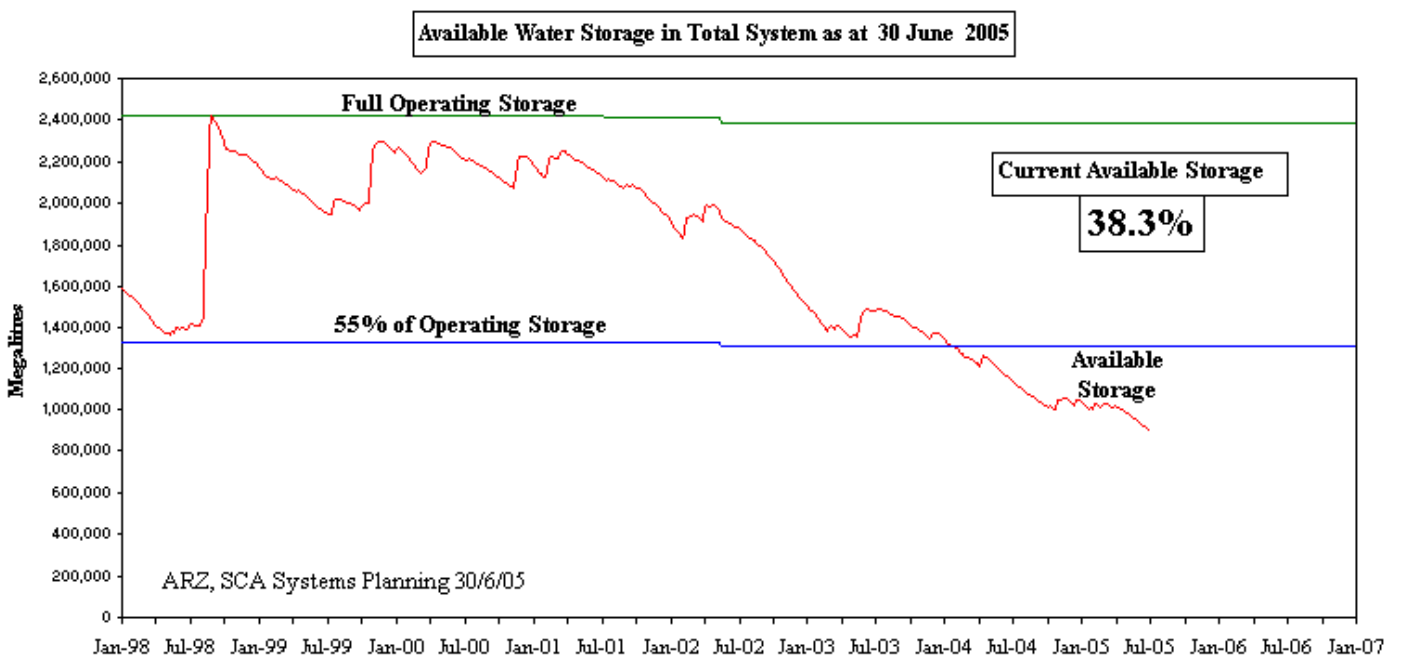


Figure 2: Available Water Storage in the main Sydney metropolitan dam
 Source: Sydney Catchment Authority 2005

In 2004/2005 the City of Ryde LGA consumed 10,447,696 kilolitres of water which is 513, 180 kilolitres less than the previous financial year. If you take into consideration the fact that the population and development of the city has grown in the past financial year, this is very encouraging.

Rainfall data collected in the City of Ryde also reflects a continued need for residents and businesses to conserve water, as monthly rainfall totals continue to be low, except in a couple of extreme storm events (see Figure 3)

In 2004/2005 the City of Ryde joined Sydney Water’s Every Drop Counts program to reduce water consumption by the organisation. The City is performing above average in 15 out of 19 tools measuring water management. Overall, the City is rated as two stars

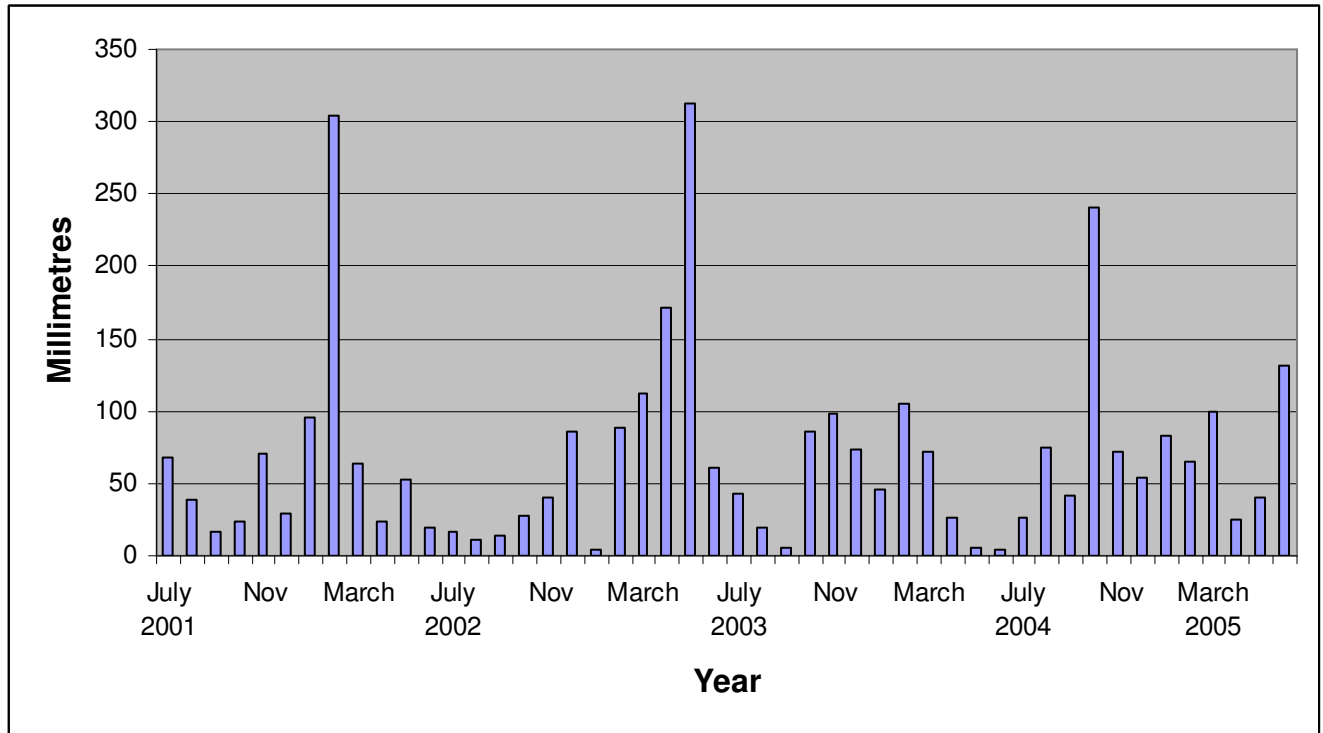


Figure 3: Monthly Total Rainfall in Ryde Local Government Area 2001-2005
 Source: As monitored by North Ryde Golf Club weather station.

which, when benchmarked against a group of 21 other local government participants around Australia and against 110 other participants across all sectors, is a very strong result so early in the program.

The City of Ryde plans to implement a number of water conservation measures in 2005/2006 including flow restrictors in kitchens and showers throughout the Civic Centre, and the removal of some taps from parks to prevent excess water usage and vandalism.

BASIX

With the commencement of implementation of the Building Sustainability Index (BASIX) on 1 July 2004, all new single dwelling-houses and dual occupancies in NSW must obtain a BASIX Certificate. This includes duplex buildings and villa home developments containing two dwellings. BASIX aims to reduce the consumption of energy and potable water by making new dwellings more resource efficient. The water target for new dwellings in the City of Ryde and the rest of the Sydney Metropolitan is a 40% reduction in consumption,

which will ultimately show a positive impact. Simple ways to achieve the BASIX water target include the use of:

- Triple A rated showerheads, toilet and tap fittings
- Rainwater tank connected to toilet, laundry and garden
- Small lawn area, use of native and low water species

Through BASIX, residents of the City of Ryde installed 117 Rainwater tanks in 2004/2005⁶.

Future Actions

As part of the NSW State Government requirement, the City of Ryde will be developing a Water Savings Action Plan in the 2005/2006 financial year.

In the 2005/2006 the City of Ryde will be applying for grants for water savings initiatives as part of the Federal Government's Community Water Grants Program and through the NSW Government's Water Savings Fund.

2.7 Public Health in the Ryde LGA

2.7.1 Public Health Nuisances

Goal: To secure the abatement of public health nuisances.

Indicator	03-04	04-05
<i>Complaints about public health nuisance</i>	167	174

Complaints about public health nuisances were up from 167 to 174 in the current reporting period. Overgrown land, sewer leaks and overflows, accumulated rubbish, poultry keeping and vermin problems continued to be the most common causes for complaints.

Nine Orders requiring the preservation of healthy conditions were issued in the current reporting period.

2.7.2 Food Premises

Goal: To ensure that all food businesses comply with the requirements of the relevant food safety standards.

⁶ Source: Sydney Water Corporation 2005

Indicator	03-04	04-05
Complaints about food businesses	33	22

The number of food premises increased from 521 last year to 535 in the current reporting period. However, complaints about food businesses were down from 33 to 22 in the current reporting period.

The City of Ryde Environmental Health Officers carried out 373 routine food safety inspections in the current reporting period, to ensure compliance with the Food Act 2003. Orders were issued to 2 food businesses in relation to unclean and insanitary premises, and one penalty notice was issued for a breach of the Food Act 2003 in the current reporting period. A food hygiene course was conducted in October 2004 and was attended by 28 participants.

2.7.3 Skin Penetration Premises

Goal: To ensure that all skin penetration premises comply with the requirements of the *Public Health (Skin Penetration) Regulation 2000*

The number of skin penetration premises, hairdresser's shops and beauty salons increased from 76 to 107 in the current reporting period. One complaint was received about a beauty salon in the current reporting period.

The City of Ryde Environmental Health Officers carried out 25 routine hygiene inspections in the current reporting period, to ensure compliance with the Public Health (Skin Penetration) Regulation 2000 and Local Government (Orders) Regulation 1999.

2.7.4 Public Swimming Pools

Goal: To ensure that all public swimming pools comply with the requirements of the *Public Health (Swimming Pools and Spa Pools) Regulation 2000*.

The number of public swimming pools increased from 26 to 27 in the current reporting period. The City of Ryde Environmental Health Officers carried out 48 routine swimming pool inspections in the current reporting period, to ensure compliance with the Public Health (Swimming Pools and Spa Pools) Regulation 2000.

2.7.5 Water-Cooling Systems

Goal: To ensure that all water-cooling systems comply with the requirements of the *Public Health (Microbial Control) Regulation 2000* to prevent the outbreak of Legionnaires' diseases.

The number of water-cooling systems decreased from 174 to 168 in the current reporting period. The City of Ryde Environmental Health Officers carried out routine inspections of 10 water-cooling systems in the current reporting period, to ensure compliance with the Public Health (Microbial Control) Regulation 2000.

2.7.6 On-Site Sewage Management Systems

Goal: To ensure that all on-site sewage management systems comply with the requirements of the *Local Government Act 1993*.

The number of on-site sewage management systems increased from 24 to 25 in the current reporting period. A number of enquiries were received from householders concerning the installation of greywater diversion devices. The preparation of a Greywater Reuse Policy is still pending.

2.7.7 Undertaker's and Mortuaries

Goal: To ensure that all undertakers' businesses and mortuaries comply with the requirements of the relevant legislation.

The number of approved mortuaries decreased from 3 to 2 in the current reporting period. No inspections were carried out of undertaker' businesses or mortuaries in the current reporting period.

2.7.8 Mosquito Control Program

- Goals:**
1. To reduce mosquito breeding incidence and nuisance through education, monitoring and treatment
 2. To monitor associated health risks in the area by having samples of mosquitoes tested for arbovirus.

Indicator	03-04	04-05
Number of mosquitoes trapped in the Ryde LGA		
Ochlerotatus vigilax	966	1,433
All species	4,191	5,296

The annual, joint mosquito monitoring and arbovirus surveillance program conducted by the City of Ryde, NSW Health, the Sydney Olympic Park Authority (SOPA) and other adjacent local government bodies was continued this season. Only four residential complaints were made this season, and there were no arboviruses detected in tested samples of adult mosquitoes.

The total number of trapped mosquitoes within the City of Ryde this season was the third highest over the last thirteen seasons of trappings, and the particular nuisance species *Ochlerotatus vigilax* from saltmarshes across the river comprised 27.1% of the trapped mosquito population and its total numbers was the fourth highest over thirteen seasons (see Figure 4). However, in comparison *Oc. vigilax* made up 34.2% of all mosquitoes caught over 13 seasons, and the numbers trapped was 1,433, which is slightly above the annual average of 1,316.

Public education this season included displays on boards in two libraries, in the Civic Centre foyer, and comprehensive, manned stalls at Granny Smith Festival and in Macquarie Shopping Centre. An advertisement in a local paper preceded the stall at Macquarie Shopping Centre. Already existing, comprehensive contributions have included the City’s Intranet with the aim of educating staff during the previous season, and the City’s web site, which has provided information to the community since 2001.

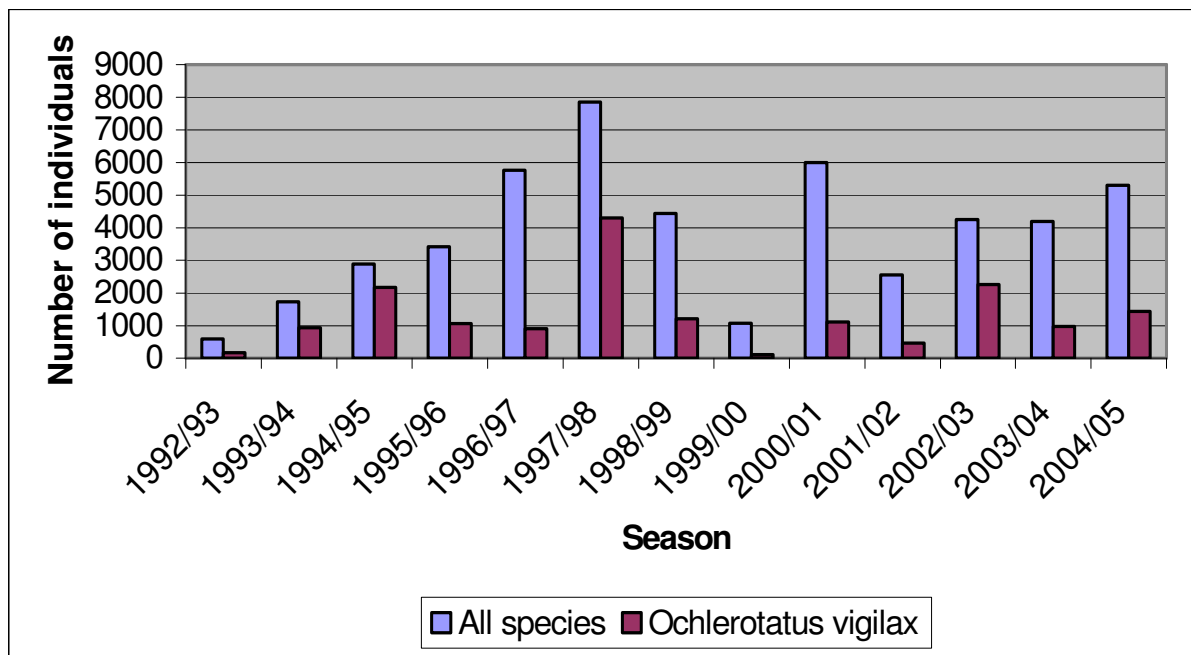


Figure 4: Total annual mosquito trapping numbers for all species and for the main saltmarsh species *Ochlerotatus vigilax*, for seasons 1992/93 to 2004/05

2.7.9 Vaccine Preventable Diseases

Goal: To ensure children in the City of Ryde are properly immunised in accordance with NSW Health and the National Health and Medical Research Council (NHMRC).

The City’s Immunisation Program has increased in popularity within the community with 2474 children in attendance during the year. This shows an increase of 379 children from 2003-2004.

During the year 6443 vaccinations were administered. These numbers show an increase of 1374 vaccinations from last year.

Pneumococcal vaccination for children up to two years of age was introduced in January 2005 and is now part of the current schedule. The Chicken Pox vaccine will be included as a free vaccine on the schedule from November 2005 for children at 18 months. The City of Ryde's clinic is currently vaccinating older children for Chicken Pox at a minimal cost.

The City of Ryde's Immunisation Program is being held up as a "Flagship" to other councils in both country and city areas as a highly rated program. Its procedures are being copied by other councils and used as a model for councils setting up new immunisation programs. The program won a Local Government Managers Association merit award of excellence for 2004-2005 for Service to the Community within Local Government.



The City of Ryde Vaccination Clinic

Future Actions for Public Health in the Ryde LGA

The City of Ryde's Environmental Health Officers to continue to carry out activities which promote and support public health in the City of Ryde, including education, and the investigation of complaints.

The Mosquito Control Program will continue during summer season 2005/06 and include similar facets as previous years.

To continue the City of Ryde's immunisation program with the view to improve the percentage of fully immunised children in the community to the desired 95%, therefore continuing the fight against childhood diseases.

2.8 Social Change in the Ryde LGA

Goal: To provide strategies, policies and plans and undertake an advocacy role that promotes the social and cultural well-being of individuals and the community

In 2004/2005 Consultation and research was completed for the needs papers in the Social Plan 2005. Also completed were the Children's, Young People's, Older Peoples, Cultural and Linguistically Diverse People's, Women's, Men's and People with a Disability Needs Papers. Consultation and research was completed for the Aboriginal Needs Paper with final endorsement expected to be completed by December 2005. Other work included:

- Convening of the Community Development Support Expenditure Committee and distribution of Community Grants.
- Facilitation and or resourcing of networks, inter-agencies and forums that respond to issues around safety and service for children, young people, women, older people, people with disabilities, culturally and linguistically diverse people and people from an Aboriginal or Torres Strait Islander background.
- The Harmony Festival was held with over 1000 people attending at the Ryde Civic Centre. This free multicultural event for families provided a range of activities from international food stalls to dancing and music. The local Police command and Fire Brigade were present with displays for the children. Additionally a Migrant Information Expo was held to provide information for newly arrived residents.



Images from the 2005 Harmony Festival

- Implementation of the Families First project, which aimed to provide advice on strategies and services to enhance prevention and early intervention models to meet the needs of families.
- Supporting, resourcing and working constructively with local residents, workers, community groups and organisations to enhance their capability for addressing the needs of the community.

- The provision of community facilities to community organisations that deliver services to the residents of Ryde.

Future Actions

- The completion and implementation of the City of Ryde Social Plan 2005
- To conduct social research employing a range of methods to develop a comprehensive social plan
- To develop policies and implement programs in response to identified community needs and to ensure compliance with statutory obligations.
- To advocate for the improvement of services and for those without a voice within the community (inclusive of older people, people with disabilities, young people, children, women, people from cultural and linguistically diverse backgrounds, men and Aboriginal & Torres Strait Islanders) to ensure they are given appropriate consideration in the delivery of City of Ryde services
- To deliver a range of services that promote the social and cultural well being of individuals and the community

Management Plan 2004/2007 Progress Summary – Human Settlement

Objective	Strategy	Measures/Targets	Progress
To foster and promote value of Aboriginal heritage in the City of Ryde	Complete the Indigenous Peoples Needs Paper for the Social Plan by November 2005.	Needs Paper is prepared for incorporation into the Social Plan due November 2005.	Project brief dated March 2005 for this needs paper has been prepared.
	Review the Aboriginal Heritage items incorporated on the Heritage LEP 105.	Undertaken as part of Heritage Plan review process due 30 June 2005.	Delayed. To be pursued in 2005-2006.
	Adopt the Northern Sydney Aboriginal Heritage Plan.	Undertaken as part of Heritage Plan review process due 30 June 2005.	Delayed. To be pursued in 2005-2006.
To foster awareness of Noise issues and implement reduction strategies	Review Development Control Plans to ensure any noise generating activities are properly managed at the development construction stage.	Completed to on-going program.	Completed. Appropriate noise control conditions are applied at the approval stage and the City of Ryde enforces these condition and requirements of POEO Act.
To encourage waste minimisation and waste recycling and effectively manage waste disposal.	Introduce a separate paper and container collection from units, which will also allow for the availability of paper collection only from schools and commercial properties.	Service for commercial properties by 30 June 2004.	City paper and container collection service for commercial properties commenced. To review under new Waste Contract proposed next year.
		Awaiting program for schools as the Department of Education have a contract with Visy Board Recycling Company to collect paper waste.	Visy Board Recycling Company have contract with Department of Education to collect paper from all schools.
	Advertise Expressions of	Completed to program and ensure	Process completed. Tenders received and

	Interest for the Provision of Waste Transfer, Processing and Disposal Services for the NSROC member councils.	approval from ACCC.	following consideration were rejected. Negotiations now proceeding for individual City of Ryde waste collection contracts
	Formulate data received by the community on the introduction of a greenwaste collection and determine the feasibility of such a service.	Survey completed to program requirements and results reported to the Council of the City of Ryde.	Survey completed. Green Waste Collection Service to be introduced as part of new waste collection and disposal service in 2005-2006.
	Continue existing waste management programs.	Completed to on-going program.	Completed to program. Program is ongoing.
To promote Water Conservation.	Investigate ways to incorporate Water Sensitive Urban Design (WSUD) into local area policies and programs. Techniques include use of rainwater tanks and water recycling to reduce water volumes, and use of soft landscaping and grass swales to increase water absorption. Other design approaches include use of wetlands, sediment traps and water pollution control ponds to maintain water quality and enhancing and protecting natural water systems.	WSUD principles are considered in any review of local DCP's, to on-going program. WSUD principles are considered in any City Capital Works Programs. Report to the Council of the City of Ryde by 30 June 2004 on how the city is incorporating WSUD into local area policies and programs.	Local development control plans encourage use of rainwater tanks and other water saving and reuse devices. Environmental audits of Enviro Serve Operations Centre, Ryde Aquatic and Leisure Centre and Porters Creek Depot consider water conservation and reuse measures Sustainability assessment completed for proposed new Ryde Central Library development and proposed SES building included water conservation and reuse objectives. Applying Energy Smart Water Wise DCP 45 and

			<p>new SEPP (BASIX) for development proposals</p> <p>Water Management Scoping Study to identify all viable water saving and cost saving options for improved water, stormwater and wastewater management in City areas of operation completed.</p> <p>Water Reclamation Study for Ryde Aquatic and Leisure Centre under consideration</p> <p>Joined Sydney Waters 'Every Drop Counts' Program to drive sustainable improvements in water efficiencies and participated in their Water Management Diagnostic Assessment.</p>
	<p>Include water conservation issues in any of the City's environmental education programs.</p>	<p>Incorporated in Enviro Ed Team Education and Promotion Strategy.</p>	<p>Completed</p>
	<p>Consideration to be given to making the installation of rainwater tanks in all new residential dwellings mandatory.</p>	<p>Considered in the review of City Dwelling and Duplex DCP, to on-going program.</p>	<p>The installation of rainwater tanks is now a mandatory requirement under BASIX, for new dwellings and duplexes. For other forms of development, the installation of rainwater tanks is also encouraged through the City of Ryde's Stormwater Management Code.</p>

To protect public health through related environmental health programs	Continue the City's Food Inspection Program.	Completed to on-going program.	Progressing to program.
	Continue the City's Water Cooling systems inspection program to minimise spread of Legionnaires Disease.	Completed to on-going program.	Program is focusing on the more sensitive commercial areas and shopping areas and is in progress. There are inadequate resources to carry this program into less sensitive industrial areas at this time.
	Continue the City's Mosquito Control Program.	Completed to on-going program.	Trapping part of program completed from December 2004 to April 2005. Report due June 2005 to program.
	Continue the City's Immunisation program with the view to maintain and improve the percentage of immunised children in the area to the National Immunisation Strategy's desired 95% by June 2005 and to advocate for an increase in subsidy from the State Government.	Completed to on-going program.	The number of children attending the City's Immunisation Program has doubled from last year and previous years. This is due to the increased popularity of the program. There has been no increase in the subsidy from State Government except the increased reimbursement for nurses' wages. Two extra nurses have had to be employed to cope with the large numbers of children attending the program.
	Continue to attend to health complaints in a timely manner.	Response time in accordance with agreed City complaint response protocol.	Completed
	Continue the City's Skin Penetration	Completed to on-going program.	Program in progress

	inspection program.		
	Continue the City's Swimming Pool Inspection Program.	Completed to on-going program.	Program in progress
	Co-ordinate a follow up compliance survey of local tobacco retailers with NSW Health.	Completed to on-going program.	Following recent changes to the structure of the Health Promotions Unit of the Northern Sydney Public Health Unit, the City of Ryde Environmental Health Officers now provide assistance to survey local tobacco retailers, on request. There were no requests for assistance this year.
	Continue the City's Mosquito Control Program.	Completed to on-going program.	Completed to program
To contribute to community well being through effective social change programs	Develop and implement the City of Ryde Social Plan 2005.	Social Plan ready November 2005.	On target for completion November 2005
	Develop policies and implement programs in response to identified community needs and to ensure compliance with statutory obligations.	Completed to on-going program.	Social Plan and Disability Discrimination Act Action Plan are both nearing completion and will address these issues.
	Advocate for the improvement of services and for those without a voice within the community (inclusive of older people, people with disabilities, young	Included in Aboriginal Needs Paper due June 2005 for Social Plan.	Aboriginal Needs Paper nearing completion. To be completed in 2005-2006.

	<p>people, children, men, women, people from cultural and linguistically diverse backgrounds, and Aboriginal and Torres Strait Islanders) to ensure they are given appropriate consideration in the delivery of City of Ryde Services.</p>		
	<p>Deliver a range of services that promote the social and cultural well being of individuals and the community.</p>	<p>Complete to Access and Equity Policy requirements.</p>	<p>Completed</p>

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3. Bushland and Biodiversity

Goals:

1. To implement strategic and comprehensive bushland programs that encourage passive recreational opportunities in natural areas in the City of Ryde
2. To protect biodiversity through weed management, environmentally sensitive riparian drainage and restoration, and fauna management.

3.1 Bushland Regeneration and Management in the Ryde LGA

The City of Ryde Bushcare Program

The City of Ryde Bushcare Program has continued to regenerate, protect and preserve urban bushland areas within the City of Ryde through the support and management of volunteers for the enjoyment of future generations. There are 130 volunteers in 15 bushcare groups. This year substantial progress has been accomplished by these groups in the improvement of biodiversity of the small and isolated pockets of remnant bushland.

The total area of land worked on by bushcare groups was approximately 10.4 hectares. Bushcare Groups completed Secondary work (or Follow up) and Maintenance.

The current Bushcare groups are:

- Minga Reserve
- Greenwood Park
- Waterloo Park
- Portius Park
- Darvall Park
- Stewart Park
- Finch Avenue
- Kennedy Street
- Brush Farm Park
- Ross Street/Glades Bay Reserve
- Putney Park
- Field of Mars – corner. Monash Road & Kim Street
- Field of Mars – Cemetery
- Roving weeding group – various sites
- Pidding Park

Schools involved:

- Ryde Secondary College
- Epping Boys High
- Marsden High School



A site undergoing bush regeneration in the City of Ryde

The City of Ryde Bushland Teams

The City of Ryde directly funds bush regeneration by professional contractors via an annual allocation in the City of Ryde's Parks section- Capital Works (General Fund) budget. This year the bush regeneration contract allocation totaled \$258,130, an increase of \$17,130 from the previous years budget. There were 8901 paid bush regeneration hours.

In addition to the above direct funding, various other projects were carried out in the City related to improvements to the City's natural area assets. A total of \$450,000 was expended under this Capital Works program directly on works to improve natural areas.

This year twenty-five bushland parks covering 159 hectares received professional bush regeneration contract works in particular areas including Brush Farm Park, Darvall Park, Marsfield Park and Putney Park.

The National Trust of Australia (NSW), Green Brush Bush Regeneration Company, Sydney Bush Regeneration Company, Gondwana Bush Restoration Company, and Terra Australia Bush Regeneration Company are acknowledged for their work over the last twelve months parks and reserves around the City. Examples of work completed can be seen in Table 2.

Table 2: Examples of Bushland Projects in the City of Ryde in 2004/2005

Site	Work Complete
Aitchander Reserve	At the watershed of the upper northern arm of Buffalo Creek catchment area a rehabilitation project in Aitchander Reserve was established to assist creek stabilisation, weed removal and planting.
Santa Rosa Park	Shrimptons Creek on going bushland rehabilitation works adjacent the Air League Hall involve weed removal and replanting.
Darvall Park	The remaining park signs for the Tall Timbers Walk and sandstone and blue gum timber bench have now been installed. Additional planting, fence and stairways have been embellished on the Chatham Road entryway. Track maintenance works are ongoing
Work on Epping Road, Lyon Park Road and Paul Street North DP 880284	Rehabilitation of this land has been on going since 2000, with some original works completed by volunteer support from the Sydney 2000 Olympic International Youth Camp. Funding this year was from the Roads and Traffic Authority.
Work on Ryde Hospital Blue Gum High Forest	Ryde TAFE staff and students, the City and the Ryde Hospital Engineering Department are involved in this project. Students have been learning practical bushland management skills while restoring a weed infested bushland area adjoining Ryde Hospital. This land is a remnant of Blue Gum High Forest that is listed under the Threatened Species Act 1995 as an endangered ecological community. One quarter of the reserve has been weeded, and although much still needs to be done, with the help and support of the Environmental Trust, Ryde Hospital and the City of Ryde the project is moving forward better than expected.

An ongoing strategy is the rationalisation of park usage where bushland listed under the Threatened Species Conservation Act 1995 exists. In certain areas where under utilised recreational facilities exist these are being centralised to more appropriate parks. This allows creation of stronger buffer zones surrounding the natural regeneration of the original forests. The above works has nurtured small pockets of Blue Gum forest in West Ryde this year. The community will further benefit from bushland projects that are encouraging passive recreational opportunities for healthier lifestyles.

Initial meetings with local BMX bike riders and the City of Ryde has help determine a location where a BMX Track can be build in Ryde. This will be further investigated over the next three months and the bike riders will be involved in the construction of the facility. Currently some BMX bike riders resort to building tracks in bushland

Further Actions

The continuation of the volunteer bushcare program and the City of Ryde bush regeneration program. This includes secondary weeding at sites that have received initial weeding. Maintenance will also take place. This involves spraying and mulching at more degraded sites (especially along walking tracks), and hand weeding at healthier bushland sites.

3.2 Fire Management in the Ryde LGA

Goal: To minimize the impact of fire on both people and property, while maintaining natural fire regimes for native bushland.

Firebreaks

There are 18 firebreaks that were maintained by the City of Ryde this year. Examples can be found at Field of Mars Reserve, Pembroke Park, Portius Park and Stewart Park. Firebreaks that underwent clearing works in 2004/2005 included those located at:

- Tyagarah Park
- Santa Rosa Park
- Somerset Park and
- Maze Park

A number of firebreaks are managed by a contractor, including:

- Jeanette Street-Blue Gum Drive Kitty's Creek
- Busaco Road
- 102-112 Crimea Road
- Tasman Place bushland
- Pembroke Park
- Nth Ryde RSL - 47 Magdala Road
- Ivanhoe Reserve
- Minga Reserve
- Lynn Park: Blue Gum High Forest
- Symonds: Blue Gum High Forest

The City of Ryde continues to apply the provisions of the regional fire management strategy.

There are currently two Community Fire Unit's, which are in Busaco Road Marsfield and Monash Road Gladesville. A grant application has been submitted to purchase a new Community Fire Unit for Crimea Road, Marsfield.

Future Actions

The City of Ryde-Bush Fire Prone Property Map needs to be reviewed by City of Ryde Officers and certified by Rural Fire Services to be scaled down to approximately three locations only in the City that may be considered as bushfire prone property,

3.3 Pest Management in the Ryde LGA

Goal: To implement community based projects that eliminate primary and satellite infestations of feral species of regional concern.

Foxes

In 2004/2005 three baits were taken by foxes in Field of Mars Reserve and 1 bait was taken at Brush Farm Park. Sand plot monitoring was used to investigate the presence of foxes at parks in the City of Ryde. Results can be seen in Table 3. Anecdotally, the number of foxes in Ryde appear to have decreased dramatically, possibly due to drought. The sand plot monitoring shows that foxes are present in a number of parks, but at this stage it is difficult to say whether or not the number of foxes is decreasing, as comparison of data over a number of years is required.

Table 3: Sand Plot Monitoring in the City of Ryde 2004/2005

Month	Fox Activity
October 2004	Foxes present in Ryde Hospital Bushland, Brush Farm Park and Field of Mars
December 2004	Foxes present in Ryde Hospital Bushland, Brush Farm Park and Field of Mars
February 2005	Foxes present at Ryde Hospital Bushland
April 2005	Foxes present in Ryde Hospital Bushland and Field of Mars

Feral Rabbit Program 2004-2005

In Christie Park, previously a pindone poisoning program trial was undertaken and two kilograms of bait was taken, which may equate to approximately 6 to 12 rabbits. However a dominant male may consume this amount by himself. Rain also occurred during the baiting which favoured growth of grass shoots, giving feral rabbits other food sources.

This year an initial spotlighting night was undertaken with all lighting at the sports oval shut down, with a count of over sixty feral rabbits. With a population of this number shooting, poisoning, den fumigation or trapping would not be cost effective. Damage and associated expense repairs to the playing fields would continue.

Common Indian Myna

The common Indian Myna bird (*Acridotheres tristis*) is a growing threat to biodiversity, particularly to bird communities in the Ryde area. The bird competes aggressively with native wildlife for nesting hollows, which are in short supply over much of Australia because of clearing from agriculture.

The World Conservation Union (IUCN) has listed the Indian Myna among the world's most invasive species, classifying it as an Extreme Threat for Australia⁷.

The City of Ryde is a member of the Urban Feral Animal Action Group. The group has ordered traps to catch Myna birds, which will be used in pilot projects. The group has also

⁷ Source: Indian Myna Management Solutions Australia, www.immsa.com.au

provided residents with information about the threat posed by Indian Mynas and possible ways of reducing the abundance of Indian Mynas on properties, including denying the bird roosting and feeding opportunities.



Common Indian Myna

Future Actions

- Continue to undertake fox sand plot monitoring
- Consideration of an option to rabbit proof fence the playing and training fields at Christie Park
- Promote a pilot program for trapping of Indian Myna birds in Darvall Park

3.4 Native Flora and Fauna in the Ryde LGA

Goals:

1. To implement strategic and comprehensive bushland programs that encourage opportunities for passive recreation in natural areas in the City of Ryde
2. To protect biodiversity through weed management, environmentally sensitive riparian works, bush regeneration and restoration, and fauna management

A 77-page report *Native Plants of the Ryde District, The Conservation Significance of Ryde's Bushland Plants* draft is complete. Following formatting for website display, public comment will be finalised and appropriate changes made. A further report has been commenced which will give both photographic and written description of the threatened, regionally and locally significant plants within the city.

Following a vegetation survey done in 1999 a more detailed mapping program may be required to isolate exact pockets of the Blue Gum High Forest community and the Turpentine Ironbark forest. It is intended that properties identified within the City mapping system and corporate property database will be noted on 149 certificates. This will help protect these endangered ecological communities.



Boronia ledifolia photographed in the City of Ryde. This is an associated understorey species of the Sydney Sandstone Ridgetop Woodland plant community; remnants of which can be found in the City of Ryde.

Future Actions

The city is assisting the minor upgrade of the Visitor Centre to enable more educational activities to be undertaken. A native plant identification seminar will be held later this year to assist volunteers with Bushcare works.

Flora and fauna surveys will be carried out by a suitable contractor, commencing in the next financial year in Field of Mars Reserve, Brush Farm Park, Lambert Park and Darvall Park. The aim of the project is to acquire baseline data for future biodiversity conservation measures.



Water dragons at Shrimptons Creek

3.5 Noxious Weeds in the Ryde LGA

Goals:

1. To educate the community about noxious and environmental weeds and their control
2. To extend inspection programs to manage and control the incidences of primary and satellite infestations of noxious weeds on community and private land

Noxious Weed Complaints

Complaints about noxious weeds were up from 24 to 32 in the current reporting period. There were 127 noxious weed inspections including 95 as part of the noxious weeds education campaign.

The City of Ryde's Environmental Health Officers continued to investigate complaints about noxious weeds and provide advice about noxious weed control. No weed control notices were issued in the current reporting period.

Noxious weed removal programs

The City of Ryde has been involved in the following removal programs this year:

Alligator Weed Control Project

In order to eradicate Alligator Weed, all of the Parramatta River foreshore Parks in the City have been treated and saltmarsh species have been successfully grown and planted in Melrose Park. This aquatic weed has been controlled on the river and, utilising a specifically built GIS mapping program, saltmarsh species are being mapped on both Parramatta River and Lane Cove River.

Outbreaks of Alligator Weed have been found on a flood mitigation properties property in Kent Road next to Shrimptons Creek and successfully treated.

After an infestation was found within a Macquarie University watercourse, the City commenced a surveying program for Alligator Weed together with Lane Cove National Parks and Wildlife Service, and other downstream councils.

Pampas Grass and Blue Grass

The ownership of land from Delhi Road, North Ryde to Christie Park, Macquarie Park containing Pampas Grass and Blue Grass infestations were identified. Letters were sent out to the various landholders by the end of 2004, requesting assistance in this environmental noxious weed project.

By March of 2005, positive responses had been received from the above landholders. The pampas grass was in full flower at this time and the City of Ryde arranged for an

emergency seed head collection run to occur throughout the affected area, in conjunction with each landholder.

Utilising the above strategy, as with previous years, the amount of weed seed blowing around the area, (including back onto the council land), was minimised.

By the end of June 2005, another major landholder had come on board and the first comprehensive treatment work had been completed on all of their affected lands in Ryde. Meanwhile, another major landholder had begun control work and is positive about working with the City of Ryde in the near future.

The City of Ryde's approach of encouraging educational inspection and control work on other land tenures made a big difference, particularly in terms of reducing the amount of weed seed being spread. Without this positive approach, chances are that the effectiveness of the control work being undertaken on adjoining City of Ryde land would have been eroded by the continual encroachment of seeds from neighbouring properties.

Overall, the project has been very effective in reducing the number of Pampas Grass and Blue Grass in the City of Ryde.



A site with pampas grass scattered in the middle ground



The same location after successful removal of pampas grass

Ludwigia

An ongoing aquatic weed program in Darvall Park to remove Ludwigia has been completed this year totalling 28 hours.

Asthma Weed

Asthma Weed removal was undertaken at Banjo Paterson Park with 42 hours of work completed.

Noxious weed education

Information flyers covering another three noxious weed species: Green Cestrum, African Olive and Asparagus Fern were produced, totaling a number of 12 noxious weed flyers so far. The annual, state-wide Weedbuster Week was promoted during the City's Granny Smith Festival, using a fresh weed display to attract visitors, and handing out promotional items to residents who brought weeds for identification by staff.



Green Cestrum – a poisonous and vigorous noxious shrub

During the reporting year, over ninety Stage 3 follow up inspections of private properties were undertaken for the Brush Farm Park Noxious Weed Program. Inspection reports were produced and will be taken into account during the final inspection rounds during 2005/06.

Review of the NSW noxious weed legislation was long due, and a Noxious Weeds Bill was passed on 1 June 2005. *The Noxious Weeds Amendments Act 2005* will commence on 1 December 2005 and it will bring about new certification of inspecting officers and the replacement of noxious weed control categories. Existing noxious species listed within individual local government areas in the State will remain, but all noxious weed classifications will be transferred across the classes.

Future Actions

By the end of the 2005-2006 financial year, it is expected that all other landholders will have been contacted about Pampas Grass and Blue Grass removal again. In this way all of the initial comprehensive control work undertaken on all land tenures will be rigorously followed up.

The City of Ryde will continue to investigate complaints concerning noxious weeds on private land.

The Brush Farm Park Noxious Weed Program will continue with further inspections to take place in the 2005/2006 financial year.

Management Plan 2004/2007 Progress Summary – Bushland and Biodiversity

Objective	Strategy	Measures/Targets	Progress
To promote Biodiversity and implement programs to protect Biodiversity in the City of Ryde.	Consideration is given to synthesizing and collating information about the flora of the City of Ryde under a specific project.	Brief prepared by March 2004 and call for Expressions of Interest by 30 May 2004.	Native Plants of the Ryde District Study prepared. Flora and Fauna Survey of Field of Mars Reserve, Darvall Park and Brush Farm Park, including adjacent Lambert Park being considered for next year.
	Explore the feasibility of developing a local bush-walking program.	Program considered by 30 June 2004.	Mapping of walking trails and cycleways completed and information available on the City's website.
	Consideration is given to undertaking a Natural History of Ryde Project to document the natural heritage of Ryde City to support the local naturalists in their studies of local bushland. Legislation requires that the community (including environmental groups) must be involved in monitoring changes to the environment over time.	Project considered by December 2004.	Native Plant Study specific for the City of Ryde prepared. A Plan of Management for the Lane Cove National Park completed by National Parks and Wildlife Service exists. Other significant elements of bushland and natural areas are to be considered as part of the City's Heritage Study.
	Continue to apply the Threatened Species Conservation Act, 1995.	Comply with Act.	Completed
	Continue	Completed to on-	Completed to

	implementation of the high quality Volunteer Bushcare Program.	going program.	program
To protect the environment through active pest management.	Further develop the City's Community Noxious Weeds Program.	Community Noxious Weed Program is developed by June 2004.	<p>Completed Stage 2 of Brush Farm Park Community Noxious Weed Program. Stage 3 re-inspections planned for 1st quarter 2005-06.</p> <p>Proposal to replicate Brush Farm Park for private properties around Darvall Park planned for commencement in 2005-06</p> <p>Successful joint grant funding with Ku-ring-gai Council to completed community noxious weed program around the Lane Cove River, in Ryde for that area around the Field Of Mars Wildlife Refuge.</p>
	Undertake the fox sand plot monitoring four times a year at Field of Mars and Brush Farm Park.	Complete to on-going program.	Completed to program
	Remove rabbit habitat in Field Of Mars.	Completed to on-going program.	Habitat substantially destroyed during 2002 fires. Under watching brief
	Conduct noxious weed re-inspections of private properties around Brush Farm	Completed to program.	Stage 3 re-inspections nearing completion. To be completed first

	Park during 2003/04 in order to check condition of properties. Any remaining, as well as new noxious weeds found will be recorded in order to evaluate the education efforts made during the first stage of the program. Note: The City's incentives were continued during 2002/03 in the form of limited pickups of noxious weeds and giveaways of native replacement plants.		quarter 2005-2006
To maintain a balance between protecting life and property and ensuring biodiversity.	Implement the approved 2003/2004 Hazard Reduction/Ecological Burn Program.	Completed to seasonal program.	Completed
	Map areas within the City that are bushfire prone or subject to slope instability.	Mapping is completed to program.	Mapping completed. To be reviewed by Rural Fire Service and NSW Fire Service in 2005-2006.
To manage and develop the City's Open Space	Continue to apply for grant funding for renovation of old facilities.	Funding opportunities are identified.	Completed
	Continue the City's ongoing asset maintenance program.	Completed to on-going program.	Completed to program

4. Water

4.1 Water Quality in the Ryde LGA

Goals:

1. To improve water quality of our waterways, including receiving waters
2. To monitor changes in aquatic health

Water Quality Monitoring Strategy

This year saw the commencement of the City of Ryde's 7 Year Water Quality Monitoring Strategy.

The first 2 years of the strategy has the 5 core sites on Shrimptons, Archers, Buffalo, Terrys and Porters Creeks, respectively, being monitored both in Spring and Autumn. Both biological and chemical parameters will be measured along with a number of statistical analyses. For brevity and consistency with previous State of the Environment reports the AusRivAS results will be shown in this report.

Ecowise Environmental was awarded the contract to carry out the first year of monitoring and they reported back to the City of Ryde after each season.

In Spring 2004, sampling in Porters and Buffalo Creeks was carried out upstream of the 'core' sampling locations due to access problems. To provide some consistency these 2 locations were sampling again in Autumn 2005 together with the 5 'core' sites.

Some of the main points from the Spring 2004 monitoring were:

- High conductivity results in Porters Creek
- The dissolved oxygen was below ANZECC/ ARMCANZ (2000) guidelines.
- Faecal Coliform levels were sporadically elevated at some sites.
- In all 17 samples were taken across the 5 sites. 1 sample was in AusRivAS Band B (below reference), 8 were in Band C (well below reference) and 8 were in Band D (impoverished). Archers Creek was considered in the best condition and Porters Creek the poorest.

Following a review of the Spring 2004 report by the Water Quality Monitoring Steering Committee the Strategy was amended to expand on the nutrient parameters that are tested. Now ammonia, nitrates, total kjeldahl nitrogen, and total nitrogen have been added to total phosphorus already being measured. This was to allow a better understanding of the eutrophication of the waterways.

The main points from the Autumn 2005 monitoring were:

- Dissolved oxygen levels continued to be low.

- Ammonia exceeded ANZECC/ARMCANZ (2000) guidelines at all sites and nitrates and total nitrogen was generally exceeded at most sites.
- Porters Creek was again impacted by high conductivity levels.
- In all 21 samples were taken across 7 sites. 11 samples were in Band B (below reference), 9 were in Band C (well below reference) and 2 were in Band D (impoverished). Archers Creek was again the best and Porters Creek (the same site as tested in Spring 04, not the 'core' site) being the worst.

Pollution tolerant macroinvertebrate families dominated all the sites with a number which can tolerate organic or nutrient enriched environments. Confirming that the nutrient levels observed in the chemical analysis is being reflected in the macroinvertebrate life in the streams.

Ecowise comments that the results are indicative of urban creeks with significant to severe impairment of ecological health. Comparison with previous sampling carried by Robyn Tuft and Associates in Porters, Buffalo and Terrys Creek has indicated an improvement in 2005.

The occasional high faecal coliform levels are likely a result of sewer overflows into the stormwater system. Indeed some of the notifications from Sydney Water of dry weather overflows they have attended correlate to similar times when sampling occurred. Sewer overflows can also contribute to the higher nutrient levels.

Further investigation of the high conductivity levels revealed that the discharge into Porters Creek from the Parramatta Rail Link worksite also had very high conductivity levels. The matter was referred to the NSW Department of Environment and Conservation, as they are the appropriate regulatory authority for that worksite. It is understood that a study of the groundwater being encountered in those works has now begun.

The high conductivity levels also occurred at the same time elevated levels of total nitrogen were encountered. The Spring 05 test results will be checked to see if this association is continuing and further investigation maybe required.



Shrimptoms Creek – one of the Creeks undergoing water quality analysis as part of the City of Ryde's Water Quality Monitoring Strategy.

Middle Harbour and Lane Cove Macrobiological Monitoring Program

This program, previously carried out in conjunction with the councils of the Lane Cove Catchment and Robyn Tuft and Associates is designed to get an indication of the overall health of the catchment.

This year the work was conducted by Biotrack Australia Pty Ltd with samples taken from Buffalo and Porters Creek (same 'core' locations as indicated in the Water Quality Monitoring Strategy) in both Spring 04 and Autumn 05. The average of these results shows that Porters Creek was in AusRivAS Band B (below reference) and Buffalo Creek was in Band C (well below reference). This was consistent with the conditions assessed by Ecowise.

Recreational Water Quality

During November and December 2004 the City of Ryde's Environmental Health Unit conducted a 'one-off' monitoring program in the Lane Cove and Parramatta Rivers to assess water quality against the recreational water quality criteria set out in the ANZECC/ ARMCANZ (2000) guidelines.

5 samples in 3 locations on the Parramatta River and 2 locations on the Lane Cove River were analysed for the presence of faecal coliform and enterococci bacteria as well as some other parameters such as pH, temperature and visual clarity. 2 of the samples were considered to have been taken during wet weather.

The ANZECC/ ARMCANZ (2000) guidelines describe 2 criteria for recreational water quality:

- i) Primary Contact – Where full immersion in the water will occur. eg. swimming
- ii) Secondary Contact – Where only limited contact with the water may occur. eg. boating or fishing.

The main results from the monitoring were:

- All sites in both rivers met the median (average) and maximum criteria for secondary contact for both faecal coliforms and enterococci.
- All sites on the Parramatta River met the median criteria for primary contact for both faecal coliforms and enterococci.
- Lane Cove River generally had higher bacterial levels than the Parramatta River.
- Higher bacterial levels will tend to occur after wet weather. This was reflected in the results on the wettest of the sampling days where all sites failed the maximum criteria for enterococci for primary contact.

Porters Creek Depot – Water Quality Monitoring 2004/2005

The water in Porters Creek upstream and downstream of the depot's discharge point has been monitored on a monthly basis since November 1993.

Monitoring was carried out 13 times during 2004/2005. The two upstream sampling points are in the main channel adjacent to Wicks Road and the M2 Motorway, and on the Spur line which drains properties fronting Lane Cove Road. The downstream sampling point for the combined waters of the creek is below the Depot site on the boundary with the Lane Cove National Park.

Laboratory testing of these samples found that the differences between the up and downstream sites was 1mg/l or less for ammonia for 13 out of 13 tests, 1.5mg/l or less for nitrate and nitrite for 13 out of 13 tests, and 1.5mg/l or less for Total Kjeldahl Nitrogen for 12 out of 13 tests.

In December 2004 the Department of Environment and Conservation (DEC) approved the surrender of the licence to operate a Waste Disposal Facility at the Depot. The City of Ryde is permitted to continue the current materials recycling and landfill capping activities in accordance with the Closure Plan.

Conditions of surrender of the licence placed obligations on the City of Ryde to continue to manage the Porters Creek depot environment in a responsible manner. These include the operation of the leachate disposal systems, surface water quality monitoring, and the submission of certain reports by 30 September 2005.

These reports are on

- Landfill gas monitoring
- Leakage rate of the existing landfill cap
- Feasibility of discontinuing the irrigation of leachate
- Surface water quality monitoring
- Stability of northern batters
- Feasibility of isolating and storing excess leachate
- Permeability of the base of the terminal pond

If the reports indicate that further action is warranted, these issues will be worked through with the Department of Environment and Conservation.

Sydney Water Dry Weather Overflows

In accordance with a license requirement set out by the Department of Environment and Conservation Sydney Water advised the City that they attended 37 sewer overflows during the reporting period. This is a decrease of 33 compared to last year.

By catchment area they are:

Terrys Creek	9
Porters Creek	4
Shrimptons Creek	5
Charity Creek	7
Mars Creek	2
Buffalo Creek	5
Gladesville	2
Archers Creek	3

Streamwatch

City of Ryde staff responded to enquiries from schools participating in the Streamwatch program as required and in regards to any pollution incidents. No specific Streamwatch events were undertaken during the reporting period.

Epping Boys High School and Holy Cross College have made enquiries about how the City may be able assist in their Streamwatch programs. The Water Quality Monitoring Strategy allows the use of 'satellite' sites to supplement information already being gathered from the main 'core' sites. It may be possible that the programs of these schools could be utilised in this way.

Enforcement Actions

The Environmental Health unit responded to 53 water pollution incidents during the reporting period.

All of these were, thankfully, relatively minor, though a spill of transmission oil in College Street, Gladesville had the Environmental Health unit, Enviroserve and the local fire brigade working together to successfully prevent pollution of nearby Buffalo Creek.

Future Actions

The City will be continuing its Water Quality Monitoring Strategy, and its involvement in the Middle Harbour and Lane Cove Macrobiological Monitoring Program

Development of the Streamwatch program will be explored.

The City will continue to investigate reported water pollution incidents.

4.2 Stormwater Management in the Ryde LGA

Goals:

1. To increase community awareness of stormwater pollution
2. To maintain stormwater infrastructure

Stormwater Management Plan – Program of Works

In order to improve the health of catchments, the City of Ryde implemented the Stormwater Management Plan Program of Works. It is a comprehensive program that identifies, schedules and costs major environmental programs that address pollution control in the catchment areas of the City of Ryde local government area. The program

provides an integrated approach to stormwater management across several sections of the City of Ryde and this will allow the flexibility to facilitate ongoing community participation in local area decision-making processes.

As part of the plan, the Water Quality Monitoring Strategy was adopted in 2004/2005. The strategy will enable City capital works and community education programs relating to creek restoration and rehabilitation to be better targeted because the monitoring data will enable changes in water quality trends to be detected and this will allow decisions to be made on projects and programs to address problems found to be unique to each system.

A number of initiatives were implemented to reduce the amount of pollution entering stormwater and to reduce stormwater runoff in general. Structural measures have been installed including Gross Pollutant Traps at Terry's Creek and at Bowden and Well Streets. Pollution control pits are now in place for individual properties. Pit cleaning and streetsweeping practices have also been reviewed to improve efficiency. On a smaller scale, facilities have been provided to residents for animal faeces disposal at Brushfarm and Blenheim Parks. Mapping of stormwater infrastructure has been updated for quick environmental incident response and to advise the City of Ryde's Enforcement Team.

Standard conditions of development Consent relating to preventing stormwater pollution have been reviewed and updated. Also as a preventative measure, erosion and sediment control is required for developers. Enforcement of regulations has resulted in 11 littering infringement notices issued in accordance with the POEOA Act.

Monitoring continued of sewer overflows, leachate from Porters Creek and the rate of litter collection from Pollution Control Devices (PCDs) to determine problems in different areas and appropriate responses.

Water re-reuse systems have been installed at Monash Park to reduce the amount of runoff, and as an effective water conservation measure.

The bushcare volunteer program has assisted with the restoration of riparian zones and with limiting the effect of stormwater runoff in bushland areas.

Stormwater Pollution Educational Initiatives

A number of educational initiatives were carried out in 2004/2005 to prevent stormwater pollution, including:

- The continuation of the noxious weeds program
- Stormwater education for City of Ryde officers through the staff induction process
- Information on stormwater policies on the City of Ryde website
- Interpretive signs were installed along creeks and waterways and at bush regeneration sites
- Encouragement and support provided for schools participating in the Streamwatch program.
- Environmental audits of automotive businesses in the Buffalo and Higgonbotham Road industrial area at Gladesville. The opportunity was taken to talk to the owners about water pollution. The audits were targeting air pollution and emissions but the proximity of Buffalo creek to this area provided a good focus to provide some education about

the impact the businesses may have on stormwater pollution and subsequent water quality in the creek.

- Environmental audits of automobile businesses in the Meadowbank Industrial area, specifically targeting stormwater pollution awareness.

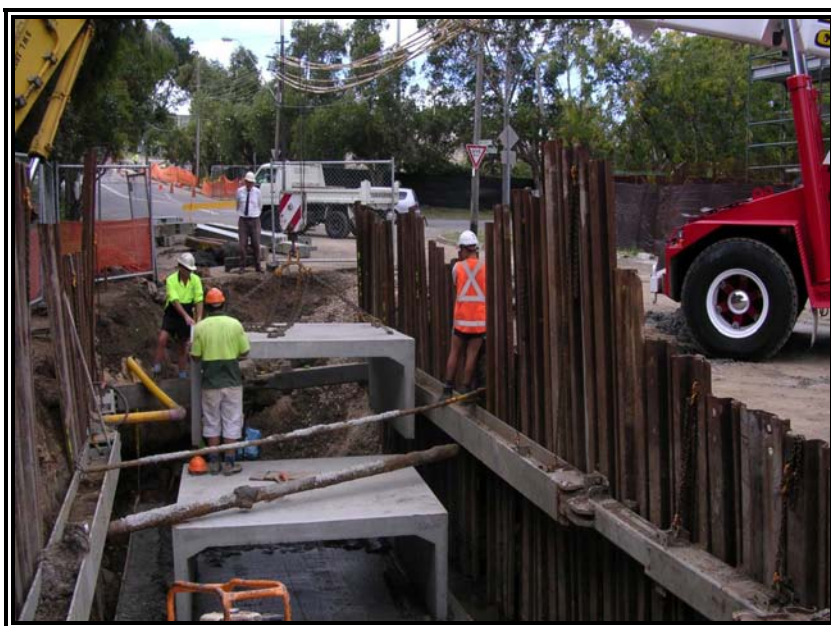
Stormwater Infrastructure Maintenance

Catchment Work

This year the following maintenance work to Stormwater Infrastructure was undertaken (see Table 4).

Table 4: Maintenance work to Stormwater Infrastructure by catchment in the City of Ryde LGA for 04/05

City of Ryde Stormwater Catchment	Work Completed
Shrimptons Creek	Urgent drainage replacement in Agincourt Road completed.
Charity Creek	Urgent drainage replacement in Herbert St commenced.
Denistone	Urgent drainage replacement in Graf Ave. and Chatham Rd. commenced.
River	Stage 1 of the Meadowbank Employment Area Drainage Augmentation Scheme involving improved drainage facilities in the Bowden St. Sub-Catchment completed. Stage 2 involving the provision of trunk and secondary drainage facilities in the Well St. sub-catchment as well as a pollution control device at the system outlet to Parramatta River commenced.
Mars Creek	Enlargement of the upper detention storage in Dunbar Park completed.



Drainage construction in Well Street, Meadowbank

Pollution Control

Indicator	03-04	04-05
Waste Collected by Pollution Control Devices (tonnes)	47.50	60.08

The total amount collected in 2004/2005 is an increase of 26.48% on that collected in the previous year.

The City of Ryde’s Stormwater Management Section installed three additional PCDs during the 2004/2005 financial year.

Table 5 lists the PCD’s commenced and completed during 2004/2005.

Table 5: Pollution Control Devices completed in the City of Ryde LGA in 2004/2005

Type of Devices	Catchment	Location
1 Continuous Deflection Separation (CDS)	River Catchment	Anderson Park
1 Continuous Deflection Separation (CDS)	Archers Creek Catchment	Maze Park
1 Storm Trap	Archers Creek Catchment	Brush Farm Park
1 Trash Rack	River Catchment	Bowden Street

Figure 5 shows the increase in waste collected from the City’s Pollution Control Devices over the last three years. This clearly demonstrates the value of these devices and their effectiveness in removing pollutants before they reach receiving waters.

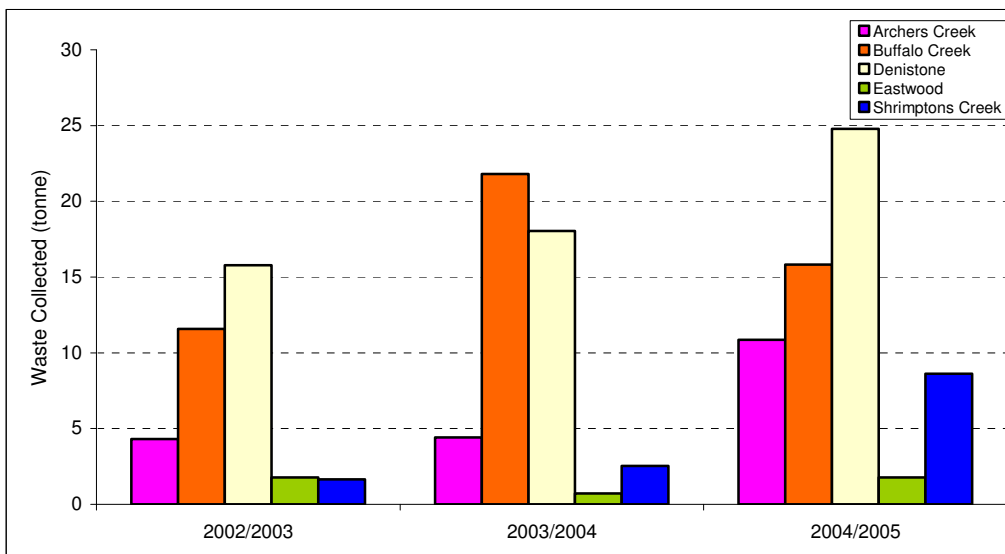


Figure 5: Waste Collected City of Ryde Pollution Control Devices from 2002/2003 to 2004/2005



Additional Storm Trap Device installed to supplement the existing Humeceptor at Brush Farm Park

Creek Rehabilitation Work

Maze Park

The project is a continuation of the Maze Park Creek Rehabilitation project. The project was funded and managed by the City's Stormwater Management Section. Works included removal of noxious and environmental weeds, removal of rubbish washed into the creek and maintenance of creek profile to more effectively convey in high creek flows.



Revegetation of the creek and bank at Maze Park, Brush Road

Shrimptons Creek

Bush regeneration and weed control continued in those parts of the creek disturbed by the gross pollutant trap installation and riffle construction undertaken as part of the Stormwater Trust Grant project.

Street Sweeping Program

Indicator	03-04	04-05
<i>Amount of litter collected from street sweeping operations</i>	696	617

The total quantity of material collected is a decrease of 11.35% on that collected in the previous year, which could be due to a number of factors including a reduction in rainfall over the period, or a decrease in litter on the streets due to stormwater and waste education programs.

Future Actions

- Review the condition of all existing Stormwater Assets in compliance with Australian Accounting Standard 27 (AAS27).
- Continue community education programs on the prevention of Stormwater pollution and raising awareness by dedicated campaigns and library handouts.
- Support Sydney Water Corporation's – Sewer Overflow Abatement Program.
- Continue installation of Gross Pollutant Traps (GPT) in accordance with the City's program and provision of funds for maintenance.
- Investigate opportunities for further water reuse in parks.
- Encourage and support Streamwatch programs in local high schools.
- Review Erosion/Sediment Control Strategy for commercial and residential construction sites and increased surveillance.
- Undertake Stormwater augmentation works in Herbert Street, Eastwood town centre and Meadowbank Employment Area.

Management Plan 2004/2007 Progress Summary – Water

Objective	Strategy	Measures/Targets	Progress
To maintain and protect water quality and manage stormwater	Develop a water quality monitoring strategy for the City of Ryde.	WQM Strategy is completed by June 2004.	Completed and Strategy being implemented.
	Consider specific community education programs on the prevention of stormwater pollution.	Incorporate in Enviro Ed Team Education and Promotion Strategy.	Completed and Strategy being implemented.
	Undertake regular water quality monitoring of local waterways.	Incorporate in WQM Strategy due June 2004.	Strategy completed and includes biological and chemical monitoring at 5 core creek sites within the City of Ryde.
	Review all existing Stormwater Management Plans and develop new plans for the next 3 years.	Review by June 2004.	Review completed and quarterly audit meetings held.
	Continue installation of Gross Pollutant Traps and provision of funds for maintenance.	Completed to on-going program.	Completed GPTs at Bowden and Well Sts, Meadowbank and one on Terrys Creek. Quote to construct CDS unit as part of Maze Park Stage 2 rehabilitation work is under consideration. Progressing to program.
	Carry out urgent drainage replacement works at Eastwood Oval, the vicinity of 13 Lane Cove Road, and at Railway Parade, Eastwood scheduled during	Completed to program.	Completed.

	2003/04.		
	Support Sydney Water Corporation's Sewer Overflow Abatement Program.	Ongoing support of Program.	Completed
	Install Pollution Control Devices as part of drainage works at Railway Parade, Eastwood scheduled during 2003/04.	Completed to program.	Completed
	Continue responding to water pollution complaints in a timely manner.	Response time to agreed City complaint response protocol.	Completed

5. Air

5.1 Air Quality

Goal: To improve air quality in the City of Ryde through local initiatives which can have a positive effect on regional air quality.

Local Air Quality

Indicator	2003-2004	2004-2005
<i>Air Complaints Received by the City of Ryde:</i>		
Backyard Burning	15	13
Odour (sewer, cooking, chemical etc)	26	16
Solid Fuel Heaters	5	4
Dust and Construction	3	4
Total	49	37

The total number of complaints received by the City of Ryde's CRMS this year was 37. This is 12 less than the 2003-2004 total.

Regional Air Quality

Indicator	2003	2004
<i>Number of days that had a high Regional Pollution Index (RPI)⁸</i>	13	7

The NSW Department of Environment and Conservation (DEC) uses the Regional Pollution Index (RPI) to determine whether the levels of air pollution in Sydney's urban areas are high enough to cause damage to human health and the environment. The RPI is categorised as low, medium or high and measurements are taken twice a day at sites across Sydney. Whilst it is understood that the air quality in the City of Ryde must be considered in a much broader regional context, the continued decrease in high level RPIs from last year's substantial fall for the region is encouraging.

The air quality sampling data routinely collected by the DEC shows very few exceedences of the national standards for health and environmental protection throughout the region. Anecdotal comments in the Sydney press do however, refer to local pockets of 'haze' or 'smog' from time to time, and despite lack of sites-specific nor real-time data, it is entirely appropriate, given that, because smog derives largely from motor vehicles, and because traffic congestion is an issue throughout the region, the ill effects of smog (or elevated contaminant levels) are now being experienced on some days throughout the years. It is

⁸ www.soedirect.nsw.gov.au

possible that the photochemical smog issue in the region, irrespective of how prominent it is or isn't at present, will feature in the future.

Local Air Quality Management Plan

In 2004/2005 many initiatives, supporting various outcomes of the Local Air Quality Management Plan were implemented. These can be seen in the Table 6.

Table 6: Local Air Quality Management Plan initiatives implemented in 2004/2005

Outcome Theme	Initiative
Improving air quality through reducing local emission of air pollutants	<ul style="list-style-type: none"> • Promotion of the correct use of wood heaters • Audits of City of Ryde operations • A project to improve air quality through targeting automotive businesses.
Planning instruments to assist in the prevention or reduction of air pollution	<ul style="list-style-type: none"> • In the development assessment process, energy efficiency is encouraged and conditions are imposed to minimise air pollution. • The implementation of BASIX, which assists with the assessment of residential development in improving air quality. • Demolition conditions have been strengthened to improve the control of dust entering the air. • The City of Ryde also continues to investigate air pollution from industry/commercial sources, undertake required regulatory enforcement and prosecutes offenders breaking open burning prohibition requirements.
Education	<ul style="list-style-type: none"> • The industry audit program. This program continued in 2004/2005 and most premises included in the initial Industry Audit Program have completed the work required from their inspection reports. There are a small number of premises still completing work necessary to ensure that their premises are operating in an environmentally satisfactory manner.
Public Transport	<ul style="list-style-type: none"> • Improvements to the City's Bikeways network • Commencement in the development of an Integrated Transport Strategy.
Monitoring of air quality	<ul style="list-style-type: none"> • Air quality is monitored and reported on every year in the local and regional State of the Environment Report through the EPA's Regional Pollution Index.
Protecting and creating greenhouse sinks	<ul style="list-style-type: none"> • The development of a City wide public Tree Policy • Tree planting on National Tree Day, School's National Tree Day
Reducing greenhouse gas emissions	Ryde joined the Cities for Climate Protection™ Program and began conducting sustainability audits of the Civic Centre, Civic Hall and Ryde Library.

Future Actions

- The investigation of compressed natural gas fuelled hybrid vehicles and other equipment for City operations
- Review and maintain the City of Ryde's Fleet operations to provide best practice examples in reducing air emissions
- Continue to assess development applications for potential air impacts and impose appropriate conditions to prevent or minimize air pollution
- Continue to investigate air pollution from Industry/Commercial sources and undertake regulatory enforcement
- The City of Ryde to develop policies that encourage residents to use public transport
- For future actions relating to the reduction of greenhouse gas emissions, please see section 5.2,

5.2 Greenhouse Gas Emissions

Goals:

1. To reduce greenhouse gas emissions in the City of Ryde
2. To support the Federal Government's Climate Change Action Agenda

New Indicator ⁹	2004-2005
Energy Consumption for top three the City of Ryde sites (kWh):	
Ryde Aquatic Leisure Centre	8,639,245
Civic Centre/Civic Hall/Ryde Library	1,186,607
ELS Hall Park	137,683
Total (kWh)	9,963,535
Total (tonnes of carbon dioxide emissions)	10, 502

The three City of Ryde sites that used the most amount of energy in 2004/2005 consumed 9,963,535-kilowatt hours. This is equivalent to approximately 10,502 tonnes of carbon dioxide (one tonne of carbon dioxide will fill an average sized house¹⁰). The City of Ryde has been very active in 2004/2005 in improving energy conservation and reducing greenhouse gas emissions.

Cities for Climate ProtectionTM

The City of Ryde joined ICLEI's Cities for Climate ProtectionTM (CCP) Program. The City of Ryde will now work through five milestones as part of the program, including assessing

⁹ This indicator is being used for the first time for this year's report

¹⁰ Source: www.greenhouse.gov.au

current greenhouse gas emissions, setting reduction targets and developing a plan to reduce emissions. Through the CCP program, the City of Ryde is developing initiatives to reduce greenhouse gas emissions.

Sustainability Audit Program

A Sustainability Audit of the Civic Centre, Civic Hall and Ryde Library was recently undertaken by the consultants Energy Conservation Systems. This audit recommended various energy and water conservation measures, which could be implemented in order to save approximately 300 tonnes of CO₂ and over 3000kL of water per year. Many of these recommended changes were implemented immediately (such as changing the hours of operation of the air conditioning system) and the remainder of low cost/short payback recommendations will be undertaken in the early part of 2005/06. However some of the higher cost/longer payback recommendations will be considered in upcoming years.

More than 126 tonnes of CO₂ emissions were saved in 2004/2005 through the following initiatives:

- The Ryde Civic Centre, Civic Hall and Library were converted to 10% greenpower energy supply in July 2004, saving over 112882 kWh or 119 tonnes of CO₂ each year. Glazing was also installed on the Ryde Civic Centre exterior several years ago saving an unquantifiable amount of energy due to reduced heating and cooling needs.
- Solar lights have previously been installed in Wilga Park, Elouera Reserve, Banjo Paterson Park and Shepherds Bay Park saving over 700 kWh or 1 tonnes of CO₂ per year.
- Approximately 120 computer screens have been converted in this financial year from CRT to more energy efficient LCD screens saving over 5500 kWh or 6 tonnes of CO₂ per year. A further 200 CRT screens still require replacement.

Regional Implications

The Northern Sydney Region of Councils (NSROC), of which Ryde is one of its members, have collectively identified the need to reduce growth of greenhouse gas production as a major policy target, and are examining ways in which they can influence their communities to move in this direction. Notwithstanding this commitment, it appears unavoidable that the impacts of a substantial increase in urban density across the region will make this goal difficult to meet. Nevertheless, effects of local heating, increased non-renewable energy consumption and the significant increases in local traffic congestion by cars are seen as key contributors to increased greenhouse gas emissions within the region and will be particularly targeted.

The Building Sustainability Index (BASIX)

With the commencement of implementation of the Building Sustainability Index (BASIX) on 1 July 2004, all new single dwelling houses and dual occupancies in NSW must obtain a BASIX Certificate. This includes duplex buildings and villa homes developments

containing two dwellings. BASIX aims to reduce the consumption of energy and potable water by making new dwellings more resource efficient. The Energy Target for single dwellings and dual occupancies is a 25% reduction in greenhouse gas emissions. From July 2006 this will increase to a 40% reduction and will eventually show a positive impact. In future years, the City of Ryde will be able to report on energy savings resulting from the implementation of BASIX.

Simple ways the community are being expected to achieve the BASIX energy target include the use of:

- Clever design options including orientation of the building and location of rooms to optimize solar access
- Optimising use of natural light and ventilation including cross-flow ventilation into the design
- Simple shading devices and use of doors, blinds and curtains to control heat transfer
- Solar hot water systems
- Ceiling fans
- Gas heating
- Energy efficient lighting eg Compact Fluorescent lights (CFLs)
- Alternative energy eg Photovoltaic (PV) Panels.

Future Actions

In the 2005/2006 financial year, the City of Ryde expects to complete 3 out of the 5 Milestones of the CPP Program.

The remaining recommendations of the Sustainability Audits of the Civic Centre, Civic Hall and Ryde Library will be implemented.

The implementation of BASIX will continue, with all new single dwelling houses and dual occupancies; new boarding houses, guesthouses, hostels, lodging-houses and backpacker accommodation under 300m² throughout NSW requiring a BASIX certificate from the first of October 2005.

5.3 Transport in the Ryde LGA

Goals:

1. To encourage reduced reliance on use of the car.
2. To promote alternative modes of transport such as public transport to minimise air pollution

Vehicle ownership

Indicator	03-04	04-05
<i>Total Number of Motor Vehicles Registered in the City of Ryde¹¹</i>	77,245	72,107

The total number of vehicles registered in the City of Ryde decreased this year by 5139 vehicles to 72,107. The number of vehicles in every category either decreased or remained the same compared to last year. After increasing by 19% in 2003-2004, the number of off-road passenger vehicles (eg 4-wheel drives) fell in 2004-2005 by 3%¹².

Lead Replacement Fuel (LRP)

The number of cars that require LRP has diminished to the point that it is becoming increasingly unviable for fuel suppliers to produce, store and distribute the fuel, and for service stations to supply it.

Road Safety and Pedestrian/Bicycle Amenity

Indicator	2003	2004
<i>Total Number of Motor Vehicle Accidents/Casualties in the Ryde LGA¹³</i>	850	852

The number of motor vehicle accidents/casualties that have occurred in Ryde remains steady, with 852 in 2004-2005.

Indicator	2003	2004
<i>Number of Pedestrian Casualties in the Ryde LGA¹⁴</i>	46	47

The number of pedestrian casualties remains steady. This figure has consistently been in the range of 42 to 47 for the last five years.

Indicator	2003	2004
<i>Number of Pedal Cyclist Casualties in the Ryde LGA¹⁵</i>	12	14

The number of pedal cyclist casualties also remained quite steady, with 14 casualties in 2004/2005.

¹¹ Source: www.rta.nsw.gov.au

¹² For all registration categories, please see last year's State of the Environment Report

¹³ Source: www.rta.nsw.gov.au

¹⁴ Source: www.rta.nsw.gov.au

¹⁵ Source: www.rta.nsw.gov.au

Public Transport

Indicator	2003	2004
Local Rail Passenger Journeys in the Ryde LGA¹⁶	3,492,144	3,562,753

State Transit carried 198 million passengers in 2003/4. Patronage in all businesses, Sydney Buses, Sydney Ferries and other services showed growth in 2003/4 reversing the recent trend of declining patronage in recent years since the Olympics. In 2004/2005 the number of local passenger journeys on trains in the City of Ryde increased by 70,609 (or 2%) to 3,562,753.

Improvements to public transport in 2004/2005 include:

- Progress on the construction of the Parramatta-Chatswood Rail Link. Tunneling work is almost complete and train station works are in progress. It is likely that trains will roll out in 2008.
- The completion of the Macquarie Shopping Centre bus interchange and taxi parking, including a shelter and seating on Herring Road.
- Work on Meadowbank and Eastwood station upgrades

It is imperative that initiatives be taken urgently, to promote a fully integrated public transport system in the region generally, that will maximize the effectiveness of the bus, rail and ferry system, available in the Ryde LGA. Major roads in the region are prominent thoroughfares for vehicle-bound commuters of the outer suburbs, as well as an accelerating intra-regional commercial traffic flow. A failure to develop a comprehensive and sustainable transport strategy could seriously impede the goal of increasing the population within the Northern Sydney Region.

Future Actions

- An extension of the T3 lane on Victoria Road (proposed by the RTA)
- Bus lanes in peak hours on Victoria Road, Gladesville
- The purchase of long buses by the Ryde Depot to service the Ryde area.
- The development of an Integrated Transport Strategy for the City of Ryde in 05/06. The City of Ryde will be developing an Integrated Transport Strategy with the aim of encouraging more sustainable travel. This includes reducing air pollution and greenhouse gas emissions and increasing the health and well being of residents. This will be achieved through encouraging people to use public transport and active transport (such as walking and cycling).

¹⁶ Includes data for Eastwood, West Ryde and Meadowbank only. Source: *Rail Corp 2005*.

Management Plan 2004/2007 Progress Summary – Air

Objective	Strategy	Measures/Targets	Progress
To promote knowledge and awareness of the impact of greenhouse gas emissions	Join the Cities for Climate Protection Program and develop and implement a Greenhouse Gas Reduction Program.	CCP Program joined by 30 December 2004.	Completed
	Review Energy Smart Water Wise DCP No. 45 and monitor its uptake through Development Consent Process.	Review is undertaken to on-going program.	BASIX is being implemented for new dwellings, villas and townhouses. Where BASIX does not apply, the provisions of DCP 45 are being applied to all other forms of new development. The application of BASIX for medium urban developments has been delayed by the State Government, which has put back the City of Ryde's proposed review of DCP 45. Review of DCP 45 and its uptake through the development consent process will now proceed 0506.
	Apply provisions of Energy Smart Water Wise DCP No.45 to any City of Ryde capital works program.	Provisions being applied in capital works programs.	Completed
	Develop and implement actions that reduce Greenhouse Gas Emissions from the City of Ryde's transport activities.	Is part of CCP Program and related Strategy Development.	CCP Program joined this year. A Greenhouse Gas Action Plan is Milestone 3 of this program and this plan is anticipated for completion by

			December 2005
	Develop and implement initiatives that reduce Greenhouse Gas Emissions from City of Ryde owned and operated buildings.	Is part of CCP Program and related Strategy Development.	CCP Program joined this year. Inventory and Forecasts are Milestones 1 and 2 of the Program, which are being staged for completion by November 2005. A Level 2 Energy audit is also being completed of the Civic Centre Complex and Greenhouse Gas Reduction strategies will be identified from this audit for inclusion into the Milestone 3 CCP Action Plan to be completed by December 2005. The City of Ryde also conducts sustainability audits of its operations and incorporates energy reduction practices via these audits. The City of Ryde purchases 10% of its total energy needs as 'Green Energy' from renewable sources.
Improve air quality in the City of Ryde.	Undertake Industry audit of Automotive Businesses in Gladesville targeting air impurities.	Audit Project is completed by 30 June 2004.	Completed
	Develop a local Air Quality Management Plan in conjunction with the Cities for Climate Protection Program. The plan will focus on the key elements of energy	Plan is developed by December 2004.	Local Air Quality Management Plan has been developed.

	efficiency, land use and transportation planning, vegetation management, specific industry source control and education, information and public participation.		
	Encourage neighbouring Councils to develop air quality management plans.	Plan is circulated to adjoining Councils upon completion of plan.	LAQMP for Ryde adopted. Working with NSROC to promote consistency across the region.
	Continue responding to air pollution complaints in a timely manner.	Response time in accordance with agreed City complaint response protocol.	Completed
To reduce transport impacts on the City of Ryde	Continue to develop the bikeways networks.	Completed to program.	Bikeways Network has been reviewed
	Develop an integrated transport plan in conjunction with State Government Agencies.	Completed to program.	Integrated Transport Planning Strategy for Ryde proposed for 2005-2006. State Government Sydney Metro Plan is also considering the completion of a regional transport management plan as part of the Metro Plan considerations.
	Conduct the "Slow down your moving too fast" regional speed reduction education program.	Completed to program.	Completed
	Conduct the "40km/h council road work zones" local speed reduction education program.	Completed to program.	Program is ongoing

	Conduct the “Choose a sober driver” joint drink drive educational program.	Completed to program.	Conducted Drinking Kills Driver Skills Program at 3 local hotels over 2 months.
	Conduct the “Safety before Convenience” local pedestrian safety education program.	Completed to program.	Program is ongoing
	Conduct the “Fatigue” local short distance driver fatigue project.	Completed to program.	Completed
	Conduct the Seniors Week local pedestrian safety education program.	Completed to program.	Completed
	Promote “Occupant Restraints” local safety restraint fitting days.	Completed to program.	Program is ongoing
	Facilitate Graduated Licensing Scheme Workshops for Parents and Carers of learner drivers.	Completed to program.	Program is ongoing
	Take part in the introduction of light rail into the Macquarie Park Corridor linking North Ryde to Epping, Chatswood and the Sydney CBD.	Completed to program.	The City of Ryde is still awaiting DIPNR approval for the Macquarie Park Corridor LEP.

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6. Soil and Landscape

6.1 Soil Erosion in the Ryde LGA

Goals:

1. To minimise land degradation and sedimentation of waterways in the City of Ryde local government area.
2. To ensure that building sites in the City of Ryde local government area have adequate erosion and sediment controls

Indicator	03-04	04-05
<i>Number of complaints received about inadequate erosion and sediment controls on building sites</i>	25	27

The number of complaints about inadequate erosion and sediment controls on building sites remained relatively stable increasing slightly from 25 to 27 in the current reporting period. A review of the strategy is proposed next year.

6.2 Acid Sulfate Soils (ASS)

Goal: To identify and manage ASS in the City of Ryde local government area

There are 97.6 hectares of acid sulfate soils in the City of Ryde. The preparation of an ASS Management Policy is planned in the future.

6.3 Land Contamination

Goal: To identify and manage development on lands that are contaminated or are potentially contaminated.

The City of Ryde received 3 site audit statements under the Contaminated Land Management Act 1997, in the current reporting period.

No land in the City of Ryde was subject to an investigation order or remediation order under the Contaminated Land Management Act 1997, in the current reporting period.

Management Plan 2004/2007 Progress Summary – Soil and Landscape

Objective	Strategy	Measures/Targets	Progress
To reduce land degradation.	Investigate how the City of Ryde can better enforce sediment and erosion controls on building sites.	Review is completed by 30 June 2004.	Review in progress. Random audit of building sites planned for 2005-06.
	Review policies and strategies for managing land that are affected by ASS.	Completed to on-going program.	Review of ASS Policy has been rescheduled to next year.
	Review policies and strategies for managing land contamination and develop an appropriate Development Control Plan to assist owners, developers, prospective purchasers, remediation consultants, independent auditors and Planning Officers.	Completed to on-going program.	Draft DCP in progress. To be completed next year.

Conclusion

This supplementary report was prepared to provide the community of the City of Ryde with an update to the 2003/2004 Comprehensive State of the Environment Report. The information covers the period of 1/07/04 to 30/06/05 and will now be a building block for the next Comprehensive report due out in 2008.

The local environment has remained relatively stable from last year's report and any environmental changes continue to be effectively managed by specific City programs. The current drought is a theme, which is echoed throughout the report, affecting a variety of areas including water conservation and open space management.

Population growth, urban sprawl, the wasteful behaviour by sections of the community, an ageing infrastructure and planning changes are putting increased pressures on the local environment that will require constant monitoring.

The City of Ryde will continue applying the principles of ecologically sustainable development in all local area decisions to ensure that balance between the built and natural environments is maintained.

With the implementation of new strategies, programs and regular enforcement and community awareness programs, the City of Ryde can make progress in its aim of ensuring the environment we live in today will also be livable in the future. This is reflected in Antoine de Saint-Exupery's (1900-1944) famous quote:

We do not inherit the Earth from our parents; we borrow it from our children.

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The information contained in this report is from a number of sources but primarily from data held within the City of Ryde's files, rainfall data from North Ryde Golf Club and other data available from the DEC's "SoE Direct" web site relevant to the City of Ryde local government area.

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