



Waste Watchers

Report 2010

Presented to

 City of Ryde



Macquarie *Generation*





Executive Summary

Keep Australia Beautiful NSW experienced a very successful teaching period during Term 4, 2010. During this time Waste Watchers achieved a number of key outcomes for the City of Ryde Council including:

- Visiting 1 primary schools over 2 days
- Participation of approximately 192 students
- Successful delivery of the Sustainability Sleuths module
- Improved awareness of local sustainability related problems

The Waste Watchers workshops are designed to satisfy not only government policy and legislation concerning environmental education, but also syllabus outcomes for primary schools set out by the Board of Studies, and the objectives of Council.

During the Sustainability Sleuths activities, students examined the limited resources available on Earth and learnt about how they can take care of them. They also investigated renewable and non-renewable resources, considered their own impact upon the environment and identified ways that they can become more sustainable.

Keep Australia Beautiful NSW believes in achieving maximum positive change to the NSW environment. The enthusiasm and passion of the Education Officers helped to facilitate this for The City of Ryde Council, and the participating school. Participants were provided with a range of resources for further discussion and follow up.

Statistical analysis of the program provided valuable feedback for program development and for The City of Ryde Council. Teachers and students alike regarded the program highly. They showed a high degree of interest and concern about environmental issues. They understood the need to 'make a difference' through positive and preventative actions and the communication of these to others.

Other modules offered by the Waste Watchers program include Wide World of Waste, Mechanics of Organics, Water Welfare and Catchment Chronicles. These modules also aim to raise the awareness and learning of primary school students about environmental issues applicable to their local area. Based on feedback received, Keep Australia Beautiful NSW recommends that council offers diverse experiences for their local children by selecting the Water Welfare module for its next booking, as this was a popular choice from teachers attending our workshops. Alternatively, council could offer schools a choice which includes this preferred Waste Watchers module.

Keep Australia Beautiful NSW coordinates other successful environmental programs including:

- Tidy Towns, Sustainable Communities
- Clean Beaches
- Sustainable Cities
- Graffiti Action Day

Keep Australia Beautiful NSW appreciates the support of Council and looks forward to working with you again in the future. The following document provides detailed outcomes and results achieved by Waste Watchers for The City of Ryde Council during Term 4, 2010.

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1. Introduction

Waste Watchers visited 1 school in Ryde area over 2 days during Term 4, 2010. The program targeted primary students from Kindergarten to Year 6 and there were approximately 192 participants, plus class teachers. Issues relevant to Ryde area were explored.

Participants investigated the limited resources available on Earth and learnt about how they can take care of them. They also investigated renewable and non-renewable resources, considered their own impact upon the environment and identified ways that they can become more sustainable.

Students were empowered with a greater understanding of the need for appropriate behaviours and actions in their local and home environments. They were encouraged to take the information home and educate their families and friends. This enhanced the effectiveness of the program and extended its influence into the broader community.

1.1 About Waste Watchers

Waste Watchers is one of the State's leading environmental education programs. Last year, 46,526 participants from 419 schools in 46 local government areas benefitted from the activities in this informative and stimulating program. Our specialist waste educators are teacher trained and deliver fun-filled, interactive workshops.

A high quality education service is provided to all stakeholders with administration and liaison handled by Keep Australia Beautiful NSW, resource material distributed to participants, and a comprehensive report written for the host council.

1.2 Policy and Legislative Framework

Waste Watchers assists councils achieve obligations under a range of environmental and sustainability policies.

- o Federal level:
 - Environmental Education for a Sustainable Future – National Action Plan
 - Caring for Our Future – The Australian Government Strategy for the UN Decade of Education for Sustainable Development, 2005 – 2014
- o State level:
 - Learning for Sustainability – NSW Environmental Education Plan 2007 – 2010
 - NSW Biodiversity Strategy
 - NSW Waste Avoidance and Resource Recovery Strategy 2007
 - Water Education Plan for Greater Sydney 2008 - 2012

The program also addresses primary school teaching requirements given in NSW Board of Studies K – 6 syllabus documents (see Appendix 1):

- English
- Human Society and its Environment
- Science and Technology
- Personal Development, Health and Physical Education

2.0 Description of Workshops

Workshops promoted the hosting role of the City of Ryde Council. An acknowledgment card was displayed and indicated whenever appropriate during discussions and answering students' questions. The specifics of Council's services and regulations were an integral part of activities. Our thanks go to Council staff who completed the Information Forms prior to the booking. This allowed our Education Officer to be fully informed and facilitated maximum local content. The program was relevant and provided valuable clarification of local issues.

To ensure optimum educational outcomes the following guidelines were implemented:

- A maximum of 4 workshops per day were conducted
- Workshops were generally one hour in duration; shorter for infants classes
- One class group attended each workshop
- An indoor central location was used at each school
- Contact teachers were asked to provide background information for our educators about the environmental practices within the school.

2.1 Sustainability Sleuths: Module Overview

Activities conducted help students understand the limited resources available on Earth and the important ways that they can help to look after them. Students explore renewable and non-renewable resources and how they are used to create different products, participate in a 'footprint' game, consider their own impact upon the environment and identify various ways that they can become more sustainable in their own lives.



Our Waste Watchers educator successfully delivered the Sustainability Sleuths module in Ryde as requested by Council. Students displayed a high level of interest and investigated a range of sustainability issues.

2.2 Sustainability Sleuths: Lesson Plan Summary

AIM:

This module aims to introduce students to sustainability and the need to conserve resources and reduce consumption.

OBJECTIVES:

Students will develop knowledge and understandings about

- The finite nature of earth's resources
- Renewable and non-renewable resources
- The origin of common products
- Easy steps to have less impact on the Earth

Students will develop skills in

- Naming renewable and non-renewable resources
- Adopting behaviours and practices that protect the environment
- Communicating the importance of caring for our environment

Students will develop values and attitudes relating to

- An appreciation of our limited natural resources
- A respect for the environment and our need to care for it
- A commitment to act in a more sustainable way

KEY CONCEPTS:

- The earth has a limited amount of resources
- The extraction, use and disposal of resources and their products impacts the environment
- Simple strategies and changes in behaviour can reduce the impact individuals have on the environment and save resources

ACTIVITIES MAY INCLUDE BUT WILL NOT BE LIMITED TO:

Discussion, problem solving, resource sorting activity, role-play, footprint game, sustainable actions brainstorm

2.3 Sustainability Sleuths: Student Work Samples

During the workshops groups of Early Stage 1 and Stage 1 students were given concrete examples of containers, an egg carton, an ice-cream container, a plastic bottle, a tin can and a piece of paper, that often get thrown away once they are used. The students must come up with examples of ways to reuse these items and write or draw their ideas on a piece of paper. (See Appendix 4).

Depending on the student's ability to understand Sustainability an alternate activity was given to older or more capable Stage 2 classes. Students were asked to write down their own ideas about how they can relate to sustainability at home. They were given pictures of certain rooms inside the house and were asked to write down ideas on how to be sustainable in that particular room. These suggestions and ideas were kept and collated (Appendix 4).

3.0 Timetable for the City of Ryde Council 2010

Ryde Timetable 2010

1 schools / 2 days

School	Duration	Last visited
West Ryde PS	2 days	09

Cancellations:

- Ryde East PS cancelled Sustainability Sleuths days on 02.09.10

Mon 6 Dec	West Ryde PS <u>Sustainability</u>	Janine Kitson	9.00-10.00	4J	27
			10.00-11.00	KD	21
			12.10-1.10	2T	24
			2.00-3.00	2/3A	23
Tues 7 Dec	West Ryde PS <small>Nilushi from council will attend 10.00am session</small> <u>Sustainability</u>	Janine Kitson	9.00-10.00	2T	24
			10.00-11.00	1/2C	23
			12.10-1.10	K/1E	22
			2.00-3.00	3/4B	28
Wed 8 Dec	Ryde East PS <small>School cancelled 2.9.10</small> <u>Sustainability</u> FREE DAY	S.Warn			
Thurs 9 Dec	Ryde East PS <small>School cancelled 2.9.10</small> <u>Sustainability</u> FREE DAY	S.Warn			
Fri 10 Dec	FREE DAY				

Appendix 2 contains the individual school registrations and timetables.

Total days visited	2
Total schools participating	1
Total students taking part	192
Educators:	Danielle Fogarty

4.0 Participant Resources

Schools and participating teachers were given a number of resources and supplementary program information. This will encourage the on-going teaching and learning of environmental issues and foster positive behaviours and attitudes to encourage an environmentally sustainable future. The material was sourced from a wide range of Federal and State government departments, industry organisations and individual companies.

4.1 Schools

Each school was provided with:

- Certificate of Participation acknowledging the City of Ryde Council's hosting role (Appendix 1).
- An article for the school newsletter to be sent to each family extending information to a wider audience (Appendix 1).
- Template letter of invitation to a low waste lunch (Appendix 1).
- An information pack containing:
 - Teacher notes and follow up ideas (Appendix 1).
 - Syllabus links (Appendix 1).
 - Module information (Appendix 1).
- Extra fliers and pamphlets relating to waste and sustainability issues, including:
 - "Renewable energy: Hydro" (Queensland Government Environmental Protection Agency)
 - "Renewable energy: Wind" (Queensland Government Environmental Protection Agency)
 - "Renewable energy: Ocean energy" (Queensland Government Environmental Protection Agency)
 - "Renewable energy: Geothermal energy" (Queensland Government Environmental Protection Agency)
 - "Stand-alone Power Systems" (Queensland Government Environmental Protection Agency)
 - "Oil Recycling" (Product Stewardship for oil program)
 - "Return Unwanted Medicines to your Pharmacy" pamphlet (Return Unwanted Medicines Project)
 - "Chewing Gum Fact Sheet" (Keep Australia Beautiful and the Wrigley Co)
 - "The smart way to recycle your steel cans" (Cansmart)
 - "Fast Facts newspaper and magazine recycling" (PNEB)

4.2 Teachers

Each teacher was provided with:

A teacher's information pack containing:

- Evaluation form (Appendix 3)
- Teacher notes and follow up ideas (Appendix 1)
- Module information (Appendix 1)
- A newsletter with extra information related to sustainability issues in Ryde (Appendix 1).
- Class set of Keep Australia Beautiful NSW Bookmarks

5.0 Responses to the Program

The presentations were conducted across Ryde area. School responses are described below.

General Community Summary

In Ryde area as a whole, the schools involved in the program for 2010 had a great response. Their understandings and interest in continuing to preserve the environment was encouraging. Many students showed concern about their own actions at home and how they can change various habits for a sustainable future. Although many students were enthusiastic, there is still a need for further education in the area to fully understand the concept in its entirety.

School Responses

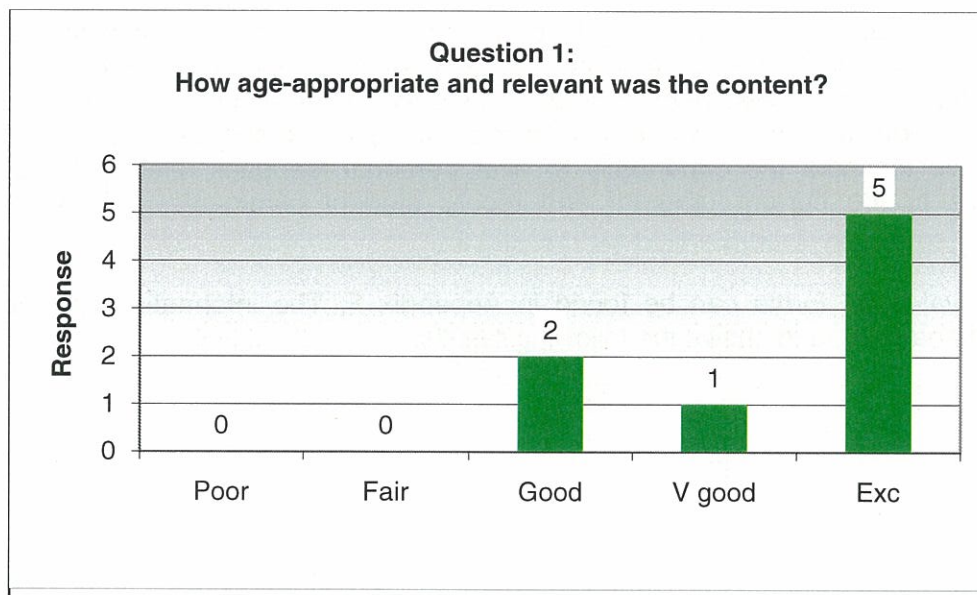
West Ryde PS

The students at West Ryde PS successfully participated in the Waste Watchers workshops and enjoyed their visit. The children had varied prior knowledge on the issues surrounding our environment but little awareness on their own actions and effects. The basic answers to saving resources were discussed with ease yet more in depth actions challenged some. Overall the program was a great success. Sustainability was a new word but its meaning was highly regarded at this school.

6.0 Evaluation of the Program

An evaluation form was given to each participating class teacher seeking feedback and suggestions of ways to further develop the Waste Watchers program. Teachers were asked to grade on a 5-point scale from *poor* through to *excellent* for five questions. Question Six asked which of our modules teachers would like their students to experience next time. The last two questions gave teachers the opportunity to offer personal feedback related to suggestions for improvements to the current program and record student comments and responses to the program.

Completed evaluation forms can be found in Appendix 3. The information has been collated, graphed and analysed, and shows the following results.

Question 1

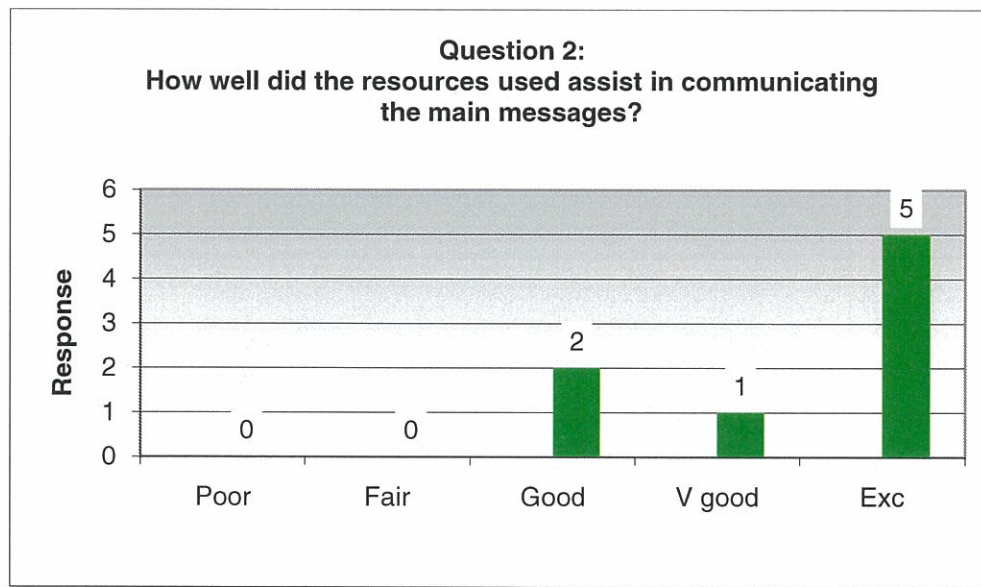
Our program is effectively tailored for all primary aged students from Kindergarten through to Year 6. During workshops students were taught about how to live sustainably. Older students were challenged with activities that required them to think more critically and creatively about sustainability issues.

Teacher Comments:

- Activities were at the right level for Kindergarten.

Student Comments:

- I liked working in a group.

Question 2

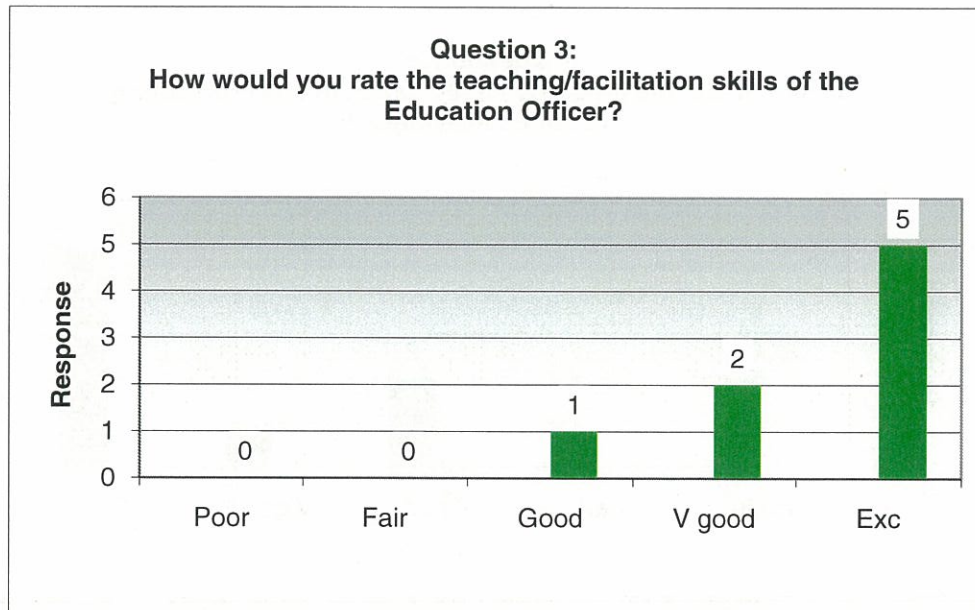
The resources used by Waste Watchers were beneficial in communicating the main messages and were shown to be appropriate for students from all backgrounds. The resources were designed specifically so that participants can easily relate to the topics covered during the Waste Watchers workshops.

Teacher Comments:

- Interesting results from the game - this was very effective.

Student Comments:

- I liked the pictures.
- I liked the miming game (about sustainable actions).
- I liked looking at things made from recycles like the car made from peps cans.

Question 3

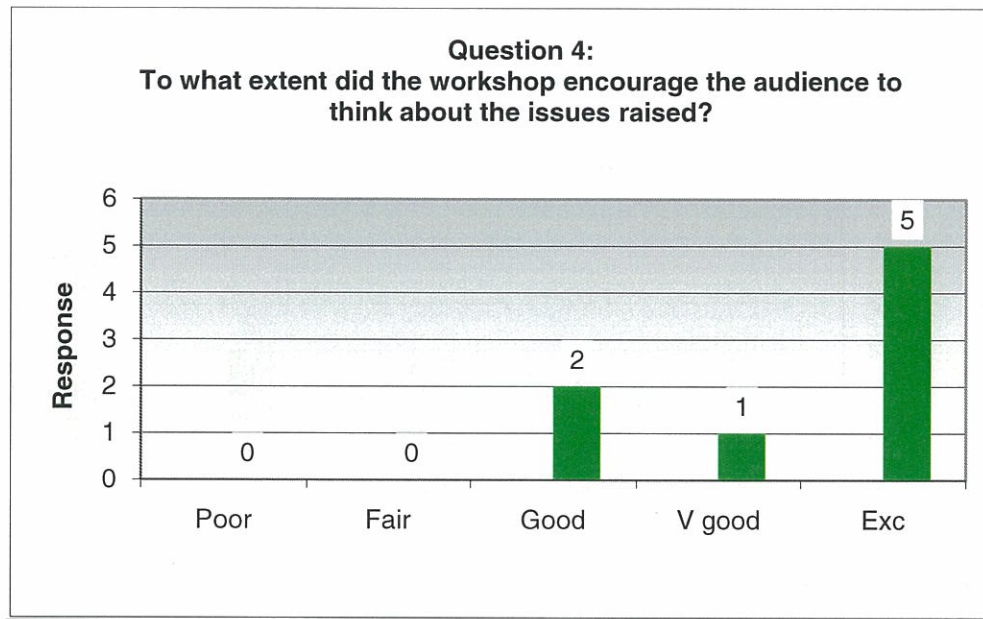
Teachers rated the teaching skills of the Education Officers highly. Keep Australia Beautiful NSW Education Officers are qualified and experienced and are shown to have excellent skills to help implement the key messages within the program. Their ability to respond to behaviour management needs and build effective rapport with the students further aided the efficiency of the program.

Teacher Comments:

- Danielle did an admirable job teaching children a complex topic.
- The students really enjoyed it and became really involved.

Students Comments:

- She was nice and helped us learn.

Question 4

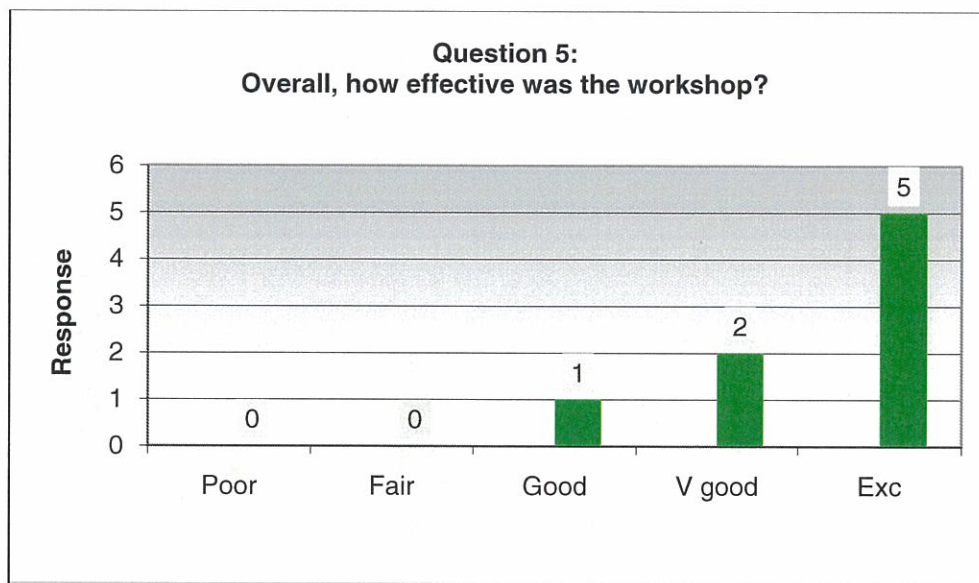
The workshops encourage students to use their experiences inside and outside the school environment and take that knowledge into the wider community and share it. All students were motivated and involved in the discussions and hands-on activities facilitated by the Waste Watchers educators.

Teacher Comments:

- It's important to teach the children so when they grow up they can teach their children.

Students Comments:

- I reuse things for arts and crafts at home.

Question 5

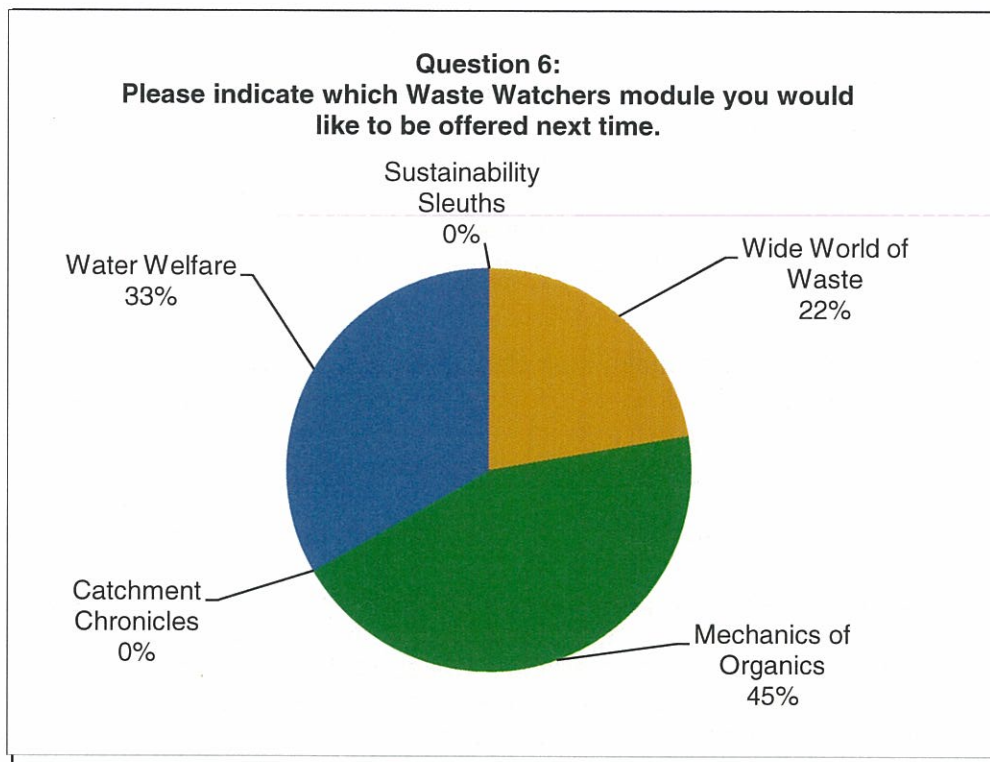
Overall the workshop was considered to be very effective. The responses by teachers and students to the Waste Watchers program in the Ryde area have been very positive. Students and teachers were engaged and many showed a high level of interest in environmental conservation.

Teacher Comments:

- Thank you!
- Thanks it was great.

Students Comments:

- It was fun.

Question 6

This year the schools had the option of Wide World of Waste, Mechanics of Organics or Sustainability Sleuths. The other option teachers showed interest in was Water Welfare (33%) and commented that in the past they enjoyed choosing this option. The teachers also commented that they appreciated the wide range of options this year, so Waste Watchers recommends The City of Ryde Council select the Water Welfare module for their next booking, or offer schools a choice including this option.

In the Water Welfare module activities conducted help students understand the natural processes of the water cycle, how we use and allocate water, and the need to use it wisely. The importance of caring for and conserving our water is highlighted. Water is a universal need and sharing strategies are investigated. Students have fun examining and assessing appropriate strategies and behaviours. The module provides a thought provoking challenge as students investigate just how precious and limited our water is.

Question 7

Teachers were given the opportunity to suggest changes or improvements to the workshop. 3 suggestions were made out of the 8 evaluation forms handed out to teachers.

1. Make the program available to all classes throughout the school as some of our classes missed out on this wonderful program.
 - Unfortunately we can only fit four one-hour sessions into our visits each day and the school. At this time of year the schools also had a difficult time fitting our workshops in around their end-of-year activities. Unfortunately, although teachers at the school would have liked us to stay an extra day, the rest of the week was full of other activities.
2. Have students suggest ways to make their classroom and school sustainable.
 - Teachers are given a list of follow up activities they can do with their students. This includes discussing ways to make their school more sustainable. This allows the teachers to tailor the activity to their school's specific circumstances.
3. Some classrooms have smartboards - develop resources to use with the smartboards and notebook software.
 - The Waste Watchers program is a hands-on and interactive program that visits a wide range of schools across NSW. It is also difficult for schools to provide a room with an interactive whiteboard for the whole day, as they are usually in classrooms. Therefore we are currently developing a range of Interactive Whiteboard resources for teachers to access from our website after our visit.

Appendix 1 Program Materials

- *Waste Watchers* – Brochure
- *Waste Watchers* – School Registration Form
- *Waste Watchers* – School Cover Letter
- *Waste Watchers* – Certificate of Participation 'The City of Ryde Council and REEN'
- *Waste Watchers* – Waste Watchers Information Flier
- *Waste Watchers* – Environmental Education Resources Website contents
- *Waste Watchers* – Module Flier
- *Waste Watchers* – Syllabus Links
- *Waste Watchers* – Newsletter for school distribution 'The City of Ryde Council and REEN'
- *Waste Watchers* – Lunch Invitation
- *Waste Watchers* – Follow-up ideas
- *Waste Watchers* – Media Release 'The City of Ryde Council and REEN'



30 July 2010

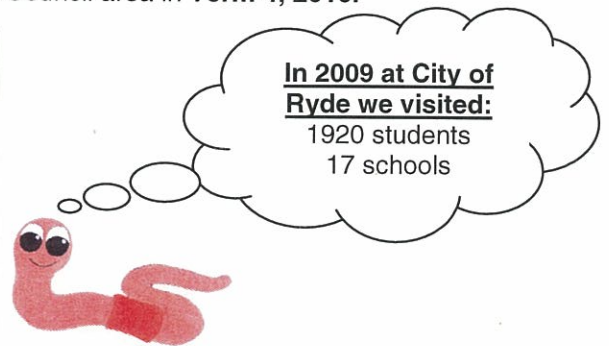
Dear Principal / Environmental Education Coordinator,

This year, the City of Ryde has engaged Keep Australia Beautiful NSW to provide the Waste Watchers environmental education program for primary schools within the Council's area. This program is **FREE** for your school - all you need to do is complete the enclosed school registration form and fax it back to us for your opportunity to participate in this highly respected program.

Waste Watchers will be visiting the City of Ryde Council area in **Term 4, 2010**.

Waste Watchers workshops are:

- Suitable for all K-6 classes
- Fun, interactive & informative
- Hosted by your local Council
- Delivered by passionate and experienced teachers
- Relevant to NSW Syllabus outcomes including:
 - ✓ English, Maths, HSIE, PDHPE
 - ✓ Science & Technology
 - ✓ DET's environmental education policy



We currently deliver a comprehensive suite of environmental workshops relating to: waste, organics, water conservation, catchments and sustainability.

City of Ryde Council and members of REEM have requested the SUSTAINABILITY SLEUTHS module:

Students will discover the limited resources available on Earth and ways that they can help look after them. Renewable and non-renewable resources are explored before students consider the impact of their actions on the environment. Ways to be more sustainable in their everyday lives is a critical component of this module.

Or the WIDE WORLD OF WASTE module:

This module facilitates behaviour change, reducing litter and encouraging appropriate waste disposal. Students are taught the specific skills of sorting waste in the home and school environment, as well as reducing, reusing and recycling. Examining items made from recycled material is of great interest to our audiences.

Or the MECHANICS OF ORGANICS module:

This module generates ideas for positive ways to utilise garden vegetation waste and food scraps. Garden organics collection, worm farming, composting and mulching are all discussed and investigated. The working worm farm is a great hit! Students have fun while learning the benefits, basic principles and problem prevention in these important areas.

The next step:

1. Complete the enclosed School Registration Form and fax back to (02) 9633 4402 **ASAP**
2. Please Note:
 - We deliver a maximum of 4 x 1hr workshops per day - one class group per workshop
 - Due to OH&S, we require an indoor, central location for the duration of our visit to your school

Upon completion of workshops, your school will receive resources including follow-up material, posters, a certificate of participation and a newsletter.

Sincerely
Deborah Kelly
Waste Watchers Program Support

Waste Watchers is proudly partnered with:







Waste Watchers

Certificate of Participation

Presented to

St Therese Primary School

Hosted by

City of Ryde Council and REEN - Ryde Environmental Education Network (2010)



www.kabnsw.org.au



Welcome to **Waste Watchers**

Keep 
Australia
Beautiful

NSW



Welcome to Waste Watchers

We hope that you and your students enjoy the Waste Watchers workshop.

Waste Watchers is NSW's leading mobile Primary School environmental education program. It is offered as a service to assist Councils educate their local children on a wide range of waste, water and sustainability issues. Interactive workshops teach students the vital, simple and effective measures they can take to protect and conserve our natural and built environments for the future.

In 2009 we were engaged by 46 different councils, visited 419 schools and spread environmental messages to 46,562 students across the State.

Five informative modules are available:



Mechanics of Organics



Catchment Chronicles



Wide World of Waste



Water Welfare



Sustainability Sleuths

Please visit our website for **FREE Environmental Education Resources.**

<http://www.kabnsw.org.au>

The contents of the website can be found overleaf.

We are certain it will form an important part of your resource library.

The Waste Watchers team thanks you for your time!

- ☺ Peta Golla
- ☺ Danielle Fogarty
- ☺ Deborah Kelly
- ☺ Alyson Lyne
- ☺ Natalie McCready
- ☺ Jacqui Murray

Waste Watchers partners:

Keep Australia Beautiful NSW
Phone: (02) 9633 3380
Fax: (02) 9633 4402



Macquarie *Generation*



FREE Resources

Keep
Australia
Beautiful

NSW



Environmental Education Resources

Find the following resources on our website: www.kabnsw.org.au

Wide World of Waste

1. *Early Stage 1 - Stage 1*
 - Sorting the Recycling
 - Maze
2. *Stage 2*
 - Crossword
 - Find-a-word
3. *Stage 3*
 - Crossword
 - Find-a-word
4. *Waste Board Game*
5. *Website links*

Catchment Chronicles

1. *Early stage 1 – Stage 1*
 - Stormwater Pollution
2. *Stage 2*
 - Crossword
 - Find-a-word
3. *Stage 3*
 - Crossword
 - Find-a-word
4. *Catchment Board Game*
5. *Website links*

Mechanics of Organics

1. *Stage 2*
 - Crossword
 - Find-a-word
2. *Stage 3*
 - Crossword
 - Find-a-word
3. *Organics Board Game*
4. *Website links*

Water Welfare

1. *Stage 2*
 - Crossword
 - Find-a-word
2. *Stage 3*
 - Crossword
 - Find-a-word
3. *Website links*

Sustainability Sleuths

1. *Stage 2 and 3*
 - Crossword
 - Find-a-word
2. *Sustainability Board Game*
3. *Website links*

These make great 5
minute fillers for
your class!



Keep Australia Beautiful NSW
Phone: (02) 9633 3380
Fax: (02) 9633 4402



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wsn ENVIRONMENTAL SOLUTIONS

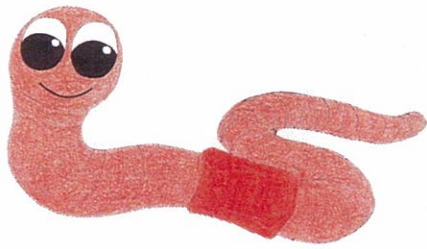
Waste Watchers partners:

Waste Watchers

NSW Syllabus Links



Strands & sub-strands	Early Stage 1	Stage 1	Stage 2	Stage 3
ENGLISH				
Talking and Listening <i>Talking and Listening</i>	TES1.1 Communicates with peers and known adults in informal situations and structured activities dealing briefly with familiar topics.	TS1.1 Communicates with an increasing range of people for a variety of purposes on both familiar and introduced topics in spontaneous and structured classroom activities.	TS2.1 Communicates in informal and formal classroom activities in school and social situations for an increasing range of purposes on a variety of topics across the curriculum.	TS3.1 Communicates effectively for a range of purposes and with a variety of audiences to express well-developed, well-organised ideas dealing with more challenging topics.
HUMAN SOCIETY AND ITS ENVIRONMENT				
Environments <i>Patterns of Place and Location</i>	ENES1 Gathers information about natural and built environments and communicates some of the ways in which they interact with, and can care for, these environments.	ENS1.5 Compares and contrasts natural and built features in their local area and the ways in which people interact with these features.	ENS2.5 Describes places in the local area and other parts of Australia and explains their significance.	ENS3.5 Demonstrates an understanding of the interconnectedness between Australia and global environments and how individuals and groups can act in an ecologically responsible manner.
<i>Relationship with Places</i>	Outcome ENES1 also applies here.	ENS1.6 Demonstrates an understanding of the relationship between environments and people.	ENS2.6 Describes people's interactions with environments and identifies responsible ways of interacting with environments.	ENS3.6 Explains how various beliefs and practices influence the ways in which people interact with, change and value their environment.
Social Systems and Structures <i>Resource Systems</i>	SSSES1 Identifies ways in which their own needs and the needs of others are met, individually and cooperatively.	SSS1.7 Explains how people and technologies in systems link to provide goods and services to satisfy needs and wants.	SSS2.7 Describes how and why people and technologies interact to meet needs and explains the effects of these interactions on people and the environment.	SSS3.7 Describes how Australian people, systems and communities are globally interconnected and recognises global responsibilities, cultural influences and their contribution to Australian identities.
<i>Roles, Rights and Responsibilities</i>	Outcome SSES1 also applies here.	SSS1.8 Identifies roles and responsibilities within families, schools and the local community, and determines ways in which they should interact with others.	SSS2.8 Investigates rights, responsibilities and decision-making processes in the school and community and demonstrates how participation can contribute to the quality of their school and community life.	SSS3.8 Explains the structures, roles, responsibilities and decision-making processes of State and federal governments and explains why Australians value fairness and socially just principles.
SCIENCE AND TECHNOLOGY				
Content <i>Built Environments</i>	BES1.1 Explores and identifies ways in which built environments suit their users.	BES1.1 Creates, modifies or models built environments to suit the needs of users.	BES2.1 Creates, models and evaluates built environments, reflecting consideration of functional and aesthetic factors.	BES3.1 Creates and evaluates built environments, demonstrating consideration of sustainability and aesthetic, cultural, safety and functional issues.
<i>Living Things</i>	LTES1.3 Identifies ways in which living things are different and have different needs.	LTS1.3 Identifies and describes ways in which living things grow and change.	LTS2.3 Identifies and describes the structure and function of living things and ways in which living things interact with other living things and their environment.	LTS3.3 Identifies, describes and evaluates the interactions between living things and their effects on the environment.
<i>Products and Services</i>	PSES1.5 Recognises the relationship between everyday products and people's needs.	PSS1.5 Grows, makes or processes some products using a range of techniques and materials.	PSS2.5 Creates and evaluates products and services, considering aesthetic and functional factors.	PSS3.5 Creates and evaluates products and services, demonstrating consideration of sustainability, aesthetic, cultural, safety and functional issues.
<i>Earth and its Surroundings</i>	ES ES1.6 Explores and identifies ways the environment influences their daily lives	ES S1.6 Identifies and describes ways in which people and other living things depend upon the and its environments		ES S3.6 Recognises that the Earth is the sources of most materials and resources, and describes phenomena and processes, both natural and human, that form and change the Earth over time.
Processes <i>Investigating</i>	INVES1.7 Investigates their surroundings by observing, questioning, exploring and reporting.	INVS1.7 Conducts guided investigations by observing, questioning, predicting, collecting and recording data, and suggesting possible explanations.	INVS2.7 Conducts investigations by observing, questioning, predicting, testing, collecting, recording and analysing data, and drawing conclusions.	INVS3.7 Conducts their own investigations and makes judgements based on the results of observing, questioning, planning, predicting, testing, collecting, recording and analysing data, and drawing conclusions.
PERSONAL DEVELOPMENT, HEALTH AND PHYSICAL EDUCATION				
Content <i>Personal Health Choices</i>	PHES1.2 Displays basic positive health practices.	PHS1.12 Recognises that positive health choices can promote well-being.	PHS2.12 Discusses the factors influencing personal health choices.	PHS3.12 Explains the consequences of personal lifestyle choices.



Waste Watchers offers five informative modules:



Wide World of Waste

Participants analyse potential waste items and consider how to reduce/avoid creating waste. Issues such as correct bin usage, sorting waste, landfill, recycling and composting are explored. The program is engaging for all students. It provides a fun way to reinforce and extend existing knowledge and foster behaviour change in the important area of waste disposal. Various types of plastic are inspected and their recyclability is determined. The reprocessing of all recyclables into new products is investigated.



Catchment Chronicles

This clearly demonstrates negative affects of inappropriate behaviours in a catchment. It is interactive and informative. Students role-play the harmful activities carried out by characters in a catchment story. Observing this cumulative affect, it is readily seen that even small, seemingly insignificant actions at home can have a major impact on water quality and biodiversity. Participants are challenged to adopt environmentally friendly practices to protect our fragile waterways. Students also discover the difference between sewage and stormwater.



Mechanics of Organics

Students investigate the differences between composting, worm farming and mulching, and the benefits they provide. Action based activities mean that participants learn while they are having fun. Sessions cover problems that occur if organic waste recycling is not conducted and the valuable resources that are produced if it is. Participants view a working worm farm which consolidates these concepts. The life size 3D cut-away models of a compost and worm farm are valuable components which allow students to study these systems further.



Water Welfare

Activities conducted help students understand the natural processes of the water cycle, how we use and allocate water, and the need to use it wisely. The importance of caring for and conserving our water is highlighted. Water is a universal need and sharing strategies are investigated. Students have fun examining and assessing appropriate strategies and behaviours. The module provides a thought provoking challenge as students investigate just how precious and limited our water is.



Sustainability Sleuths

Students will discover the limited resources available on Earth and ways that they can help look after them. Renewable and non-renewable resources are explored before students consider the impact of their actions on the environment. A fun 'footprint' game and role plays allow participants to identify simple changes they can make at home and school to consume less and become more sustainable.

Waste Watchers partners:



Waste Watchers in City of Ryde Council 2010

During term 4, primary schools in the Ryde area will be visited by Waste Watchers, a mobile environmental education program run by Keep Australia Beautiful NSW. Students explore sustainability related issues relevant to the Ryde area through interactive, hands-on activities.

Renewable Resources:

- ✓ Can be replaced by nature and do not run out quickly. These resources should be used when possible for a sustainable future.

Non-renewable Resources:

- ✓ Cannot be replaced by nature quickly. Often these resources are used for convenience but should be avoided when possible to maintain our environment.

Reduce

- ✓ Turn the tap off when brushing your teeth
- ✓ Completely fill up your dishwasher before turning it on
- ✓ Turn your television and computer off when you are not using them
- ✓ Use a clothesline to dry your clothes instead of a clothes dryer
- ✓ Turn off the light when you leave a room



Reuse

- ✓ Buy products that can be reused, refilled or recycled
- ✓ Donate unwanted items to local charities



Recycle

YELLOW lid bin (recycling):

- All paper, newspapers, magazines and cardboard (including clean pizza boxes)
- Milk and juice cartons
- Plastic bottles and containers numbered 1-7
- Glass bottles and jars
- Aluminium and steel cans (including empty aerosol cans, aluminium foil food trays)

Remember:

- Contact council about the REEN Network – Ryde Environmental Education Network to receive newsletters and be informed of meetings for teachers in Ryde area schools.
- A number of great programs and resources are available from City of Ryde Council. Please see the website <http://www.ryde.nsw.gov.au>



Waste Watchers partners:



Macquarie Generation



wsn ENVIRONMENTAL SOLUTIONS

Waste Watchers

Invitation to Lunch

Keep  Australia Beautiful

NSW



Dear Parent / Student,

Recently the Keep Australia Beautiful program Waste Watchers visited your school and a number of classes were lucky enough to participate. Activities conducted during the visit helped students understand more about waste, the impact of waste disposal on our environment, and the role they play in it.

Waste Watchers challenges us all to consider how our individual actions affect the amount of waste we create, and the affects of that waste disposal.

We seek your help in supporting and extending your child's understanding of this important issue. Please consider the following suggestions for a Low Waste Lunch.

Low Waste Lunches and snacks have:

- ✓ Lunch boxes and containers that are reusable.
- ✓ Drink bottles that are refillable and reusable.
- ✓ Food packaging that is reusable (eg small containers for snacks), compostable (eg fruit peels), or recyclable (eg paper lunch bag).

Low Waste Lunches and snacks **do not** have:

- × Pre-packed, portion-controlled packets (eg chips, cheese and bikkie combos).
- × Lollies in individual wrappers.
- × Sandwiches / rolls in plastic food wrap (eg Clingwrap, Gladwrap). Use compostable greaseproof paper instead.
- × Drinks in throw away cartons with straws (these boxes create 3 pieces of rubbish each).

Low Waste Lunches and snacks give many benefits:

- 😊 Reduced waste to landfill = a healthier planet.
- 😊 Recyclable material sent for recycling = less pressure on our limited natural resources.
- 😊 Compostable materials utilised in compost / worm farms = less green-house gas (methane).
- 😊 Less chance of waste becoming litter = a cleaner environment for all.
- 😊 Low Waste food often = low cost food!
- 😊 Low Waste food often = low waist food!

Kind regards and happy Waste Watching!

Waste Watchers partners:



Macquarie Generation



WSN ENVIRONMENTAL SOLUTIONS

Waste Watchers in City of Ryde Council 2010

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Waste Watchers partners:



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Waste Watchers

Practical follow-up ideas

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Sustainability Sleuths:

- ☺ Present a 10 point checklist to the school about ways they can lessen their impact as an assembly item.
- ☺ Write a letter to the principal to suggest the adoption of water and energy saving measures within the school. Present ideas in an informed and persuasive manner.
- ☺ Role play appropriate / inappropriate resource saving behaviours. Be creative!
- ☺ Use an online footprint calculator to calculate your footprint. Discuss ways you can have less of an impact on the Earth.
- ☺ Choose one everyday item and research what resources it is made from and how it is made.
- ☺ Organise a 'Swap meet' at your school. Or raise money by holding a 'second-hand' fair.

A further range of teaching resources and activities can be found on the Keep Australia Beautiful NSW website:
www.kabnsw.org.au

Sustainability Sleuths

1. *Stage 2 and 3*
 - Crossword
 - Find-a-word
2. *Sustainability Board Game*
3. *Website links*



Waste Watchers partners:



Macquarie Generation



wsn ENVIRONMENTAL SOLUTIONS

Media Release

October 18, 2010



Ryde Students Become Waste Watchers

The leading face-to-face environmental education program in NSW, *Waste Watchers*, will visit 20 schools in Ryde before the end of 2010.

Waste Watchers is a Keep Australia Beautiful NSW mobile education unit that conducts interactive workshops to teach students environmental management skills. The workshops are an important component of City of Ryde Council's overall strategy to increase environmental awareness in local students.

Waste Watchers will visit St Kevin's Public School for an interactive lesson called 'Wide World of Waste' on **Thursday, October 28, 9.55am-10.55am**. The school is already involved in recycling and has rain water tanks.

"This is the fourth year the program has run in Ryde," Keep Australia Beautiful NSW CEO Peter McLean said.

"This investment in environmental education by City of Ryde Council represents a dedication to passing on their knowledge and passion by teaching children how to minimise their environmental footprint.

"Waste Watchers educates primary school children to do the right thing by teaching them best practice environmental management by introducing a number of small positive steps that they can take toward helping the environment.

"The waste module uses fun activities to teach fundamental lessons about the proper disposal of rubbish to reduce waste to landfill."

These interactive workshops are sponsored by long time supporter, The Wrigley Company, as part of their overall strategy to improve environmental awareness in younger generations.

Catherine Pemberton, Corporate Affairs Director at Wrigley, said: "The program educates children at a time of life when they are interested, receptive and influential in their social networks and so able to create positive changes in others. By participating in this program we are able to instill a high level of environmental consciousness and create habits that will last a lifetime."

Waste Watchers educator Natalie McCready said the program was developed by Keep Australia Beautiful NSW specifically for school children.

"The Waste Watchers lessons are very interactive with lots of games and quizzes to help the children learn about protecting their local environment. At the same time as it gives kids an understanding of the environmental challenges faced by our society, it empowers them to make their own effective steps," Natalie said.

END

Media are invited to see a Waste Watchers lesson in action

Where: St Kevin's Public School, Eastwood

When: Thursday, October 28

Time: 9.55am – 10.55am

Please report to the school office

Media contact: Ilona Marchetta, Communications Manager, Keep Australia Beautiful NSW, 9633 3380 or imarchetta@kabnsw.org.au

Further comment: Education Officer, Natalie McCready, 0414 648 848 or CEO Peter McLean on 0416 227 158.



Appendix 2 School Registrations

- School registrations and timetables



Waste Watchers

Registration Form 2010

Keep
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NSW



Provided by City of Ryde Council – FREE TO YOUR SCHOOL

School: WEST RYDE PUBLIC SCHOOL

Address of School: Endeavour Street, West Ryde, NSW, 2114.

Phone Number: 9874 2515 Fax Number: 9804 7731

Email: westryde-p.school@det.nsw.edu.au

Number of classes in K: 1: 2: 3: 4: 5: 6: = 8 classes

Choice of Module (please circle one):

Sustainability Sleuths or Wide World of Waste or Mechanics of Organics

Principal's name and signature: Rodney YATES

Contact person for the visit: Janine Kitson

School Administration Manager: Lyn Robshaw

The program visits Ryde schools in Term 4, 2010: please indicate the most suitable dates.

Sustainability Sleuths
6th to 10th December

Mechanics of Organics OR Wide World of Waste

26th to 29th October

23rd to 26th November

29th to 30th November

1st to 2nd December

6th to 8th December

Dates in the period that are not suitable: Wed 8th December

Please note:

- There is a maximum of 4 workshops per day (1 class per / 1 hour workshop).
- An indoor central location is required for the duration of the visit.
- We will advise your allocated date and request a timetable.

Waste Watchers is proudly partnered with:



Macquarie Generation



WSP ENVIRONMENTAL SOLUTIONS

Our sponsors and supporters may be able to provide your school with information and services that support a better environment. Tick here if you do not wish to receive this information.

Register with Keep Australia Beautiful by 20th August 2010.

Fax completed form: (02) 9633 4402. Phone enquiries: (02) 9633 3380

School: ... West Ryde PS

Contact Person: ... Janine Kitson

DATE: Monday, 6th December

Times Maximum 1 hour / workshop. Maximum 4 workshops / day. (eg, 9.00 – 10.00)	Class names eg, 4 Red, 5H	Class numbers Please allocate one enrolment class <u>only</u> per workshop.	Special needs (no names) eg, wheelchair, vision or hearing impaired, ESL, NESB, ODD, ADHD, OC/IO/IM, anxiety, beh / lang support
9 - 10	4J	27	
10 - 11	KD	21	
12.10 - 1.10	2T	24	
2 - 3	2/3A	23	

DATE: Tuesday, 7th December

Times Maximum 1 hour / workshop. Maximum 4 workshops / day. (eg, 9.00 – 10.00)	Class names eg, 4 Red, 5H	Class numbers Please allocate one enrolment class <u>only</u> per workshop.	Special needs (no names) eg, wheelchair, vision or hearing impaired, ESL, NESB, ODD, ADHD, OC/IO/IM, anxiety, beh / lang support
9 - 10	2T	24	
10 - 11	1/2C	23	
12.10 - 1.10	K/1E	22	
2 - 3	3/4B	28	

DATE:

Times Maximum 1 hour / workshop. Maximum 4 workshops / day. (eg, 9.00 – 10.00)	Class names eg, 4 Red, 5H	Class numbers Please allocate one enrolment class <u>only</u> per workshop.	Special needs (no names) eg, wheelchair, vision or hearing impaired, ESL, NESB, ODD, ADHD, OC/IO/IM, anxiety, beh / lang support

Appendix 3 Evaluation Forms

- Completed evaluation forms

