

BUSINESS WASTE REDUCTION PROJECT



Stage 2 Report - June 2008

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EXECUTIVE SUMMARY

The Business Waste Reduction Project aims to achieve measurable waste reduction outcomes and reduce the amount of waste disposed to landfill for a select number of businesses in the NEWF region.

The project is implemented by i) collaborating with individual businesses to identify waste management issues and developing action plans to implement change ii) targeting the wider business community through information transfer, networking with industry groups and the media.

The project engaged ten businesses in Stage 2 and fostered relationships with a range of industry groups, businesses networks and relevant government agencies enabling it to promote waste reduction to a broader regional audience. The project was promoted in regional and national media, through its quarterly newsletter and conference presentations.

The projects stated objectives have been met with seven businesses having implemented their action plans and an additional three businesses potentially doing so in the coming months. Diversion from landfill is quantifiable for four of those businesses at present and is approximately 43 ton per annum. Existing online resources have been well utilised with over 100 visits per month to the BWRP web pages. This average has increased to 150 per month over the last 3 months. Project case studies have been increasingly accessed on the web.

All businesses involved in the project reported that they had improved their waste management practices, were more aware of waste issues and found the project to be a positive experience.

Project implementation has been externally constrained by the limited availability of services in the rural sector and the time and resource constraints of participating businesses. Internally, a review of resources and a more proactive approach to the media by the project coordinator is required.

The Business Waste Reduction Project has been extended until June 2009. It is recommended that this stage of the project should continue in its present format of working with specific businesses in the region while broadening its target audience through industry groups, associations and the media.

The project should aim to

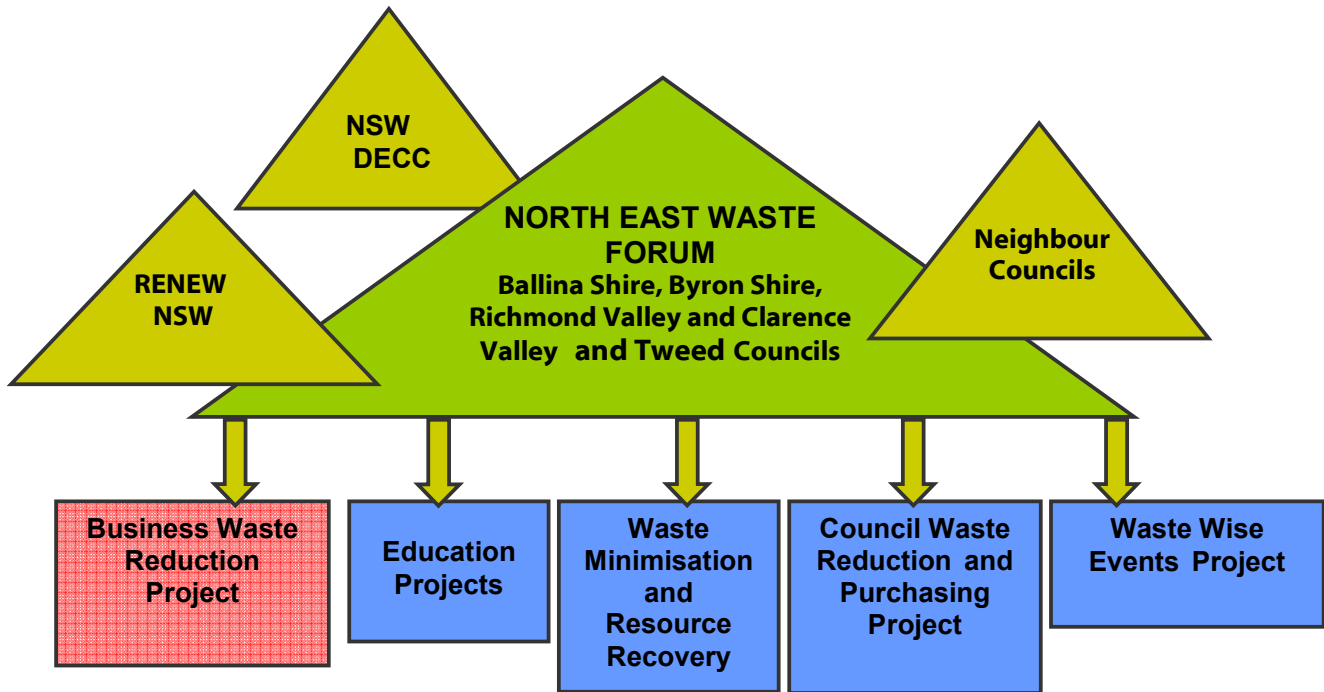
- ❖ Assist business in each council area to develop waste management plans and reduce their waste to landfill.
- ❖ Raise awareness of regional business through the media, industry groups and business networks.
- ❖ Conduct training for specific industry groups, such as Tourism, in the region.
- ❖ Collaborate with other projects that focus on sustainable business in the region.

Jeanie McKillop
Business Waste Reduction Coordinator
North East Waste Forum
June 2008

PROJECT BACKGROUND

The Business Waste Reduction Project (BWRP) is a component of the North East Waste Forum (NEWF), a voluntary group of five councils on the North Coast of New South Wales. The NEWF oversees a number of projects that aim to achieve the development and implementation of local and regionally based solutions to waste management. It has strong ties to neighbouring councils, RENEW NSW Regional Waste Management Groups and the NSW Department of Environment and Climate change (DECC). (See Figure 1)

Figure 1: Project Context



The Business Waste Reduction Project began in April 2005 and aims to achieve measurable waste reduction outcomes and reduce the amount of waste disposed to landfill for a select number of businesses in the NEWF region. The project collects and disseminates information from similar projects and actively transfers the experiences of its own businesses to other businesses across the five local government areas.

The targeted businesses cover a broad range of industries in the project area. They range from tourism operators to TAFE colleges. They were selected primarily because of their waste generating capacity and the potential for outcomes to be transferred to other businesses operating in the region.

AIMS AND OBJECTIVES

The original aim of the Business Waste Reduction Project was to achieve measurable waste reduction outcomes and reduce the amount of waste disposed to landfill for a select number of businesses in the NEWF region. Its objectives were to

- To assist businesses across the NEWF region to implement waste reduction activities;
- To reduce the amount of commercial and industrial waste to landfill across the region;
- To make use of knowledge collected from previous similar projects;
- To share information about business waste reduction across the NEWF region and if applicable further afield
- To focus on actions for reducing waste

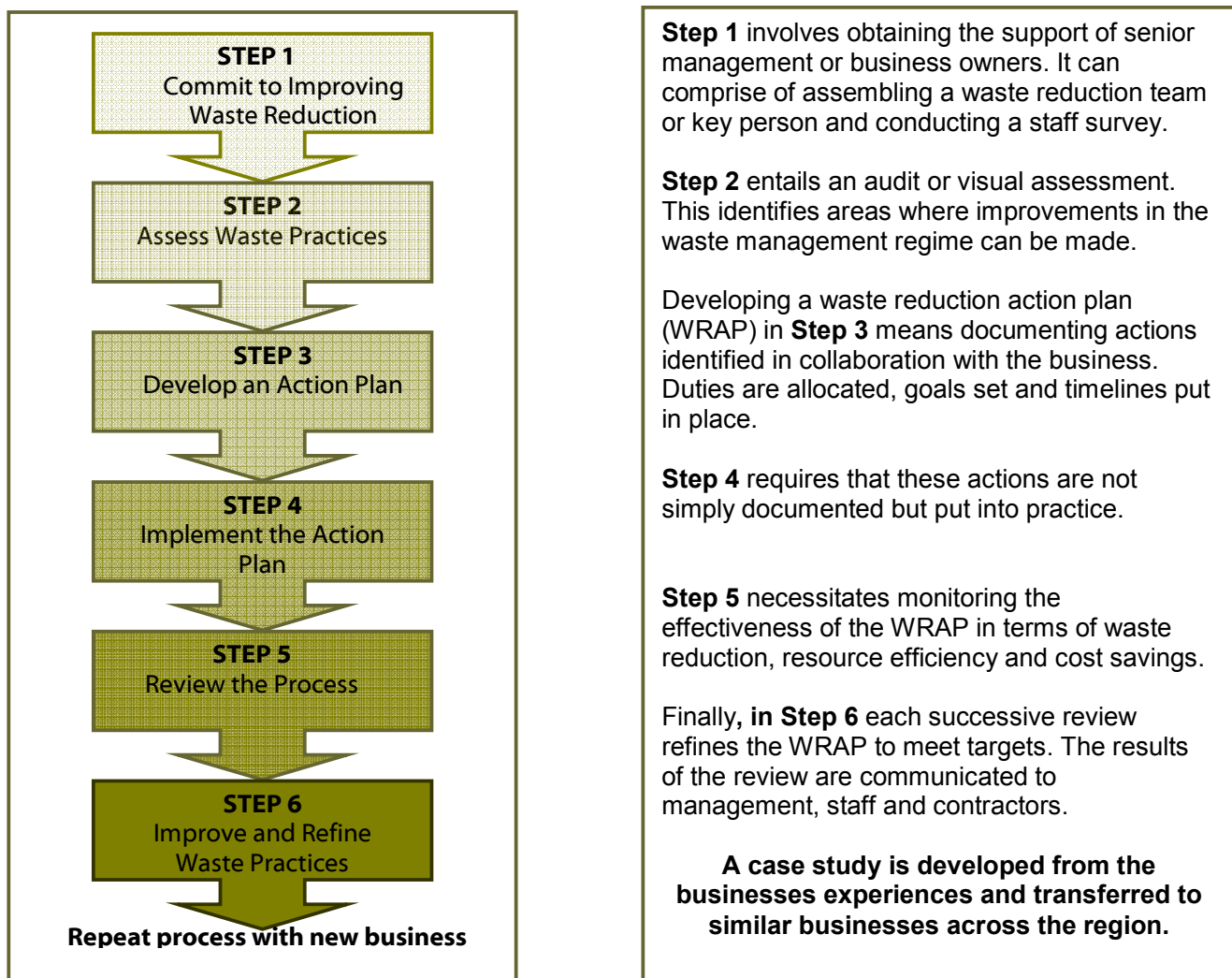
These objectives have been refined to incorporate new aspects of the project as it has developed. More specific project objectives include:

- ❖ To build the capacity of regional business by providing information advice and resources through industry associations and groups
- ❖ To promote business waste reduction through the media to bring about awareness raising and assist with behaviour change.
- ❖ To research to determine the attitudes, understanding and skills needed to bring about behaviour change.

PROJECT IMPLEMENTATION

The project is implemented in two ways. Initially, individual businesses in each of the five council areas were approached to participate in the project. The project co-coordinator collaborated with management and staff to identify waste management issues in their business and to develop actions to implement change. The process of assisting individual businesses, adopted by the BWRP, incorporates six simple steps and is outlined below.

Figure 2 Steps of the BWRP



Secondly, once individual businesses were established in the project the wider business community was targeted through information transfer, industry groups and the media. This approach aims to target a larger audience and will continue into Stage Three of the project (June 2008-June 2009).

BUSINESSES INVOLVED

St Mary's High School Casino



The Business Waste Reduction Project has now entered its second stage, building on the successful work completed in the first year. Ten new businesses have been involved in Stage 2 with audits and reports completed for all. Seven businesses have implemented their Waste Reduction Action Plans with the remaining three scheduled to do so within the next two months. Case studies have been compiled for five businesses. We will continue to add to the list of case studies as we work with businesses and organisations to introduce waste management systems. Industry groups and individual businesses in the accommodation and schools sector have now received case study information to

help them establish their own waste reduction action plans and strategies. The self-help toolkit has been promoted in newsletters and the media to reach more .

The new businesses have become involved in the initiative this year include the First Sun Caravan Park Wollongbar TAFE, St Mary's High School, the Angourie Rainforest Resort, Linnaeus Estate, Image Design Homes, Calypso Caravan Park, Ocean Shores Country Club, Crowley Retirement Village and the Grafton District Services Club. The waste reduction initiatives of these businesses will act as an effective blue print for improving waste management among similar businesses in the project area. This transfer of knowledge is an integral component of the project and provides an opportunity for all local businesses to participate in more sustainable operations.



The waste station at Linnaeus Estate

So far this year we have formed relationships with the Byron Sustainable Ventures Network, the Northern Rivers Business Advisory Service, the Ballina Chamber of Commerce and Industry, Byron United, Lennox Head Chamber of Commerce, Casino and Yamba Chambers of Commerce, the Business Advisory Network Group, The northern Rivers Consultative Committee and the economic development officers from a number of local governments. Forming networks and relationships will continue to be a major component of information exchange and engaging businesses that need help in this area.



The Angourie Rainforest Resort at Yamba has reinstated a worm farm to help deal with the large quantity of organic waste the resorts restaurant produces

RESULTS AND OUTCOMES

Table 1 Stage 2 Business Outcomes

BUSINESS	STATUS	OUTCOMES
STAGE 2: March 2007-June 2008		
First Sun Caravan Park Byron Bay	<ul style="list-style-type: none"> • Audit • Report & Recommendations • Action Plan • Re-assessment • Case study • Promotion • Transfer to 58 parks in region 	<ul style="list-style-type: none"> • a significant increase in recycling additional 6 x 240l MGB bins installed. This represents an increase of 35% or 141kg per week (7.3 ton per annum) of glass, cardboard, paper and plastics • a more accessible and streamlined system of waste recycling system through waste stations and bin rotation • Increased staff awareness through training • Increased visitor awareness through signage and additional information in park brochure and a recycling game for children • Use of reusable cleaning brushes instead of disposable cloth
Wollongbar TAFE	<ul style="list-style-type: none"> • Audit • Report & Recommendations • Action Plan 	<ul style="list-style-type: none"> • 1.8t of electronic waste to the Ballina Councils E waste collection day. • Organics from restaurant kitchen diverted to staff poultry • Reduction in paper use from centralised printing • Launch of intention to recycle on World Environment Day 2008
St Mary's High School Casino	<ul style="list-style-type: none"> • Site analysis • Audit • Staff Survey • Report & Recommendations • Action Plan • Reaudit • Case study • Promotion • Waste Wise Certificate • Transfer to all regional schools • Evaluation 	<ul style="list-style-type: none"> • a green casual day raised funds to purchase 7 wheelie bins and 28 classroom bins for paper recycling • paper recycling diverted approximately 3.6 ton per annum • Staff removal of compost to use as poultry food equates to 200kg pa. • Double sided printing and re use of single sided paper • Resource list on waste supplied to teachers • Awareness raised through an article in the newsletter and assembly • Posters and signs installed to encourage best practice

<p>Angourie Rainforest Resort Yamba</p>	<ul style="list-style-type: none"> • Site Analysis • Audit • Staff survey • Report & Recommendations • Action Plan • Re-assessment • Case study • Promotion 	<ul style="list-style-type: none"> • a worm farm uses most of the resorts food waste. At the time of audit this represented 48 kg per day of organic waste. Annually this would represent over 17 ton per annum. However, the audit sample incorporated a weekend when waste generation would be greater than on a week day. Also, seasonal variations in the tourist industry make extrapolations from one audit unreliable. • Recycles all comingled waste which at the time of audit was 35 kg per day or 12.8 ton per year. • Reuses green waste on resort gardens • reduced unnecessary servicing of rooms, allowing guests to fully use toiletries • Changed supplier of toiletries to reduce plastic packaging • Encouraged patrons to return newspapers rather than disposing of them • Replaced non-recyclable plastic cups with a recyclable variety • Converted to more power efficient light bulbs • Converted to electronic memo's • Used pushbikes not cars around the resort • Has reduced waste bill from \$1200-1500 per month to \$650-750 per month since taking on changes
<p>Linnaeus Estate Broken Head</p>	<ul style="list-style-type: none"> • Site analysis • Audit and report • Action Plan • Case study 	<ul style="list-style-type: none"> • A waste management station was constructed • a bulk bin for cardboard and paper • Signage was attached to bins to raise awareness and promote the correct separation of recycling and waste. • Several 240 litre MGB's (wheelie bins) were provided to capture comingled recycling. Collected on demand when full • two 400 litre aero-compost bins were purchased for organics. The end product is used on the estate's gardens and grounds

Image Design Homes Murwillumbah	<ul style="list-style-type: none"> • Site Analysis • Audit and Report • Action Plan • Case study • Evaluation 	<ul style="list-style-type: none"> • Cardboard separated for collection by contractor. Approx 5.5 cubic metre bin filled per month • Increased recovery of scrap metal through improved staff awareness • Timber waste reduction through making staff more aware of utilising smaller pieces of timber and minimising off-cuts
Crowley Village	<ul style="list-style-type: none"> • Audit • Report & Recommendations • Action Plan 	<ul style="list-style-type: none"> • Introduced co-mingled recycling to kitchen • Erected new signage to encourage separation of cardboard, recycling and waste • Published an article in the newsletter to raise staff and guest awareness about recycling
Calypso Holiday Park	<ul style="list-style-type: none"> • Audit and report • Consultation with Council waste and Parks staff 	<ul style="list-style-type: none"> • Investigation of recycling services and options still pending
Ocean Shore Country Club	<ul style="list-style-type: none"> • Audit • Report & Recommendations 	<ul style="list-style-type: none"> • Investigation of recycling services and options still pending
Grafton District Services Club	<ul style="list-style-type: none"> • Audit • Report & recommendations 	<ul style="list-style-type: none"> • Investigation of recycling services and options still pending

A number of additional businesses have been assisted through consultation with the project co-ordinator. Site inspections, information transfer and advice was provided to:

- Grafton TAFE
- Byron Bay Apartments
- Mt Warning Caravan Park
- Anchorage Holiday Park
- Cabarita Beach Motel
- Fairlight Motor Inn
- Byron Beach Resort
- Ramada Resort Ballina
- Ballina Beach Resort
- Elders Real Estate, Lennox head

CAPACITY BUILDING and PARTNERSHIPS

Networking

The project has also begun to focus on business networks and industry groups to build capacity in the region, which will result in waste minimisation and resource recovery. Table 2 below lists networks that have been established.

Business Network/group	Outcomes
Ballina Chamber of Commerce	<ul style="list-style-type: none"> • Presentation to Chamber businesses • Information in newsletter • Toolkit to 40 businesses
Lennox Head Chamber of Commerce	<ul style="list-style-type: none"> • Presentation to Chamber businesses • Promotion of project through local media • Regular feature in Lennox Wave (local paper) • Collaboration on 'greening' Lennox CBD
Byron United (Chamber)	<ul style="list-style-type: none"> • Project promotion through newsletter
Yamba Chamber of Commerce	<ul style="list-style-type: none"> • Plans for presentation in 2008
Dani Young Business Services	<ul style="list-style-type: none"> • Conduit for information to Ballina Businesses
Northern Rivers Business Advisory Network (NORBAS)	<ul style="list-style-type: none"> • NORBAS Site link to NEWF site
Business Advisory Network Group (BANG)	<ul style="list-style-type: none"> • Network meetings to exchange information • Inclusion in on Business Road Show in 2008
Casino Chamber of Commerce	<ul style="list-style-type: none"> • Exchange of information
Northern Rivers Area Consultative Committee (Business)	<ul style="list-style-type: none"> • Promotion of project in newsletter • Information exchange
Economic Development officers in Councils	<ul style="list-style-type: none"> • Louise Ford, Richmond Valley • Michel Boyle, Byron Council

Partnerships

The BWRP has also formed relationships with other organisations and projects to build capacity in the region for businesses to undertake more sustainable practices and to share resources. These have included Rous Water, North Coast Water, Northern Rivers Tourism Ballina Councils Urban Sustainability Project and the DECC Sustainable Schools Project.

PROJECT PROMOTION

The BWRP has been promoted in regional media with articles appearing in the Northern Star, Clarence Valley Review, Richmond River Express Examiner, Northern Rivers Business Magazine, the Lennox Wave and through RENEW NSW. The project has also produced a quarterly newsletter that is distributed electronically to businesses in the region. In May 2007 the project co-ordinator attended the Q Waste 2007 Conference in Surfers Paradise and presented a 20 minute seminar on *Motivating Business to Reduce Waste*. A presentation of the project was also given at the LGSA Environmental Education Workshop in Lismore May 2008

PROJECT EVALUATION

Web site statistics

In order to ascertain if the message of online resources and services that the project has developed is reaching the business community a review of visits to the Business Waste reduction Projects Web pages was undertaken. The results are summarised below. Figure 1 and 2 represent the number of times the BWRP site was visited in the past 16 months.

Figure 1: Hits from March 2007-October 2007

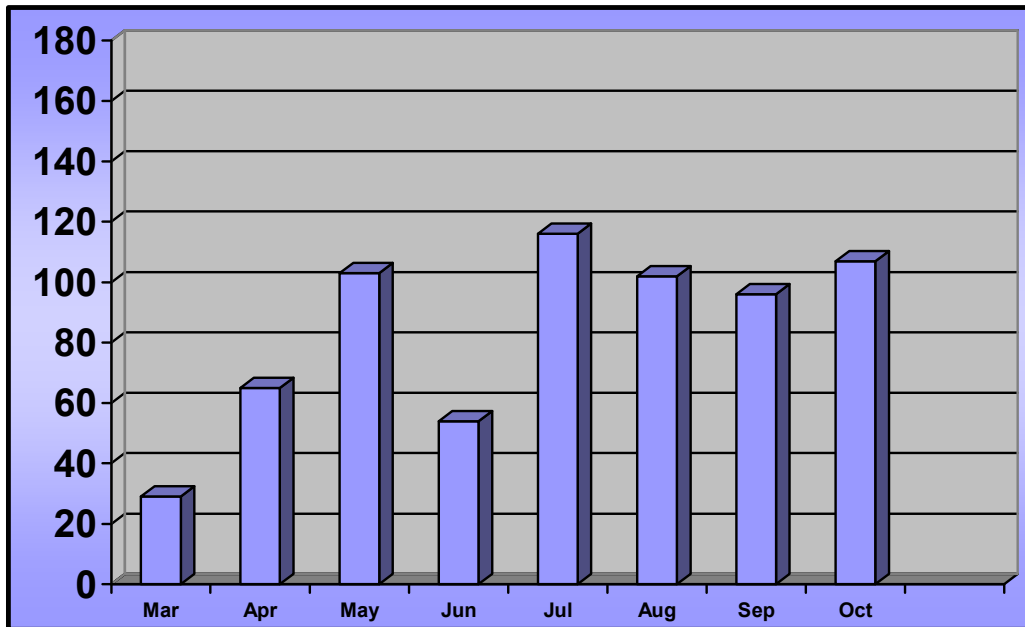
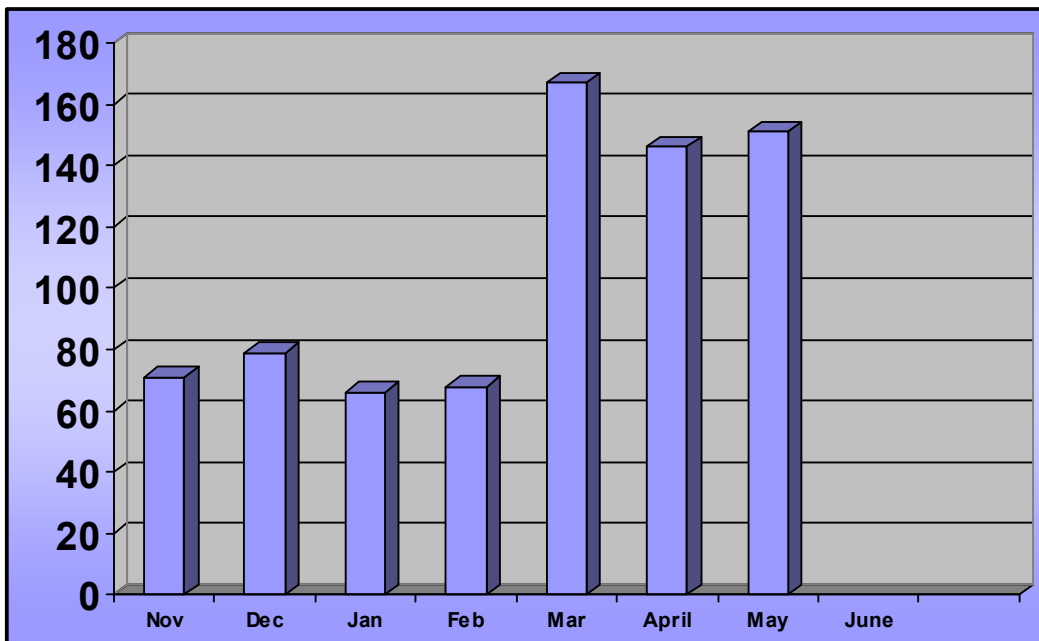


Figure 2: Hits from Nov 2007-June 2008



There was a noticeable increase in traffic in March and April 2008 that was potentially due to mail-outs, newsletters and presentations. Figure 3 and 4 below show how these visits were distributed over the main pages on the site; the self help toolkit, information on conducting an audit, case studies and the BWRP Newsletter. These graphs indicate that as the project has progressed the toolkit has remained the page of most interest to visitors, but the visits are increasingly distributed more evenly across all pages.

Figure 3 Hits per month by page category for March 2007-October 2007

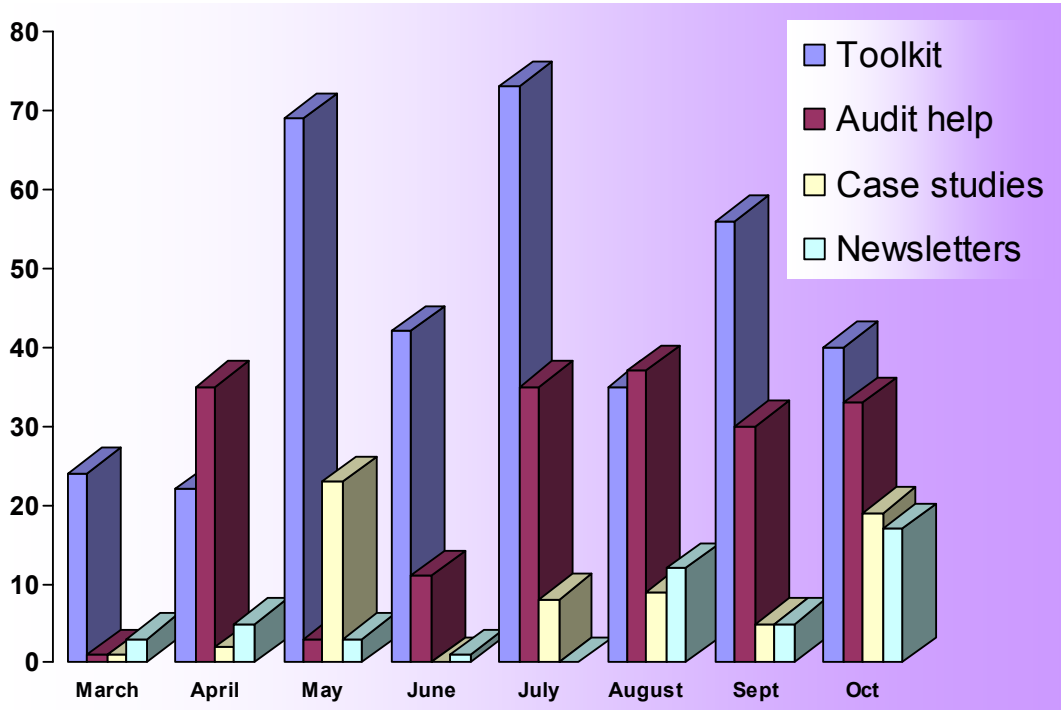
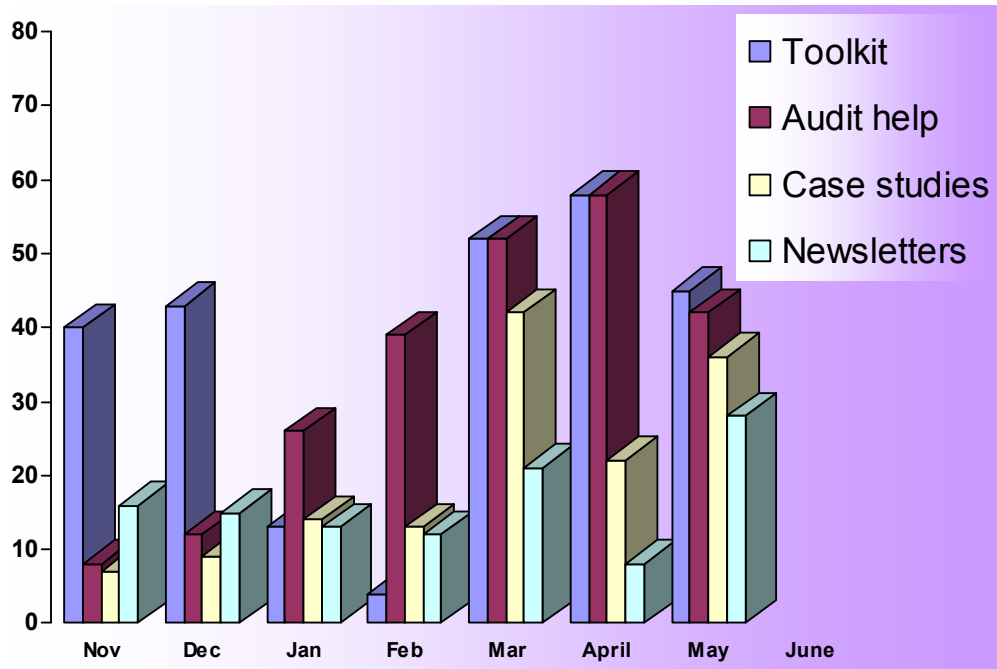


Figure 4 Hits by category for Nov 2007 - June 2008



The increased visits to case studies could be related to the increased number now posted on line. Audit help has also increased, which could indicate that businesses are undertaking their own audits to better understand their waste generation. Interest appears to be moving away from the Toolkit and is now more evenly distributed across pages. This may be related to the complexity of the toolkit for everyday use and the simplicity or brevity of case studies and newsletters. A Review of the toolkit may be warranted.

Business Survey

Businesses who have been involved in Stage 2 of the project were invited to undertake a survey. The results are summarised below. Of the seven businesses invited to take part in the survey six accepted. The survey form used is appended to this report.

Response to Questions 1-5

- All businesses agreed that they had improved waste management practices due to their involvement in the BWRP? 33% of these stated that the improvement was not complete.
- All businesses claimed that their involvement in the project has helped raise staff/customer awareness
- All businesses agreed that the project had provided them with a range of options for reducing waste
- All businesses felt there was a sufficient level of support from the project co-ordinator
- All businesses stated they would continue to pursue waste reduction initiatives

Q6 Changes made by businesses

- Implemented paper waste recycling in admin and staff blocks, library, copy rooms and class rooms, collect organics for home poultry, Raised awareness on assembly, green day, newsletter, posters. Presentation to teachers on reducing paper use. Looking at recycled paper purchasing
- Recycling cardboard, waste minimisation of wood, better separation of metal
- All organic waste to worm farm, reduced servicing of rooms to reduce product use, changed to more environmentally friendly products, introduced commingled recycling, now use electronic memos and push bikes,
- Ewaste disposal at Council Ewaste day, reduced paper use in office, restaurant takes organics home, recycling program launched on World Environment Day 2008-06-25
- Introduced compost bins, co mingled recycling, paper and cardboard recycling, built a waste transfer station
- Article in newsletter to encourage recycling, recycling bins in kitchen, signage in independent living apartments, contractor to collect second hand demolition material

Q7 Areas where the project could have been improved/helped more

- Nowhere
- Found a use for treated timber
- no, you probably did everything you should but it was let down on our end
- No, not really - you did your job perfectly
- Convince your councils to pick up on demand
- Green waste collection

Q8 Did it save you money?

- No, same cost or more
- Yes, through increased recycling which is cheaper
- Yes definitely, we went from \$1200 - \$1500 per month to \$650-750 per month
- Not sure
- I assume so as paper recycling is cheaper than waste collection

CONCLUSIONS and RECOMMENDATIONS

My evaluation of Stage 2 of the BWRP has highlighted a number of the project strengths and weaknesses. The main observations are outlined below.

Strengths

The projects stated objectives have been met. Seven businesses have implemented their action plans with an additional three businesses potentially doing so in the coming months. This means that twice the number of businesses originally targeted in the work plan have been engaged in the project.

Diversion from landfill is quantifiable for four of those businesses at present and is approximately 43 ton per annum.

The project has fostered productive networks with 10 industry groups in the region enabling it to promote waste reduction to a broader audience and transfer knowledge.

On average, over the past twelve months 100 people per month accessed the BWRP web pages. This average has increased to 150 per month over the last 3 months. Project case studies have been increasingly accessed on the web.

All businesses involved in the project reported that they had improved their waste management practices, were more aware of waste issues and found the project a positive experience.

Weaknesses

Inadequate recycling services available - the services for recycling which are available to the commercial sector in rural areas is limited so even when a business wants to do the right thing it is often unable to. Bulk recycling is not available in all LGA's and recycling collection in many areas is only fortnightly.

Maintaining the commitment of businesses over time has been constrained by their own time and resources

The BWRP Toolkit is complex and may need some simplification or an abridged version to enhance its usefulness.

The co-coordinator needs to take a more proactive approach to the media to further disseminate information to business. The business email register needs to be expanded and introduced into Tweed.

Recommendations

The Business Waste Reduction Project has been extended until June 2009. It is recommended that this stage of the project should continue in its present format of working with specific businesses in the region while broadening its target audience through industry groups, associations and the media.

The project should aim to

- ❖ Assist one business per council area to develop waste management plans and reduce their waste to landfill.
- ❖ Raise awareness of regional business through the media and industry groups.
- ❖ Conduct training for specific industry groups, such as Tourism, in the region.
- ❖ Collaborate with other projects that focus on sustainable business in the region



Evaluation of Business Waste Reduction Project

Please answer the following questions to assist with future project planning and delivery.

- 1. Has your business improved its waste management practices due to its involvement in the BWRP? Yes Partially No
- 2. Has involvement in the project has helped raise staff/customer awareness? Yes Partially No
- 3. Has the project provided you with a range of options for reducing waste? Yes Partially No
- 4. Was there a sufficient level of support from the project co-ordinator? Yes Partially No
- 5. Will your business continue to pursue waste reduction initiatives? Yes Partially No
- 6. Please list any changes your business made while involved in the project.

- 7. Please indicate areas where the project could be improved or could have assisted you further

- 8. If possible, please indicate if the project has saved your business money

- 9 Please add any additional comments you wish to make

Thank you for participating in this evaluation and in the Business Waste Reduction Project