

WORKS COMMITTEE MEETING

BUSINESS PAPER

TUESDAY 11 MAY 2010

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WORKS COMMITTEE MEETING

Notice is hereby given that a Works Committee Meeting of the Council of the City of Randwick will be held in the Council Chamber, Town Hall, 90 Avoca Street, Randwick, on Tuesday, 11 May 2010 at 6:00pm.

Committee Members: The Mayor, J Procopiadis, Andrews, Belleli, Bowen, Hughes, Matson, Matthews (Chairperson), Nash, Notley-Smith, Seng, Smith, Stevenson, Tracey, White (Deputy Chairperson) & Woodsmith

Quorum: Eight (8) members.

NOTE: At the Extraordinary Meeting held on 28 September 2004, the Council resolved that the Works Committee be constituted as a committee with full delegation to determine matters on the agenda.

Apologies/Granting of Leave of Absences

Confirmation of the Minutes

Works Committee Meeting - 13 April 2010

Declarations of Pecuniary and Non-Pecuniary Interests

Address of Committee by Members of the Public

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Notice of Rescission Motions

Nil

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Ray Brownlee
GENERAL MANAGER

Works Report No. W10/10



Subject: Waste Management Strategy
Folder No: F2004/07280
Author: Talebul Islam, Coordinator Waste Management

Introduction

In accordance with Part 5A of the Protection of the Environment Operations (Waste) Regulation 2005, the Department of Environment, Climate Change and Water (DECCW), NSW, introduced the Waste and Sustainability Improvement Payments (WaSIP) in 2009. Each Council receiving WaSIP is required to prepare a Strategic Waste Action Plan (SWAP) which includes performance milestones that will contribute to Council achieving the 2014 municipal waste diversion target of 66%.

As Randwick City Council has received payments under the WaSIP scheme, it is required to prepare a Strategic Waste Action Plan that contains performance milestones that will contribute to council reaching the 2014 municipal waste target.

This report presents council's Waste Management Strategy that contains Waste Action Plan with performance milestones that will contribute to council reaching the 2014 municipal waste target.

Issues

Waste and Sustainability Improvement Payment Program

In 2009-10 council has received over \$480,000 to carry out various waste and sustainability activities. A guideline issued by the Department of Environment, Climate Change and Water on Waste and Sustainability Improvement Payment Program indicates that over the next seven years DECCW will deliver \$237.3 m to eligible councils in Sydney Metropolitan Area. Randwick Council can expect over \$5 million of funding for such activities. One of the requirements to qualify for this funding is to prepare a Strategic Waste Action Plan towards achieving the NSW Government 66% landfill diversion target and carry out the actions accordingly.

Council's resource recovery performance

At present council is achieving 39% diversion of waste from landfill and is one of the best performers among the NSW councils that have not yet implemented any Alternative Waste Technologies (AWT). Additional resource recovery initiatives including implementation of Alternative Waste Technology will require for Randwick Council to achieve the 2014 diversion target.

Waste Management Strategy

Council developed a Waste Management Strategy in 2007 in line with Randwick City Plan that now has been reviewed. The Waste Management Strategy 2010 analyses council's current waste management practices and level of resource recovery. Also analyses available and potential technologies, procedures and actions that will allow council achieving 66% resource recovery target by 2014.

An action plan has been developed and included in the Waste Management Strategy 2010 with short (1-3 years), medium (3-5 years) and long-term actions to achieve the diversion target.

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Relationship to City Plan

The relationship with the City Plan is as follows:

Outcome 10: A healthy environment.

Direction 10d: Sustainable alternative waste technologies and environmentally sound collection systems are identified and implemented.

Direction 10e: Our community is encouraged to implement waste minimisation strategies.

Financial impact statement

There are no financial implications.

Conclusion

Each council receiving Waste and Sustainable Improvement Program funding from the Department of Environment, Climate Change and Water is required to develop and adopt a Strategic Waste Action Plan that details how council will achieve 66% resource recovery by 2014. Randwick City Council is recipient of the funding.

Council's Waste Management Strategy 2007 has been reviewed, which analyses council's current waste management practices, resource recovery, available and prospective waste treatment technologies that might have potential for achieving the 2014 municipal waste target of 66% resource recovery. The 2010 Waste Management Strategy contains an action plan with short, medium and long term performance milestones that will allow council to reach the 2014 municipal waste target.

Recommendation

That Council adopts Waste Management Strategy 2010 with defined actions to achieve 2014 municipal waste target.

Attachment/s:

1. Waste Management Strategy - 2010

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WASTE MANAGEMENT STRATEGY

W10/10



May 2010

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INTRODUCTION

1.1 Background

Any substance or object the holder discards, intends to discard or is required to discard can be defined as waste. If not managed properly, waste can become a source of pollution that can cause harm to human health and to the environment.

Putrescible waste generated in residential properties requires additional consideration to protect the health of the residents through safely and timely removal.

Currently, Australia is one of the highest per capita waste generating nations in the world. Waste generation is affected by the throughput of commodities and the quantities of waste generated are affected by consumer choices and efficiencies within the lifecycle of these commodities. However, overall consumption of commodities is directly affected by the economic activities. Demographic and historical data, both in Australia and overseas, suggest that as a population achieves higher socio-economic status and as positive economic conditions occur, there is increased consumption of goods and services and hence generation of waste.

Section 496 of the Local Government Act 1993 NSW empowers a Local Government Authority to make and levy an annual charge for the provision of domestic waste collection and management services. In 2001 the New South Wales State Government enacted the Waste Avoidance and Resource Recovery Act 2001. This Act requires that waste management options are considered against a hierarchy of the following order:

- A. Avoidance of unnecessary resource consumption
- B. Resource recovery (including re-use, reprocessing, recycling and energy recovery)
- C. Disposal

NSW Waste Avoidance and Resource Recovery Strategy 2003 revised in 2007, stipulates the need to maximise conservation of our natural resources and to minimise environmental harm from waste management and disposal. The strategy identified four key areas:

- Avoiding and preventing waste
- Increased use of renewable and recovered materials
- Reducing toxicity in products and materials
- Reducing litter and illegal dumping

The Randwick City Plan has identified two directions and three actions for the future in relation to waste management.

Directions:

- Sustainable alternative waste technologies and environmentally sound collection systems are identified and implemented
- Our community is encouraged to implement waste minimisation strategies

Actions:

- 66% of the City's waste will be diverted from landfill by 2014
- No untreated waste to be sent to landfill by 2020
- Waste to resource initiatives are implemented

This Waste Management Strategy analyses Randwick City Council's current waste management procedures and achievements, and outlines targets and actions to achieve sustainable outcomes through meeting the legislative requirements.

1.2 Purpose of Waste Management Strategy

The purpose of the Waste Management Strategy is to set a framework and procedures for sustainable management of waste within the Randwick City Council for the present, immediate future and for the long-term future to meet the state resource recovery targets and community aspirations.

1.3 Strategy Mission

Randwick City Council's Waste Management Strategy has the following mission:

In partnership with the community we will manage our waste in a sustainable way and will recover the best resource value from it.

This mission encompasses environmentally, socially and economically sound collection, transport and processing of waste for its best resource value. Achieving this mission will necessitate community education, community involvement, resource allocation and implementation of innovative technology.

2. THE STRATEGY IN CONTEXT

2.1 Sustainability context

Mounting research findings have demonstrated that waste management issues are integral part of the environment. Starting from global warming, water savings, conservation of virgin resources, greenhouse gases and soil health issues are closely related with waste management.

In the face of increasing disposal costs, waste avoidance and reuse are the best vehicles for minimisation of waste management costs.

Increased awareness of the environmental impacts caused by landfills has led to the growing oppositions to landfills by the community. So, landfilling of waste is no longer an acceptable or a viable waste disposal method to the community.

Sustainable management of waste will be the one that is environmentally sound, cost effective and socially acceptable.

2.2 Current developments in Waste Management

2.2.1 Waste Collection

An innovative garbage and recycling collection and monitoring system has been introduced in 2008. The garbage and recycling bins are now microchipped and trucks equipped with microchip reader, weighing mechanism and waste bin content viewing camera. This allows continuous collection of data on service delivery, bin presentation, participation in dry and green waste recycling, bin contamination, etc. Such information are being used for service improvement, improved resource recovery, making policy decisions and legislative reporting.

Global Positioning System (GPS) and Geographical Information System (GIS) are the other components of the collection and monitoring system that helps improving service delivery, OH&S and quality management.

2.2.1 Disposal of Waste

In 2009 Wright Corporate Strategy carried out a public review of landfill capacity and demand in NSW. The review found that including the newly approved landfill at Woodlawn, there is about 40 million tonnes of landfill capacity available for Sydney. At a rate of 2 million tonnes per year disposal, there is 20 years of landfill life in Sydney. However, both Eastern Creek and Lucas height have only four to six years of life and Woodlawn has 400,000 tonne per year input cap by consent conditions.

Based on this situation, council can rely on landfilling option only for a short-term. Also, gate fees for landfills are increasing due to increase in s. 88 levy charged under Protection of the Environment Operations Act 1997.

2.2.2 Waste Processing

Traditionally waste has been managed by collecting and disposing of at landfill. This traditional way of managing waste was acceptable by the community until two major issues emerged - waste is resource and when buried in landfill causes harm to the environment by emission to land, water and air. This acquired knowledge has made landfilling of waste increasingly less viable and led to the development of new technology, known as Alternative Waste Technology (AWT), capable of recovering resource value from waste with reduced or no harm to the environment.

Typically, AWT treats waste by mechanical, biological and/or thermal processes involving separation of recyclables, fermentation, percolation, gasification, melting, etc. Suitability of individual or combinations of such processes depend on type of waste, level of source separation and community perception of AWT's environmental impacts. These technologies are usually associated with high capital costs and higher than landfill operating costs. However, the long-term environmental benefits can outweigh the capital and operating costs of such technologies.

European countries are slowly moving towards adopting such technologies and moving away from landfill as means of waste disposal. There are number technologies available in Europe, America and Australia for treating wastes and producing value added products for reuse. There are a number of AWT facilities are now operating throughout Australia or are in planning stage.

Global Renewable Limited in partnership with WSN Environmental Solutions has established an alternative waste technology facility at Eastern Creek, Sydney, called "UR-3R". It is claimed that this technology is capable of diverting 80% of household waste from landfill. Recyclables are separated at the facility by mechanical sorting, and green electricity and compost are produced from the residual organic component of the waste. Few Sydney Councils are currently using this facility for processing of their domestic waste under long-term contractual arrangements. Currently the facility is almost at its consent input cap.

WSN Environmental Solutions has established a new alternative waste technology facility at Jacks Gully called "Equilibrium". This facility is capable of separating recyclables using their physical properties of floating and sinking in water. Green electricity is being generated from the residual organics and the source separated green waste is being composted. It is claimed that currently more than 60% of household waste is being diverted from landfill at this facility. The facility is consented with maximum of 90,000 tonnes per year and is currently receiving more than 70,000 tonnes of waste per year.

Both the facilities are using Mechanical and Biological Treatment method of waste processing. UR-3R technology is capable of processing waste from a single-bin collection system, but currently is processing waste from three-bin collection system.

SITA has established an advanced waste treatment facility at Kemps Creek. This facility converts organic from the garbage bin into compost and mulch product and recovers resources like aluminium, steel, plastic and glass. It is claimed that about 68% diversion rate is at the facility. There is about 30,000 tonnes per year available capacity at the facility at this point in time.

Earthpower Technologies is Australia's first food waste-to-energy facility located at Camellia in Sydney. It accepts source separated food waste from the commercial, industrial and domestic sector and converts it to green energy and nutrient rich fertilizer. Due to its sensitivity to contamination, this technology is still facing difficulties in processing source separated residential food waste.

Bedminster, Biomass Solution, Biovision 2020, Earthpower, Tryton and Remondis have established or are planning to establish AWT facilities based on mechanical and biological treatment throughout Australia.

2.3 Legislative context

The Waste Avoidance and Resource Recovery Act 1993 is the overarching legislation in NSW that guides and regulates waste management in local government authorities. The Act provides a clear sense of purpose to reduce waste, optimise the recovery of useable resources from waste and manage residual waste in an environmentally responsible way. Section 12 of the Act requires the Director General of the Department of Environment, Climate Change and Water (DECCW) to develop a waste strategy for the state. DECCW developed NSW Waste Avoidance and Resource Recovery Strategy 2003, which was reviewed in 2007 (NSW Waste Strategy).

NSW Waste Strategy identified four key outcome areas:

- Avoiding and preventing waste
- Increased use of renewable and recovered materials
- Reducing toxicity in products and materials
- Reducing litter and illegal dumping

The strategy set a goal of holding the level of the total amount of waste generated over a five-year period. Targets of 66% resource recovery in the municipal waste area by 2014 and reduction in volume and tonnage of litter and illegally dumped material, using 2003 as the base year, were set.

In accordance with Part 5A of the Protection of the Environment Operations (Waste) Regulation 2005, the Department of Environment, Climate Change and Water (DECCW) introduced a Waste Services Performance Improvement Payments (WSIP) and delivered \$25 million to eligible councils to invest in programs that will improve waste avoidance, resource recovery waste management outcomes. This program was updated in 2009 to Waste and Sustainability Improvement Payments (WaSIP) and will invest \$256 million over seven years to improve waste avoidance, resource recovery, the use of secondary resources and waste outcomes, and improvements in environmental sustainability in local government areas. Eligible councils will require developing and adopting a Strategic Waste Action Plan that contains performance milestones that will contribute to council reaching the 2014 municipal waste target.

Targets of 63% and 76% resource recovery from commercial and industrial (C&I) and construction and demolition (C&D) wastes, respectively, were set by the strategy as well. The management of C&I and C&D wastes does not fall within the responsibility of local

government, except where the local government has some regulatory authority that can be used to enhance resource recovery.

NSW's major economic instrument for waste, under Section 88 of the protection of the Environment Operations Act 1997, the Waste and Environmental Levy (the Levy) is currently at \$56.60 per tonne of waste disposed of at landfill and is set to increase by an additional \$10.00 (CPI adjusted) per tonne over the next four years. This means that by 2014-15 the levy will be about \$90 per tonne and the landfill gate fees can reach \$200 per tonne.

Waste transportation and disposal activities including illegal dumping are regulated by the Protection of the Environment Operations Act (POEO Act) 1997 and the Regulations made under the Act.

2.4 Waste Inquiry Outcomes

2.4.1 Productivity Commission Inquiry

In 2006 there were two waste management inquiries. One was carried out by the Productivity Commission of the Federal Government and the other by the Standing Committee on Public Works, NSW. The Productivity Commission presented its inquiry report on waste management to the Federal Government in October 2006. The report made the following concluding remarks.

"Waste management policy should primarily be focused on reducing social and environmental risks from waste collection and disposal to acceptable levels. The Commission considers that policy makers have become distracted by the pursuit of other, waste hierarchy inspired, objectives – such as minimising waste and conserving resources – and give insufficient regard to whether their interventions would lead to net benefits to the community.

Directly addressing relevant market failures and distortions throughout product life cycles will assist markets to determine the right balance between waste avoidance, resource recovery and disposal. Waste management policy can play its role in this process, but it should not be used to indirectly address upstream environmental and social issues. Many of these impacts may warrant intervention, but this would be (and often already are) much more effectively and efficiently addressed using direct policy instruments.

Unfortunately, much waste management policy in Australia has been initiated with insufficient consideration of all of the likely financial, environmental and social costs and benefits. Waste disposal problems, and community support for the remedies proffered, are too often simply asserted, rather than demonstrated. Many interventions have certainly gone too far. In particular, landfill levies, direct and indirect subsidies for alternative waste technology facilities, and some EPR (Extended Producer Responsibility) and PS (Product Stewardship) schemes, are not justified.

The reforms the Commission is proposing will achieve a more appropriate balance between waste avoidance, resource recovery and disposal by, among other things: requiring a more rigorous approach to identifying environmental problems; tightening regulatory compliance; and reinforcing the roles of prices and awareness raising in assisting the community to make more informed choices.

As in other areas of environmental policy, the way forward is not always intuitively obvious. However, what is clear is that simple rules such as 'recycling is good, more is better', are no substitute for sound policy making procedures. Policy makers and community attitudes need to be guided by open and rigorous analysis of costs, benefits and risks, if waste management policy is to best serve the community."

2.4.2 Standing Committee on Public Works Inquiry

The inquiry into municipal waste management in NSW carried out by the Standing Committee on Public Works has identified that waste management is a complex, increasingly capital intensive, and environmentally concerning issue in NSW. Municipal waste management is a substantial and growing budget item for councils and local community.

The committee believes that sustainability and waste generation are linked and that this link should inform waste policy development. The inquiry found that technical solutions proposed for energy recovery, containment and disposal of waste are important in improving waste management in the short-term. However, contrary to the views of the Productivity Commission, the committee believes that technological changes alone are not sufficient to move society towards sustainable consumption and sustainable waste management.

In contrast to the Productivity Commission's suggestion that some Australian jurisdictions 'have become obsessed with waste minimisation as an end in itself', the Committee believes that the governments must also take care to avoid becoming obsessed with creating a flourishing waste industry as an end in itself. The true measure of the government's success in waste management is less waste.

The Committee recommends that the NSW Waste Strategy either be updated, or a new municipal waste policy be developed to underpin and complement the Waste Strategy with a view to strengthening the Strategy's framework to enable targets to be more realistic, measurable and attainable. Regardless of which policy avenue the State Government adopts, the Committee argues improvements should be made in data consistency, target specification, waste infrastructure planning and resource recovery guidance principles.

The inquiry identified that efforts in educating the community extend beyond placing the right waste in the right bin and need to be directed toward a greater understanding of the full costs associated with waste disposal and recycling.

In relation to food wastes, the committee recommends that the State Government undertakes further analysis of the organic waste to landfill problem. In relation to disposal options, the Committee considers that current landfill and alternative waste technology (AWT) disposal methods should be seen as complementary rather than competing systems. It recognises the complexity and risks associated with AWT and considers that councils need additional support in developing contracts and making choices surrounding AWTs and that increased coordination amongst stakeholders be reinforced to defray the costs, risks and burdens on ratepayers more equitably.

The Committee suggested that the NSW Department of Environment, Climate Change and Water articulate in greater detail the rationale behind the current price scale of the Waste and Environmental Levy increments and utilise the Full Cost accounting method to assess appropriateness of current levy charges.

3. WASTE MANAGEMENT IN RANDWICK

3.1 City Profile

Randwick City is located in the eastern suburbs of the Sydney metropolitan area and is bounded to the north by Centennial Park, the Pacific Ocean forming the eastern boundary and Botany Bay the southern boundary. The western boundary is defined generally by major roads and the line of open space and golf courses developed over low lying land known historically as the Lachlan Swamp and Botany Wetlands.

Randwick City covers an area of 36.43 square kilometres (3643.6 hectares). There are 907 streets and lanes with a length of about 320 km in the City. A population of about 129,000 with diverse ethnic background reside in approximately 21,400 single dwelling and 34,200 multi-unit dwelling properties within the LGA.

3.2 Waste Management Service Responsibility

Council is responsible for collection and disposal of municipal waste. Sections 496 and 502 of the Local Government Act 1993 empower Council to recover the cost of domestic waste management through making and levying an annual charge and on users pay basis. The cost for the management of the waste from public litter bins, parks and gardens, beach cleaning, street cleaning and engineering activities is met from general rates revenue.

The management of commercial and industrial waste and construction and demolition wastes lies with individuals and organizations involved in those activities. Council has some regulatory authority on management of those wastes.

4. DOMESTIC WASTE MANAGEMENT

4.1 Domestic Waste Collection

Council uses a combination of day labour and contracted services to provide domestic waste collection services to the residents. Domestic garbage and recycling are collected under contract and green waste, bulky waste and illegally dumped material collections are undertaken by Council staff.

Council provides a weekly garbage collection service to all residential properties. Single dwellings are provided with a 140 litre mobile garbage bin (MGB) and multi-unit dwellings are provided with a 240 litre MGB for shared use between two units. Recycling and green waste in 240 litre MGBs are collected fortnightly. All single dwellings are provided with one recycling and one green waste bins. One recycling bin is shared between two units in multi-unit dwellings. Green waste bins are provided to multi-unit dwellings on request.

All residential properties are entitled to four bulky waste collections per year. Two of these services are offered on scheduled dates, and two are on-call and can be booked by the residents when required.

4.2 Domestic Waste Collection Issues

Council's objectives in providing domestic waste management services are to collect the household generated wastes in a safe manner, recover resources in compliance with the state legislation and waste strategy in a cost effective and sustainable manner.

Council provides garbage, recycling, green waste and clean-up collection services to 22,000 single dwelling properties. Due to topographical constraints not all of the properties are able to store their three bins within their properties and sometimes store their bins on nature strip creating hazard and visual impact on the street scapes. Some properties are unable to use Mobile Garbage Bins (MGB) due to difficult access to the properties. There are some streets where regular collection trucks are unable to access waste bins due to difficult access issues and receive special collection services.

There are over 34,000 multi-unit dwellings (MUD) in the city receiving garbage, recycling and clean-up collection services. According to a survey carried out by the DECCW, Randwick City Council has the second highest multi-unit dwelling density in the state after the City of Sydney. Some of the MUD buildings are unable to accommodate their allocated number of MGBs within the inadequately sized bin-enclosures or are unable to present them at kerbside for collection due to insufficient length of kerb available adjacent to the buildings. Such buildings require more than once a week collections. In few cases they are unable to receive recycling services. A wheel-Out-Wheel-In service has been introduced to buildings with 24 and more dwellings to remedy such issues.

Innovative improvements in collection technology have been implemented to overcome all those collection issues and improve resource recovery. Collection trucks are equipped with Global Positioning System (GPS) and bin monitoring systems to improve Occupational Health and Safety issues as well as for collection of service quality and resource recovery data.

4.3 Illegal Dumping

High level of multi-unit dwelling and high tenancy turnover, among others, are the important reasons for substantial level of illegal dumping in the city. Over a period of two years Council has collected approximately 20,000 illegal dumping incidents. Most of the illegal dumping incidents occur around MUDs.

The illegal dumping tonnages have increased over the last two years from about 700 tonnes per year to about 900 tonnes per year.

Illegal dumping is a significant problem the Sydney metropolitan area. Reduction in illegal dumping is one of the key areas identified in NSW Waste Strategy 2007. Also, DECCW has developed an illegal dumping control handbook for local government emphasising on community education and law enforcement.

An integrated approach including community education, law enforcement and quick removal have been introduced to meet the requirements of the NSW Waste Strategy. Council carries out research in cooperation with DECCW to find out innovative methods that can be implemented for further improvements in illegal dumping management.

4.4 Council's Performance in Domestic Waste Management

4.4.1 Customer satisfaction

A customer satisfaction survey carried out in 2005 found that overall 91.3% of the ratepayers were satisfied with the domestic waste services provided by Council. This is a very high level of customer satisfaction to achieve through providing approximately 110,000 services to the community per week. However, there is still room for further improvements.

A summary of the results is shown in the following table.

KEY CRITERIA RESULTS SUMMARY	2005 RESEARCH RESULTS
Overall satisfaction	
Overall satisfaction with the delivery of waste services	91.3% (satisfied to very satisfied)
General household garbage	
Frequency of which the bin is not big enough	69.0% (never or infrequently)
Recycling services	
Overall satisfaction with Council's recycling services	82.3% (satisfied to very satisfied)
Green waste services	
Overall satisfaction with Council's green waste services	85.6% (satisfied to very satisfied)
Scheduled clean-up services	
Overall satisfaction with the two scheduled clean-up services	89.4% (satisfied to very satisfied)
On-call clean-up services	
Overall satisfaction with the two on-call clean-up services	93.2% (satisfied to very satisfied)
Preference for a scheduled or on-call service	63.6% prefer scheduled
Satisfaction with the information Council provides on waste services	78.0% (satisfied to very satisfied)

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4.4.2 Waste generation and resource recovery

During 2009 Council collected just over 50,000 tonnes of wastes from the residential properties and has recovered about 19,600 tonnes of recyclables that includes over 13,200 tonnes of dry recyclables and 5,800 tonnes of green waste. The recovered dry recyclables include 510 tonnes of metal recovered from clean-up material. The overall recovery rate is 39%.

A waste stream audit undertaken by Council in 2008 found that the average household in Randwick generated 7.8kg of garbage, 6.1kg of recyclables and 3.1kg of green waste per week.

Food represented the greatest proportion of material in the garbage stream at 40%. Overall recovery of recyclable material was 86.3%. The potential additional diversion possible, if all garden organics and dry recyclables were recovered, is 9% or 26% if food waste is also included.

Recovery of 40% food waste in the rubbish bin would allow Council to achieve 65% diversion from landfill and almost meet the NSW Waste Strategy 2007 target of 66%.

Should the Randwick City Council continue the same level of waste generation and resource recovery, by 2014-2015 Council will pay s.88 levy of over \$2.7 million per year, when levy will increase to \$90 per tonne.

4.5 Future Domestic Waste Management Options

4.5.1 Waste Collection

Achieving 2014 resource recovery target will require implementing Alternative Waste Technology. Using AWT that can process source separated food waste collected in separate bin or together with green waste Council might be able to achieve the 2014 target. Existing garbage, recycling and green waste bin collection system will not be suitable for implementation of such a technology. It will require either introduction of a food waste bin or change the frequency of green waste bin collection while food waste is co-collected with green waste. However, there are AWT options that will fit in the current collection system.

Depending on the AWT option council will choose in future, the collection system might require changing in meeting the requirements of the technology.

4.5.2 Recycling Collection

In 2008 kerbside recycling collection has been changed from split-bin to comingled collection. This change has contributed to improved resource recovery and elevated the overall recovery rate from 72% in 2005 to 86% in 2008.

4.5.3 Illegal dumping

It is important that the illegal dumping in the City is controlled to improve the cleanliness of the streets and the quality of living of our residents. DECCW studies have shown that a single approach of collection, education or enforcement in isolation is not effective in management of illegal dumping issue. They suggest that clean-up service, community education and law enforcement should work in a coordinated manner to achieve the best outcome.

4.5.4 Resource recovery

Using the current collection and recovery systems, Council achieved 39% recovery, which is 27% short of 2014 target.

The following actions implemented individually in combination can help council achieving the 66% resource recovery target:

A. Increase recovery from kerbside recycling.

The current recovery rates of kerbside recycling have been stable over the last few years in Randwick City Council. These rates are result of Council's current waste education and enforcement efforts in the environment of high transient population, ethnic diversity and high density of multi-unit dwellings in the city. Further improvement in waste education and enforcement activities may help reducing the current contamination rate of 7%; increase the current overall recyclable recovery rate of 83% by recovering the dry recyclables and green waste currently in the garbage bin. This could contribute by another 9% to the overall resource recovery rate. This option alone will improve the resource recovery, but will not enable Council to meet the targets of the Waste Strategy 2007.

B. Recovery of organics from the waste stream.

Currently food organics are collected in the general rubbish bin and the 2008 waste stream audit identified that 40% of the rubbish bin content is food organics. Full recovery of this component in the rubbish bin could add another 24% to the current 39% overall landfill diversion resulting in a total diversion of 64%. In combination with increased recovery from kerbside recycling, food organics diversion will exceed the 66% resource recovery target.

Food organics can be recovered by source separation and processing in a food waste processing facility. However, source separation of food organics at Randwick City Council area will require another additional bin. This will add to the existing problem of bin storage

and presentation for collection, especially in the high density multi-units and difficult access areas. Currently there is only one source separated food organics processing facility in Sydney area.

Collection of food organics with green waste in the same bin is another option. However, such a collection system will require an additional bin in multi-unit dwellings that do not have green waste bins. It will be impossible to accommodate any more bins in some of the multi-unit dwellings.

Therefore, resource recovery through source separated food organics is a difficult option for Randwick City Council. This will require further investigations.

C. Electronic Waste Recycling

Electronic waste or e-Waste is an emerging problem worldwide due to the success of the electronic industry over the last decade. Over these past ten years, consumer demand for items such as computers, mobile phones, televisions and other electronic devices has been phenomenal and is still growing at a rapid rate. Cost effective recycling would help both protecting the environment and increasing resource recovery.

Recycling of e-waste is still at its infancy and quite costly. Using a sustainable method of collection and recycling of e-waste Council could increase diversion waste from landfill. Council should continue investigating sustainable method of collection and recycling of e-waste.

D. Alternative Waste Technology

A good number of technologies are available or are currently being developed for treatment of waste with varied level of resource recovery as alternative to landfill. These technologies can achieve varied level of resource recovery through processing of wastes collected in single bins as mixed waste or in multiple bins as source separated by waste stream. Source separated wastes with lower level of contamination usually result in higher level of resource recovery. However, increased source separation is associated with collection of multiple bins by multiple collection trucks. This usually requires multiple collection truck movements on the streets creating traffic congestion and burning more fossil fuel resulting in environmental effects. Particularly in Randwick City area where not enough kerbside space is available for presentation of waste bins, additional bins can exacerbate the existing collection difficulties. Therefore, any technology that could achieve higher level of resource recovery while maintaining or reducing the number of bins currently being serviced would bring the highest level of benefit for Randwick City Council.

Any alternative waste technology that is capable of processing waste collected in a three bin or less collection system will be able to address any collection issues prevalent in the Council area. Such a technology that meets the sustainability principles and is capable of diverting more than 66% will be a viable alternative technology for Randwick City Council.

Currently the following alternative waste technology facilities are operational within the Sydney region:

(1) UR-3R

Global Renewable Limited in partnership with WSN Environmental Solutions has established an alternative waste technology facility at Eastern Creek, Sydney, called "UR-3R". It is claimed that this technology is capable of diverting 80% of household waste from landfill. Few Sydney Councils are currently using this facility for processing of their domestic waste under long-term contractual arrangements. Currently the facility is almost at its consent input cap.

(2) Equilibrium

WSN Environmental Solutions has established a new alternative waste technology facility at Jacks Gully called "Equilibrium". It is claimed that more than 60% of household waste is being diverted from landfill at this facility. The facility is consented with maximum of 90,000 tonnes per year and is currently receiving more than 70,000 tonnes of waste per year.

(3) SAWT

SITA has established an advanced waste treatment facility at Kemps Creek called "SITA's Advanced Waste Treatment (SAWT)". It is claimed that about 68% diversion rate is at the facility. There is about 30,000 tonnes per year available capacity at the facility at this point in time.

(4) Earthpower

Earthpower Technologies is Australia's first food waste-to-energy facility located at Camellia in Sydney. It accepts source separated food waste from the commercial, industrial and domestic sector and converts it to green energy and nutrient rich fertilizer. Due to its sensitivity to contamination, this technology is still facing difficulties in processing source separated residential food waste.

Building an alternative waste treatment facility is an exhaustive and lengthy process requiring rigorous consultation and various approvals. Starting from initiation to operation may take few years. Establishment costs are very high they are usually built by a service provider following contractual agreement with users, usually councils, and the size of the facility is determined based on the contract tonnages. Some of the technologies allow modular structures and can be built incrementally based on demands, some require one-off construction.

The amount of waste generated with Randwick Council area is not adequate for economically sustainable way of running an alternative waste treatment facility. Council has the option of using any available capacities of already built facilities or those can be built for use in collaboration with other suitably located councils.

4.6 Actions to Achieve Targets in Domestic Waste

To meet the requirements and achieve the targets of the NSW Waste Strategy 2007 Council will take the following actions in relation to waste collection, disposal and community awareness.

A. Collection

- Continue to improve collection systems to meet the customer needs and achieving resource recovery target.
- Use the full capabilities of the implemented data gathering and collection monitoring system to improve service delivery and OH&S in collection.

B. Resource Recovery

- Design and implement programmes to improve recovery from kerbside recycling.
- Investigate gaining access to AWT in the Sydney region and collaboration possibilities.
- Investigate possibilities of introducing source separation and processing of food waste.
- Implement AWT that will ensure meeting 66% resource recovery target by 2014.
- Investigate, identify and implement sustainable method of e-waste recycling.

C. Education

- Review education method and campaigns.
- Develop and implement education programmes that will enable improvements in resource recovery.
- Develop and implement community education programmes to reduce contamination in recycling and green waste bins.
- Develop and implement effective education programme for control of illegal dumping.

5. PUBLIC PLACE WASTE MANAGEMENT

5.1 Current Services

Litter bins are installed throughout the Council area for the collection of public place waste. These bins are generally positioned in high use areas such as town centres, beaches, parks, bus stops and sports fields. They are predominantly 120 litre mobile garbage bins housed in stainless steel enclosures.

Litter bins are emptied by Council's day labour staff. The frequency of service depends on the season and popularity of the area. Council's main beaches are serviced up to four times a day during the peak summer season. Town centres are serviced daily.

There are opportunities for improvements in collection system and service delivery. Further investigations allow identification of innovative collection systems with improved productivity and high quality service delivery.

Council is also trialling the collection of recyclable material in public places. A number of recycling bins have been installed to determine the service requirements and contamination levels in the material collected.

5.2 Waste Generation and Resource Recovery

Currently Council collects about 2,000 tonnes of waste through street sweeping, beach cleaning and litter bin collection services. The collected waste is currently disposed of at landfill.

AWT, if appropriately chosen and implemented, has the potential for resource recovery of over 70% from Council's public place waste currently going to landfill.

5.3 Actions to Achieve Targets in Public Place Waste

To improve collection services and achieve the targets of the NSW Waste Strategy 2007 Council will take the following actions:

- Investigate, identify and implement efficient collection system to improve productivity and customer satisfaction.
- Investigate, identify and implement appropriate alternative waste technology to achieve resource recovery that will meet the targets set in the NSW Waste Strategy 2007.

6. COMMERCIAL WASTE MANAGEMENT

6.1 Current Services

Council provides commercial waste collection services to local businesses on a fee for service basis. Currently Council services over 600 customers by collecting 120L or 240L rubbish bins at a frequency of customers' need. As part of this service Council collects source separated cardboard for recycling.

6.2 Waste Generation and Resource Recovery

Through commercial waste services Council collects approximately 5,000 tonnes of waste with high content of food organics. About 14% of the waste has been recycled through collection of source separated cardboard. Implementation of AWT can help achieving 63% resource recovery target of the NSW Waste Strategy 2007 for commercial and industrial waste.

6.3 Actions to Achieve Targets in Commercial Waste

To achieve the targets of the NSW Waste Strategy 2007 and Council's financial goals Council will take the following action:

- Investigate, identify and implement appropriate alternative waste technology for treatment of the commercial waste collected to the achieve resource recovery target of 63%.
- Investigate, identify and implement financially viable recycling service to improve resource recovery.
- Prepare and implement a business plan for Council's Commercial Waste Services to improve customer service and return on investment.

APPENDIX 1: Strategic Waste Action Plan

PERIOD TO ACHIEVE	ACTION
Short-term (1 to 3 years)	Continuous to improvement of collection systems to meet the customer needs and achieving resource recovery target
	Design and implement programmes to improve recovery from kerbside recycling
	Investigate gaining access to AWT in the Sydney region and collaboration possibilities
	Investigate possibilities of introducing source separation and processing of food waste
	Implement AWT that will ensure meeting 66% resource recovery target by 2014
	Develop and implement illegal dumping management programme to meet the DECCW requirements
	Develop and implement community education programme aiming at reduction of contamination in recycling and green waste bins
	Investigate and identify sustainable method of e-waste collection and recycling
Medium-term (3 to 5 years)	Continue improvements in waste collection services
	Review, improve and implement waste education programmes to achieve waste management goals
	Develop and implement e-waste recycling programme
	Implement AWT and achieve 66% resource recovery target by 2014
	Review and implement commercial waste and street cleaning services
Long-term (5 to 15 years)	Review and improve waste services to meet the needs of the community
	Review this Waste Strategy to meet the requirements of any legislative changes
	Review the performance of Alternative Waste Technology and implement ecologically sustainable improvements to achieve 'no untreated waste to landfill' by 2020
	Review and implement improved waste education programmes to meet the needs of ecologically sustainable development

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Works Report No. W11/10



Subject: 40km/h High Pedestrian Activity Areas - Report
Folder No: F2004/07226
Author: Heidi Leadley, Community Road Safety Officer

Introduction

In 2005 the Roads and Traffic Authority (RTA) introduced a 40km/h High Pedestrian Activity program to address issues associated with high pedestrian casualties. The program has been introduced into other local council areas including Leichhardt, Waverley and City of Sydney, as means of reducing traffic speed and the potential for pedestrian and traffic conflict.

The program involves the creation of a gateway to the zone, as well as some traffic/road treatments and signage that slow traffic and make drivers aware of the changed driving conditions.

In December, 2009 the Staysafe Committee completed a report on Pedestrian Safety (Report No. 3/54) The report was in response to the Minister for Roads request to investigate the recent increases in pedestrian fatalities in NSW. In 2008 Randwick City Council (RCC) had a startling high number of pedestrian casualties, with 21% of all casualty crashes involving pedestrians, in comparison to 11% in Sydney and only 9% in NSW.

The proposed introduction of 40km/h zones in Randwick City meet the RTA criteria for installation of the lower speed zones, with high pedestrian volumes and high pedestrian vehicle conflict (crashes).

Issues

The report proposes the introduction of 40km/h High Pedestrian Activity areas to:

1. Arden Street & Coogee Bay Road (Coogee)
2. Belmore Road (Randwick)
3. High Street (Randwick)
4. Barker Street (Randwick)

The Randwick City Council Traffic Committee has approved slight variations (see Traffic Committee Recommendation 2009.08.4.1a) of the proposed treatments on:

1. Arden Street & Coogee Bay Road (Coogee)
2. Barker Street (Randwick)

The High Street proposal has been rejected by the RTA and Police as the presence of pedestrians is not constant throughout the year. Also, whilst the Belmore Road proposal requires some additional design considerations, it is suggested that it should be released for public comment as the public feedback may assist with final design of the treatments.

The RTA is keen to go ahead with the implementation of proposed treatments in the report and is awaiting Council's decision.

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Following approval by Council, the report and proposed treatments will be available for public comment / consultation.

Relationship to City Plan

The relationship with the City Plan is as follows:

- Outcome 9: Integrated and accessible transport.
- Direction 9b: Residential amenity is protected by appropriate traffic management.
- Outcome 6: A liveable City.
- Direction 6b: Our town centres, beaches, public places and streets are safe, inviting, clean and supports a recognisable image of our City.

Financial impact statement

Council is still negotiating with the RTA as to the final funding conditions for these projects. A further report on this aspect (as well as the community consultation feedback) will be made at a later time.

Conclusion

If the report recommendation is adopted:

1. Community Consultation, in line with Council's adopted policy, will be undertaken regarding the 40km/h High Pedestrian Activity Area treatments proposed for Belmore Road, Barker Street and Arden Street/Coogee Bay Road; and
2. a report on the results of the Community Consultation and on the funding arrangements will be brought back to this Committee for consideration.

Recommendation

That Council supports the installation of 40km/h High Pedestrian Activity Areas within the City of Randwick.

Attachment/s:

- | | |
|---|-------------------------------|
| <ol style="list-style-type: none">1. High Pedestrian Activity Areas Report (GTA Consultants) March 2009 | Included under separate cover |
|---|-------------------------------|

Works Report No. W12/10



Subject: Renaming of Frenchmans Bay Reserve
- Consultation

Folder No: F2004/06876

Author: Mark Shaw, Manager Technical Services

Introduction

At the Ordinary Council Meeting of the 25 November 2008, it was resolved:

"(Matson/Woodsmith) that Council consult the La Perouse Land Council, the La Perouse Precinct Committee and local indigenous families with the results of the consultation and the naming options available to be reported back to Council."

This resolution is subsequent to a letter and petition received by Randwick City Council (dated 13 June 2008), from Ms Yvonne Simms seeking support to have Frenchman's Bay Reserve renamed John Henry Simms Reserve.

Issues

Further to the above resolution, Council officers have undertaken the necessary consultation steps to gain feedback from key stakeholder groups regarding the renaming of Frenchman's Bay Reserve.

On the 16 April 2009 letters were sent by Council, inviting the relevant stakeholder groups to submit feedback on the renaming issue. It was requested that comments would be received by Council within the nominated consultation period by 11 June 2009 - refer attachment 1.

The La Perouse Precinct Committee advised Council (resolved at its Committee meeting of 1 June 2009) that it was of the view, that the Reserve should continue to be called Frenchman's Bay Reserve, due to the "overwhelming international significance of the area to the historic fabric to modern Australia". The Committee further advised that it would support the small part of the Reserve such as the lookout points or part of the valley to be dedicated to the Simms family.

The other key stakeholder group, the La Perouse Land Council, has recently advised Council that the matter is still currently under consideration, and that they are not in a position to make a decision at this stage.

In order to achieve a definitive outcome, the Randwick City Council Aboriginal Advisory Committee, held a meeting (on 10 June 2009) to discuss the renaming issue. However, due to the limited number of members in attendance, the matter was passed over to an extraordinary meeting. At the extraordinary meeting (held on 2 July 2009), a quorum was not met and as such it was deemed unacceptable to proceed with a resolution on the matter.

Relationship to City Plan

The relationship with the City Plan is as follows:

Outcome 7: Heritage that is protected and celebrated.

Direction 7a: Our heritage is recognised, protected and celebrated.

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Financial impact statement

There is no direct financial impact for this matter.

Conclusion

Initially, it was suggested by Council officers (as part of the initial Council report dated 25 November 2008) that one of the recently constructed lookouts within the Reserve be dedicated as John Henry Simms lookout, rather than the entire Reserve.

Recommendation

That the report be received and noted.

Attachment/s:

1. Sample letter forwarded to Key Stackholder Groups

W12/10

File No: F2004/06574
Doc No: D00611854

16 April 2009

La Perouse Precinct Committee
Attention: Mr Charles Abela
1587 Anzac Parade,
LA PEROUSE NSW 2036

Dear Mr Abela

FRENCHMAN'S BAY RESERVE, LA PEROUSE -REQUEST TO RENAME THE RESERVE

I am writing to advise that on 13 June 2008, Council received a letter and accompanying petition, from Ms Yvonne Simms, requesting that Frenchman's Bay Reserve, be renamed John Henry Simms Reserve.

In 2008/09, Council allocated funds to undertake remediation work in a section of this Reserve. The new work includes various landscape features, including a footpath linking the existing coastal walkway from La Perouse to Bicentennial Park. Located along the walkway are three separate lookout points.

In response to Ms Simms request, Council prepared a report for the 24 June 2008 Ordinary Council Meeting, recommending that the main lookout be named John Henry Simms lookout, rather than the entire Reserve. It is envisaged that the lookout would reflect the character of the area, similar to the site dedicated as Timbery Reserve.

From this, the resolution recommended that Council consult key stakeholder groups, with a view to seek feedback, and Council is now inviting the La Perouse Precinct Committee to submit comments in relation to the matter.

Submissions directed to Council's Parks and Recreation Coordinator, Hayley Segedin, hayley.segedin@randwick.nsw.gov.au should include your name, address, contact phone number and email address.

All comments are to be received by Council, no later than COB Thursday 11 June 2009.

If you have any further queries regarding this matter, please do not hesitate to contact myself on 9399 0915.

Yours sincerely

Hayley Segedin
Cordinator Parks & Recreation - Acting

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