



Business Papers

Environment & Infrastructure Committee Meeting

Tuesday, 21 April 2015
12.00 pm

Notice of Meeting

To the Lord Mayor and Aldermen

You are invited to attend an Environment & Infrastructure Committee Meeting to be held in the Council Chambers, Level 1, Civic Centre, Harry Chan Avenue, Darwin, on Tuesday, 21 April 2015, commencing at 12.00 pm.

Diana Leeder

DIANA LEEDER
ACTING CHIEF EXECUTIVE OFFICER

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Removed from Public Notice Board: _____

OPEN SECTION

E&I/1

CITY OF DARWIN

ENVIRONMENT & INFRASTRUCTURE COMMITTEE

TUESDAY, 21 APRIL 2015

MEMBERS: Member S J Niblock (Chairman); The Right Worshipful, The Lord Mayor, Ms K M Fong Lim; Member H I Galton; Member R M Knox; Member R Want de Rowe.

OFFICERS: Chief Executive Officer, Mr B Dowd; General Manager Infrastructure, Mr L Cercarelli; Executive Manager, Mr M Blackburn; Manager Design, Planning and Projects, Mr D Lelekis; Acting Manager Infrastructure Maintenance, Mr C Bailey; Manager Technical Services, Ms N Douglas; Manager Climate Change; Ms S Gamble; Executive Assistant, Ms A Smit.

Enquiries and/or Apologies: Arweena Smit
E-mail: a.smit@darwin.nt.gov.au - PH: 89300 685
OR Phone Committee Room 1, for Late Apologies - PH: 89300 519

Committee's Responsibilities

- | | | |
|---------------------|-----------------------------------|--|
| * Asset Management | * Stormwater Drainage Maintenance | * Planning |
| * Building Services | * Street Cleaning | * Road Construction and Traffic Management |
| * Cemeteries | * Urban Forest Management | * Urban Enhancement |
| * Mosquito control | * Infrastructure Projects | * Climate Change and Environment |
| * Operations | * Infrastructure Maintenance | * Waste Management |
| * Parks & Reserves | * Design | * Outdoor Dining |
| * Pathways | | * Signage |
| * Road maintenance | | |
| * Sporting Areas | | |

THAT effective as of 16 April 2012 Council pursuant to Section 32 (2)(b) of the Local Government Act 2008 hereby delegates to the Environment & Infrastructure Committee the power to make recommendations to Council and decisions relating to Environment & Infrastructure matters within the approved budget.

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Environment & Infrastructure Committee Meeting – Tuesday, 21 April 2015

1. MEETING DECLARED OPEN

2. APOLOGIES AND LEAVE OF ABSENCE

Common No. 2695036

2.1 Apologies

2.2 Leave of Absence Granted

THAT it be noted Member H I Galton is an apology due to a Leave of Absence previously granted on 14 April 2015 for the period 14 to 22 April 2015.

DECISION NO.21\() (21/04/15)

3. ELECTRONIC MEETING ATTENDANCE

Common No. 2221528

3.1 Electronic Meeting Attendance Granted

THAT Council note that pursuant to Section 61 (4) of the Local Government Act and Decision No. 21\0009 – 16/04/12, the following member was granted permission for Electronic Meeting Attendance at this the Environment & Infrastructure Committee Meeting held on :

- Member H I Galton

DECISION NO.21\() (21/04/15)

4. DECLARATION OF INTEREST OF MEMBERS AND STAFF

OPEN SECTION

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Environment & Infrastructure Committee Meeting – Tuesday, 21 April 2015

5. CONFIDENTIAL ITEMS

Nil

6. WITHDRAWAL OF ITEMS FOR DISCUSSION

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COMMITTEE'S DECISION

THAT the Committee resolve under delegated authority that all Information Items and Officers Reports to the Environment & Infrastructure Committee Meeting held on Tuesday, 21 April 2015 be received and considered individually.

DECISION NO.21\() (21/04/15)

7. CONFIRMATION OF MINUTES PERTAINING TO THE PREVIOUS ENVIRONMENT & INFRASTRUCTURE COMMITTEE MEETING

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COMMITTEE'S DECISION

THAT the Committee resolve that the minutes of the previous Environment & Infrastructure Committee Meeting held on Tuesday, 24 March 2015, tabled by the Chairman, be received and confirmed as a true and correct record of the proceedings of that meeting.

DECISION NO.21\() (21/04/15)

8. BUSINESS ARISING FROM THE MINUTES PERTAINING TO THE PREVIOUS ENVIRONMENT & INFRASTRUCTURE COMMITTEE MEETING

8.1 Business Arising

ENCL: ENVIRONMENT & INFRASTRUCTURE
YES COMMITTEE/OPEN

AGENDA ITEM: 9.1

PUBLIC TOILET CAPITAL INSTALLATION AND REFURBISHMENT PLAN

REPORT No.: 14TS0240 NK:kb COMMON No.: 1977924

DATE: 21/04/2015

Presenter: Manager Design, Planning and Projects, Drosso Lelekis

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to inform Council of a proposed public toilet installation in Darwin CBD and a five (5) year refurbishment program for its existing public toilets, seek endorsement of the location of the new public toilet in Civic Park, provide the intended 5 year toilet upgrade program for information and seek endorsement of a three month trial closure of the public toilet at Pavonia Place Nightcliff.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

1. Collaborative, Inclusive and Connected Community

Outcome

1.2 Desirable places and open spaces for people

Key Strategies

1.2.2 Provide secure and clean public places and open spaces

KEY ISSUES

- The 2014/15 Municipal Plan identifies \$250,000 for the provision of a new public toilet within the CBD.
- The 2014/15 Capital Works program identifies \$204,000 for the upgrading and refurbishment of Council's public toilet facilities.

RECOMMENDATIONS

THAT it be a recommendation to Council:-

- A. THAT Report Number 14TS0240 NK:kb entitled Public Toilet Capital Installation and Refurbishment Plan, be received and noted.

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- B. THAT the location provided in **Attachment B**, Civic Park be endorsed as the approved location for the installation of a new public toilet.
- C. THAT Council note the proposed five year toilet upgrade program that it is subject to annual budget considerations.
- D. THAT Council endorse a three month trial of the night time closure of the public toilet at Nightcliff Village Shopping Centre, Pavonia Place, Nightcliff, as identified within Report Number 14TS0240 NK:kb entitled Public Toilet Capital Installation and Refurbishment Plan.
- E. Council note a further report will be presented to Council on the results of a planned survey on the effectiveness of the night time closure of the public toilet at Pavonia Place, Nightcliff.

BACKGROUND

The following decision was made at the Community & Cultural Services Committee Meeting held 22 April 2013.

THAT it be a recommendation to Council:-

- A. **THAT** Report Number 13C0037- AR:kl entitled Minutes of the Arts and Cultural Development Advisory Committee (ACDAC) Meeting 14 February 2013 and Civic Park Cultural Usage Plan, be received and noted.
- B. THAT Council endorse the Civic Park Cultural Usage Plan and Implementation Plan as a framework to guide the future development of Civic Park as a cultural venue.
 Decision No. 21\1010 (30/04/13) Carried: General Consent

At the 2nd Ordinary Council Meeting held 24th May 2014,

- A. THAT Report Number 14TC0021;AM:as entitled Public Toilet Policy Statement, be received and noted.
- B. THAT Council adopts the policy statement on Public Toilet Provision at **Attachment A** of Report Number 14TC0021AM:as entitled Public Toilet Policy Statement.
- C. THAT Council endorses the hierarchy of public toilet provision at **Attachment B** of Report Number 14TC0021AM:as entitled Public Toilet Policy Statement, to be used as a framework for the development of a Public Toilet Provision Plan.
- D. THAT a further report including an implementation plan for public toilets in the municipality, provisions of the Planning Act and Building Act and associated requirements, and access to private facilities be prepared for Council's consideration in November 2014.
 Decision No. 21\2204 (27/05/14) Carried

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This report responds to previous Council decisions on public toilet provision within the municipality.

DISCUSSION

The provision of public toilet facilities within the Darwin municipality has been the subject of previous reports to Council. The purpose of this report is to inform Council of the provisions and requirements of the Planning Act and Building Code of Australia for public amenities. This report also provides for information to Council a five year implementation plan for the upgrade of existing public toilet facilities, and provision of a new public toilet facility within the municipality. This report also provides comment on the consideration of access to private facilities for public use.

The Northern Territory Planning Act does not stipulate the requirements for the provision of toilet facilities within buildings. There is no requirement for public toilets as a standalone use, only in conjunction with other uses such as events, libraries, train stations *etc.* Depending on the location, a standalone toilet facility may require separate planning approval.

The Building Code of Australia controls the requirements for the provision of toilets within buildings. The type and number of toilets required is based on a number of factors including number of employees and patrons, type of business, class of building *etc.*

As identified in previous Report Number 14TC0021AM:as “The municipality is generally well served through the number of public toilets however, access hours and internal design and facilities provided require substantial review and improvements in order to achieve equitable access for people of all abilities.”

Policy 009 – Council Property – General (**Attachment A**) provides a statement on public toilet provision.

New Toilet Facility

The 2014/15 Municipal Plan provides one off capital funding (\$250,000) for the provision of a public toilet facility within Civic Park.

Previous reports presented to Council (Report Numbers 13C0037 AR:kl and 14TC0021 AM:as) identify Civic Park as a location where the provision of a public toilet facility is warranted.

The recommended location of the Civic Park Public Toilet has been determined in consultation with precinct stakeholders. It was identified during consultation that the preferred site for the stakeholders was behind Browns Mart. However, it was determined that this site would not meet Crime Prevention through Environmental Design (CPTED) principles. Consequently, the above mentioned site was not considered further. An alternative site was identified in consultation with precinct stakeholders and is shown at **Attachment B** to this report. This alternative site

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meets CPTED principles and provides for a facility that is easily accessible and highly visible.

When delivering the new facility, the design will be informed by the following criteria:

- CPTED principles,
- National Construction Code of Australia,
- Disability Discrimination Act 1992,
- Have appropriate, accessible directional and operational signage,
- Safety fixtures and fittings, including sharps disposal,
- Environmental sustainability,
- Parent and family friendly,
- Maintenance and life-cycle costs, and
- Site sensitivity.

It is considered important that the facility for this site be constructed in a way that delivers upon the design criteria while providing minimal impact on the amenity of the area. To achieve this, the external walls of the facility will be in keeping with the character of the surrounding area. This may be achieved through the application of free standing architectural embellishments, laser cut steel panels or screens enhanced through the application of images.

Investigation of contemporary toilet designs identified that there are a number of providers of facilities that meet with the design criteria contained within Council Policy Number 009 - Council Property – General. Selection of the provider of the facility will be determined through a public tender.

A balance between the following principles has been included in the design brief for the facility:

- Providing equitable access,
- Enabling CPTED principles,
- Preservation of the amenity and heritage nature of the precinct.

A tender for the design, supply and construction of the new toilet facility at Civic Park was advertised on Thursday 26 February 2015 and closed on Thursday 19 March 2015. Five submissions were received and are currently under assessment.

There has been previous comment in regard to the cross utilisation of existing facilities at the Bus Interchange located on Harry Chan Avenue. These toilets are currently available to the public while the interchange is manned between 6:45 am and 4:30pm Monday to Friday. These toilets are closed during the weekend.

Consultation with the Northern Territory Government's Public Transport Department identified that although the Department is not opposed to entering into a sharing arrangement, there are significant constraints that diminish the feasibility and attractiveness of providing a facility in this location including but not limited to:

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- Modifications to the existing building structure are required to allow public access to the toilet areas while isolating access to the rest of the building.
- The building is located away from the main usage area of Civic Park.
- Access to the building is across the traffic area of the interchange and is not intuitive.
- Direct links to the facility would need to be provided from within the park and this is not easily achieved.
- The facility at the bus interchange does not meet with CPTED principles when extended or 24 hour operation is considered.
- There is additional cost associated with security and cleaning of this facility when considering the extended or 24 hours of operation.

Staff will continue to identify and seek opportunities for the provision of public amenities and where the use of existing facilities operated by other entities can be cross utilised, resource opportunities can be maximised to benefit the community.

Refurbishment and Upgrading Program

The 2014 Municipal Plan provides capital funding (\$204,000) for the refurbishment of Council's public toilet facilities. Future funding to maintain Council's public amenity facilities in a sound structural condition is identified in the Long Term Financial Plan.

Future works associated with the refurbishment of toilet facilities will be subject to annual budget considerations.

Previous reports to Council identified that while the municipality is generally well served through the number of public amenity facilities, there are improvements that can be made to existing facilities in order to achieve equitable access for people of all abilities.

A recent audit undertaken of all City of Darwin building assets has informed a program for the maintenance and refurbishment of public toilet facilities. The program is within the Long Term Financial Plan from 2015/2016 as an ongoing annual allocation.

A proposed program to upgrade existing public amenity facilities to provide universal, inclusive and accessible facilities over a five year period at an estimated cost of \$230,000 per annum, subject to annual budget deliberations, review of condition and presentation is provided in the table below.

2015/16	2016/17	2017/18	2018/19	2019/20
Gardens Oval	Jingili Oval	The Ampitheatre	Wagaman Oval	Chrisp Street Oval
Kahlin Oval	Moil Oval	Lake Alexander	Dinah Beach Oval	
	Nakara Oval		Nightcliff Oval	

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The criteria used to determine the priority in the 5 year plan is based on:

- Location and popular public demand for quality facilities by the public attending outdoor functions, and
- Hierarchy classification of sporting groups at various ovals.
- Existing condition of facility.

When upgrading existing or providing new toilet facilities, consideration of the full lifecycle costs associated with the facility needs to be undertaken to ensure that facilities provided are sustainable and meet with the environmental expectations and goals of the Councils Strategic Plan.

Current refurbishment programmes deliver upon these goals through the assessment of existing fittings and where efficiencies can be gained, consideration is given to the use of energy saving electrical fittings and water consumption reducing plumbing fittings.

Public Toilet Cost Comparison

Data on water and energy consumption for individual types of public toilet facilities is not currently collected and a comparison between an automated toilet and a traditional toilet block is unable to be provided. Toilet blocks within the municipality's open space are not separately metered and accurate information relating to energy and water consumption of individual facilities is not available. Collection of this type of data could be considered in future programmes.

A statement of water use was provided by the supplier of Exeloo's and is included for information (**Attachment C**). This shows the consumption of a single pan automated, self-cleaning Exeloo.

Due to the range of different public toilet facilities provided across the municipality, a maintenance cost comparison between an automated toilet and a traditional toilet block is unable to be provided. The data available can be interpreted in different ways and the following variables distort the figures:

- Differing hours of operation,
- Overall number of cubicles varies,
- Usage data is not available for traditional toilet blocks,
- Cleaning and maintenance requirements are not comparable.

Nightcliff Shopping Centre, Pavonia Way, Public Toilet

Nightcliff Village Shopping Centre attracts a high level of patronage by both visitors and residents to the area, with popular markets, restaurants, financial institutions, medical services and other retail opportunities providing attraction to the area.

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Complaints have been received regarding antisocial behaviour occurring within the public toilet at the Nightcliff Village Shopping Centre. The toilet is currently open 24 hours, seven days per week and has operated as such for a number of years.

This toilet is the only 24 hour public facility that services the immediate area, the nearest Council operated 24 hour toilet is 1.2 kilometres away in Sunset Park. A map identifying the location of public toilets within Darwin is at **Attachment D**.

A reduction in opening hours may have an impact on the antisocial behaviour. It is recommended that a trial three month night time closure be implemented.

It is envisaged that the closure hours would be identified in consultation with stakeholders including property owners, Traders, Northern Territory Police and Safer Cities Project Officers.

Communication of the closure will be provided to residents in the immediate area with signage erected on the toilet advising of the hours of operation and availability of alternative toilet facilities within the area.

While the closure may reduce antisocial behaviour occurring in the toilet it may have the effect of moving the behaviour into the surrounding area.

It is recommended that at the completion of the three month night time trial closure of the public toilet at Nightcliff Village Shopping Centre, a survey be undertaken to ascertain the effectiveness of the trial closure and a further report on the feedback received be presented to Council.

CONSULTATION PROCESS

The level and methods employed to undertake community consultation on the projects identified within this report will be tailored to suit the individual projects and will be in accordance with Policy 025 – Community Consultation.

Individual communication plans for each project will be developed.

In preparing this report, the following City of Darwin officers were consulted:

- Manager Infrastructure Maintenance
- Manager Environment and Climate Change
- Manager Technical Services
- Team Coordinator Building Services
- Safer City Program Coordinator
- Senior Community Engagement Officer

In preparing this report, the following External Parties were consulted:

- Department of Transport

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POLICY IMPLICATIONS

Policy 009 – Council Property – General

Policy 025 – Community Consultation

BUDGET AND RESOURCE IMPLICATIONS

The 2014 Municipal Plan provides two streams of funding for the provision and refurbishment of public toilets within the municipality. These are:

- \$250,000 for a new public toilet facility within the CBD,
- \$204,000 for the refurbishment and upgrading of existing facilities.

Council's Long Term Capital Works Plan (LTCWP) provides one off funding, of \$250,000 in the 2014/15 financial year, for a new toilet facility in the CBD. There are currently no further new public toilet projects identified within the LTCWP.

It is estimated that an additional \$31,000 per annum will be required in operational budgets to ensure that the new public toilet facility at Civic Park is maintained to a high standard of operation, hygiene and cleanliness.

It is estimated that \$1.15 Million will be required over five (5) years (\$230,000 per annum) to deliver the proposed upgrade program. This funding is included in the LTCWP.

The three month trial closure of the toilet at Pavonia Place will cost \$140 per month for the toilets to be locked. There is potential for additional cleaning costs associated with the trial.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Facilities constructed will comply with relevant building codes and regulations.

ENVIRONMENTAL IMPLICATIONS

Facilities constructed will have fittings and fixtures that maximise efficiency in terms of sustainable outcomes and minimising environmental impact.

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COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

DROSSO LELEKIS
MANAGER DESIGN, PLANNING
AND PROJECTS

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

For enquiries, please contact Drosso Lelekis on 89300414 or email:
d.lelekis@darwin.nt.gov.au.

Attachments:

- Attachment A:** Policy No. 009 – Council Property - General
- Attachment B:** Proposed Location – New Public Toilet
- Attachment C:** Exeloo Water Use
- Attachment D:** Location of Public Toilets

Title: Council Property - General

Policy No: 009

Adopted By: Council

Next Review Date: 23/02/2014

Responsibility: CEO

Document Number: 2117993

Version	Decision Number	Adoption Date	History
1	20\2501	23/02/2010	Adopted
2	21\2204	27/05/2014	Adopted inclusion of policy statement for Public Toilets

1 Policy Summary

To establish a framework for the administration of property (including public places) under the Council's care, control and management:

- Fencing Contributions By Council
- Hawkers
- Mindil Beach Carnival Area
- Mobile Food Stalls
- Monuments
- Native Title
- Public Meetings In The Central Business District
- Public Places Activities
- Public Toilet Provision
- Smoke free Venues
- Street Parties
- The Mall
- Vandalism - Reward for Information

2 Policy Objectives

To provide guidance to the public and staff in respect to the management of property under the care, control and management of the Council.

3 Background

City of Darwin is responsible for the care, control and management of property within the City ranging from roads to parks and other public places through to council owned buildings.

4 Policy Statement

Fencing Contributions By Council

In all cases where a notice of intention to construct a fence adjoining Council owned land is served on Council -

If the fence is not for public purposes and subject to all provisions of the Northern Territory Fences Act being met, Council will meet half the cost of constructing a "sufficient" fence, as defined under the Act.

If the fence is for public purposes and in particular a park or reserve (but not a road, laneway or walkway), Council will meet half the cost of a 'standard' fence (800mm high ring lock pig wire fence supported by star pickets), or a 1.2m high chainmesh with pipe support.

If the fence abuts a road, laneway or walkway, Council will NOT contribute towards any fencing cost.

In assessing what constitutes a sufficient fence in (a) above the requirements of the Northern Territory Fences Act will apply and that includes consideration of the nature of the area and existing fences in the area.

In assessing the contribution to be made by Council, a minimum of three (3) quotes will be obtained from fencing contractors in respect of either a sufficient (as in (a)), or a standard (as in (b)) fence as necessary.

The lowest quote will be the basis for the contribution to be made by Council.

If any notice is served on Council which, for some reason, the notice of proposals contained therein does not comply with the Northern Territory Fences Act, the proponent will be advised that Council is not prepared or required to contribute towards the cost of the proposed fence.

Where the adjoining owner seeks a contribution towards adjoining fencing and is a community based organisation and of a charitable or non-profit nature such requests be referred to Council for specific consideration.

Hawkers

Licensed hawkers may operate according to the Hawkers Act but not within a radius of 300 metres of a business of a like nature during the trading hours of such a business.

Mindil Beach Carnival Area

Council will not agree to one off hire of the Mindil Beach carnival area on Thursday nights. Hire of the site by circuses will only be agreed to after consideration of alternative venues and in consultation with Council, the hirer and the markets.

Firm conditions of hire will be developed for circuses which take into account minimising the affect on the leased area and the parking requirements on Thursday nights.

Mobile Food Stalls

Council will only permit the operation of mobile food stalls subject to the "Guidelines for Establishment and Operation of Mobile Food Stalls".

A limited number of mobile food stall permits will be available at the following locations:

Nightcliff Boat Ramp	2
Nightcliff Swimming Pool Car Parks	2 in each
Opposite number 300 Casuarina Drive	1
Opposite Chapman Road	1
East Point Reserve (Car Park)	1
Dudley Point	1
Vesteys Beach	1
Mindil Beach	1

Hours of operation will be late afternoon and evening of Saturday and Sunday only, with the exception of East Point at which trading on public holidays is permitted.

Monuments

Council will seek to ensure the appropriate maintenance of monuments, memorials and other items of historical significance on Council controlled land.

- There will be an annual maintenance review of all monuments.
- A register of monuments will be maintained.

Native Title

As a matter of policy, Council will register its interest in any Native Title applications over land within the municipality.

Public Meetings In The Central Business District

To cater for public meetings:

- The Civic Square Gardens off Smith Street is the designated area where public meetings may be held in the Central Business District.
- Organisers will be responsible for the removal of all or any litter generated by public meetings.

Public Places Activities

The conduct of stalls, business concessions or other regular organised activities in public places is subject to a permit being issued by Council.

Permit fees are set by Council either annually in the Schedule of Fees and Charges or as a result of specific consideration of a particular activity.

Public Toilet Provision

Public toilets are necessary elements in creating inclusive, accessible and sustainable cities. The provision of public toilets enables people of all ages, abilities and social situations to participate equitably in public places. Public toilet provision also has important implications for public health and safety, supports tourism and addresses acute quality of life issues.

The City of Darwin will ensure;

- Public toilet provision is demand driven;
- Public toilets provide universal access;
- Public toilets are well designed, maintained and safe; and
- Public toilets are sustainable and minimise environmental impacts.

Public Toilet Design Criteria

Universal design principles will be applied to all facilities. Public facilities will be site specific and informed by need. Appropriate community and stakeholder consultation will be conducted in accordance with Council policy. The design of public toilets will be informed by and include, but not limited to the following:

- CPTED principles;
- National Construction Code of Australia;
- Disability Discrimination Act 1992;
- Appropriate, accessible directional and operational signage;
- Safety fixtures and fittings, including sharps dispensers;
- Environmental sustainability;
- Parent and Family Friendly;
- Maintenance and life-cycle costs; and
- Site sensitivity.

Quality and Service Levels

All public toilets will be maintained to a high level of hygiene and cleanliness.

Smoke Free Venues

City of Darwin supports smoke-free areas in accordance with “SmokeFree NT” which refers to the laws that prohibit smoking in public places.

The following areas to be smoke-free:

Civic Centre

Smoking is banned in the Civic Centre building and in all other air confined workplace buildings.

Council Vehicles

Smoking is banned in all Council plant and vehicles.

Gardens Amphitheatre

The Gardens Amphitheatre was established as a smoke free venue effective 1 January, 2008.

Playgrounds

Council Owned Playgrounds are smoke-free areas as at 1 July 2008. The smoke-free zone is within 10 metres of Council Playgrounds. Clear signage will be displayed including the international no-smoking symbol.

Street Parties

The following will apply in respect of street parties:

- The issue of a permit for a street party associated with licensed premises will only be considered in conjunction with the concluding festivities for the Festival of Darwin or New Year's Eve celebrations and/or other significant community celebrations.
- Street parties in association with licensed premises are limited to the Central Business District and only one permit will be granted on any one occasion.
- Council does not encourage or promote street parties in association with licensed premises and promoters are encouraged to seek alternative venues suitable for this type of event.
- Applications for street parties will only be considered following a survey of the immediate area, conducted by the applicant, and after referral to relevant authorities. If legitimate concerns are raised by another authority during consideration of an application then Council will refuse that application.
- Breaches of conditions of a permit may result in no further permits being issued for that promoter, agent or venue.

- Security deposits and all other relevant fees are paid in advance prior to the permit being issued.
- Advertising of the road closure of such an event will be at the direct cost to the applicant whether the advertising is undertaken by Council or the applicant. The advertisement must be a Public Notice in the NT News and be approved by Council beforehand.
- Any commercial application for a road closure where alcohol is not to be sold or consumed, be considered on its merits and appropriate conditions applied.
- Any application for a residential street party will be considered on its merits and appropriate conditions apply.
- Where Council has actively given support to the event such as in kind assistance ie waiver of fees, that appropriate recognition be given to the role of City of Darwin in such celebrations.
- That prior to a permit being issued, evidence of appropriate public liability insurance in relation to the site covered by the permit, be sighted.

The Mall

Busking

Permits for busking in the Mall pursuant to City of Darwin By Law No. 109 may be obtained for a fee in accordance with Council's Fees and Charges. Permits will be subject to conditions which must be adhered to.

Displays, Promotions and Performances.

Persons, private companies or organisations may obtain permits for displays, promotions, performances and fund raising in the Mall pursuant to City of Darwin By Law No. 109. A fee in accordance with Council's Schedule of Fees and Charges will be applicable.

Markets And Late Night Trading

Persons, private companies or organisations may obtain permits for markets at times to be agreed or late night trading in the Mall between the hours of 10.00 pm and 6.00 am up to seven days per week pursuant to City of Darwin By Law No. 109. A fee will be charged in accordance with Council's Schedule of Fees and Charges. Permits will be subject to conditions which must be adhered to and public risk insurance will be required.

Traders Permits

Mall Traders may obtain permits to trade in the Mall pursuant to City of Darwin By Law No. 109. A fee in accordance with Council's Schedule of Fees and Charges will be applicable. All fees are payable in advance.

Mall traders be permitted to set up tables and racks of goods for sale or display in the Mall as ancillary to their business in accordance with the following guidelines:

- Mall traders are defined as *shops with direct Mall frontage or shops in arcades with direct Mall frontage.*
- Arcade traders are defined as *those traders whose store is situated in an arcade adjacent to the Mall.*
- A trader must have occupied the premises for six months, or, have a registered lease for the premises prior to seeking permission to trade out.

Out-trading in The Mall is to be ancillary to the main leased premises which will be demonstrated by the following:

- evidence of a lease premises in the Mall or one of its arcades.
- the leased premises must be the principal source of business and open for trade during normal business hours.
- the leased premises must be staffed at all times during normal business hours.
- out-trading in the Mall must form an ancillary component of The Mall trader's main business.
- goods offered for sale must be of a type normally available for purchase within the shop which is conducting the stall.

All displays are to be inspected by an authorised Council Officer to ascertain that they do not interrupt pedestrian traffic flows and that they are in an area allotted by an authorised Council Officer.

Traders with Mall frontage may trade in front of their store subject to these guidelines, however, where fixed obstacles such as planter boxes or electrical installations would cause a display to disrupt traffic flow an authorised Council Officer may allocate space in the centre of the Mall. Traders within adjacent arcades may be allocated space equivalent to the arcade frontage by an authorised Council Officer adjacent to the arcade frontage, in such a manner as not to disrupt traffic flow.

Stalls must be aesthetically pleasing and set up on display units approved by an authorised Council Officer provided that:

- Only 1 x trestle not exceeding 3.0m by 0.75m & 1 x clothes rack not exceeding 1m square or diameter is used in each display; or
- 3 x clothes racks each not exceeding 1m square or diameter.

Permits will be issued on the understanding that the trader is solely responsible for any insurance claims whatsoever in relation to the stall and its contents; A copy of a current Public Liability Insurance Policy is to be lodged with applications.

If food is to be offered for sale the appropriate Health Department approvals must be submitted to Council before a permit will be issued.

An Authorised Council Officer will be responsible to determine that all goods sold on stalls are the type normally sold within the shop operating the stall.

No soliciting of custom is to be undertaken by stall holders or assistants in The Mall.

Mall traders will not be permitted to sublet stalls outside their premises to third parties.

Vehicular Access

Vehicular access to the Mall is limited to ensure a safe and attractive pedestrian environment.

Vandalism - Reward for Information

In case of damage to Council property by vandalism, where information is supplied which results in the apprehension and successful prosecution of the guilty person, the Chief Executive Officer may, at his/her absolute discretion, pay a reward of up to \$1,000 to the person supplying that information.

ATTACHMENT B

Proposed Location - New Public Toilet



Exeloo Water use Fully Automated Units

	Uses/Day	Frequency Floor/Pan 3%	Nozzles	Volume Litres Per Minute	Date	Sub Total	Duration minutes	15/11/2014 Total Litres per Day
Floor wash	50	1.5	5	15		112.50	0.5	56.25
Flushing	50			6				300.00
Total Daily								356.25
Floor wash	100	3	5	15		225.00	0.5	112.50
Flushing	100			6				600.00
Total Daily								712.50
Floor wash	150	4.5	5	15		337.50	0.5	168.75
Flushing	150			6				900.00
Total Daily								1,068.75

Location of Public Toilets in Darwin

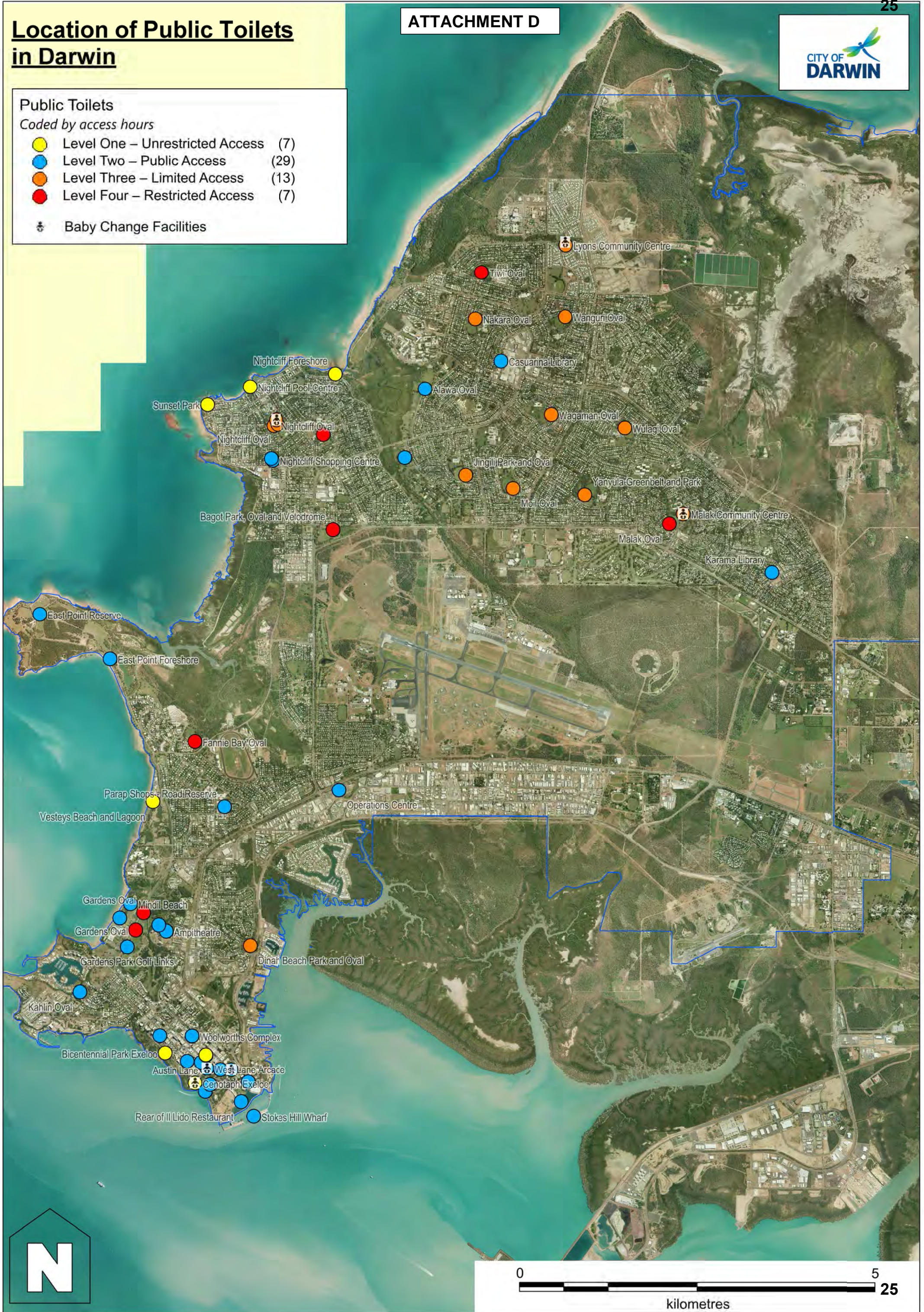
ATTACHMENT D



Public Toilets
Coded by access hours

- Level One – Unrestricted Access (7)
- Level Two – Public Access (29)
- Level Three – Limited Access (13)
- Level Four – Restricted Access (7)

Baby Change Facilities



ENCL: ENVIRONMENT & INFRASTRUCTURE
NO COMMITTEE/OPEN

AGENDA ITEM: 9.2

BLACK SPOT FUNDING - RYLAND ROAD, NIGHTCLIFF

REPORT No.: 15TS0065 PC:jg

COMMON No.: 2839189

DATE: 21/04/2015

Presenter: Manager Design Planning & Projects, Drosso Lelekis

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to provide Council with an update on the status of City of Darwin's 2015/2016 Black Spot submission.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

2 Vibrant, Flexible and Tropical Lifestyle

Outcome

2.1 Improved access and connectivity

Key Strategies

2.1.3 Manage the road network to meet community needs

KEY ISSUES

- The City of Darwin submitted three projects for the 2015/2016 Black Spot Program:
 - Daly Street and Smith Street Intersection upgrade and signalisation.
 - Ryland Road and Clarke Crescent Intersection, modification.
 - Ryland Road and Rossiter Street Intersection, modification.
- In December 2015 correspondence from the Department of Transport advised that the City of Darwin's Black Spot submission had been considered and that full funding approval for the Smith Street/Daly Street project was recommended but only partial funding for the two Ryland Road projects was being offered.
- Further correspondence received on 1 April 2015 confirmed approval of funding for the Daly Street/Smith Street project.
- The Northern Territory Government's Department of Transport has requested a response from the City of Darwin on acceptance or otherwise of their partial funding offer by May 2015.

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- In order to determine a funding arrangement for these important projects this report recommends acceptance of the partial funding offer put forwarded by the Department.

RECOMMENDATIONS

THAT it be a recommendation to Council:-

- A. THAT Report Number 15TS0065 PC:jg entitled Black Spot Funding - Ryland Road, Nightcliff, be received and noted.
- B. THAT Council accept the Black Spot funding offer as detailed in Report Number 15TS0020 DL:jg for the Ryland Road / Clarke Crescent and Ryland Road / Rossiter Street projects from the NT Black Spot Program Consultative Panel and that these priority projects be funded by Council from the 2015/2016 Capital Works, Local Area Traffic Management allocation.

BACKGROUND

The City of Darwin was invited to submit nominations for the 2015/2016 Black Spot Program by the Northern Territory Government's Department of Transport.

In October 2014, City of Darwin forwarded three Black Spot nominations to the NT Black Spot Consultative Panel for consideration.

- Daly Street and Smith Street Intersection upgrade and signalisation. Estimated cost \$830,277.
- Ryland Road and Clarke Crescent Intersection, modification to this four way intersection via the construction of a small round-a-bout. Estimated Cost \$125,408.
- Ryland Road and Rossiter Street Intersection, modification to this four way intersection via the construction of central islands and a raised pavement. Estimated Cost \$70,380.

DISCUSSION

In response to the City of Darwin's submission the Department of Transport has responded offering the following funding for each of the nominated projects.

Daly Street/Smith Street Intersection

Funding offer of \$550,277 which is the total amount requested. The estimated cost for this project is \$830,277 of which City of Darwin will contribute \$280,000.

Ryland Road/Clarke Crescent Intersection

Funding offer of \$75,000 which is only 60% of the requested amount of \$125,408.

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 SUBJECT: BLACK SPOT FUNDING - RYLAND ROAD, NIGHTCLIFF

Ryland Road/Rossiter Street Intersection

Funding offer of \$50,000 which is only 71% of the requested amount of \$70,380.

The Black Spot Program normally provides 100% of funding for successful projects that meet the eligible nomination criteria. However, despite all three of City of Darwin's nominated projects meeting the required criteria only partial funding has been offered for the two Ryland Road projects.

In response to this partial funding offer, the City of Darwin wrote to the Department of Transport in January 2015, accepting the funding offer of \$550,277 for the Daly Street and Smith Street intersection and delaying acceptance of the partial funding offer for the two Ryland Road projects pending a further Council resolution.

Formal approval from the Federal Government has now been received for the Daly Street/Smith Street project with funding for the two remaining Ryland Road projects still unresolved.

Given the current status, the options available to Council for the two Ryland Road projects are:

1. Accept the Government's partial funding offer and secure the remaining funds required to complete these projects via Councils 2015/2016 budget process, or
2. Reject the partial funding offer put forward by the Government and delay construction of these projects until an alternative funding source can be identified. This could be via Councils future budgetary processes or a future Black Spot submission.

CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Design Team Leader

POLICY IMPLICATIONS

No policy implications identified

BUDGET AND RESOURCE IMPLICATIONS

The three nominated projects have a total estimated construction cost of \$1,026,065 made up of:

Daly Street/Smith Street Intersection – Estimated Cost \$830,277;
 Ryland Road/Clarke Crescent Intersection – Estimated Cost \$125,408; and
 Ryland Road/Rossiter Street Intersection – Estimated Cost \$ 70,380.

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The cost for delivery of the Daly Street/Smith Street intersection upgrade will be covered by the approved Black Spot Grant funding of \$550,277 and Council's 2014/2015 works program allocation of \$280,000.

Should Council accept the NT Government's offer of partial funding for the Ryland Road projects an additional amount of \$70,788 (\$50,408 for Ryland/Clarke and \$20,380 for Ryland/Rossiter) would be required.

This funding could be obtained through Council's future budgetary processes or a future Black Spot submission.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

There is a potential risk that delaying the construction of the Ryland Road and Clarke Crescent and Ryland Road and Rossiter Street intersection projects may compromise road safety at these sites.

ENVIRONMENTAL IMPLICATIONS

Not assessed.

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

DROSSO LELEKIS
MANAGER, DESIGN PLANNING
AND PROJECTS

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

For enquiries, please contact Cindy Robson on 89300528 or email:
d.lelekis@darwin.nt.gov.au.

ENCL: ENVIRONMENT & INFRASTRUCTURE
YES COMMITTEE/OPEN

AGENDA ITEM: 9.3

WANGURI TERRACE - TRAFFIC CALMING AND ANALYSIS UPDATE

REPORT No.: 15TS0053 DL:jg

COMMON No.: 1668356

DATE: 21/04/2015

Presenter: Manager Design Planning & Projects, Drosso Lelekis

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to provide Council with an update on the Wanguri Terrace traffic review undertaken since the completion of the Lee Point Road Upgrade and the School Zone LED Flashing Light Project.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

2 Vibrant, Flexible and Tropical Lifestyle

Outcome

2.1 Improved access and connectivity

Key Strategies

2.1.3 Manage the road network to meet community needs

KEY ISSUES

- In November 2012, Council approved the Wanguri Terrace traffic calming measures presented in report number 12TS0196 subject to funding.
- The project was not funded and did not proceed.
- In November 2013, Council resolved undertake a review of Wanguri Terrace traffic after the completion of the Lee Point Road Upgrade and School Zone LED Flashing Lights projects, prior to further consideration of implementing traffic calming measures along Wanguri Terrace.
- The School Zone LED Flashing Lights project was completed in July 2014 and the Lee Point Road Upgrade project was completed in October 2014.
- The School Zone LED Flashing Lights and Lee Point Road Upgrade projects had the potential to alter traffic behaviour along Wanguri Terrace.
- The Wanguri Terrace traffic review was undertaken in February 2015.
- The traffic review concluded that there are insufficient warrants in terms of traffic volumes, accidents and vehicle speeds for the implementation of additional traffic

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calming measures along Wanguri Terrace to provide a cost benefit to the community.

- The Wanguri Traffic Action Group has been continually lobbying Council for the implementation of traffic calming measures along Wanguri Terrace.
- It is recommended that Council not implement further traffic calming measures along Wanguri Terrace.

RECOMMENDATIONS

THAT it be a recommendation to Council:-

- A. THAT Report Number 15TS0053 DL:jg entitled Wanguri Terrace - Traffic Calming And Analysis Update, be received and noted.
- B. THAT Council not implement further traffic calming measures along Wanguri Terrace in view of the findings of 2015 the traffic review concluding that there are insufficient warrants in relation to traffic volumes, accidents and vehicle speeds and that this matter be concluded.
- C. THAT Council write to the Northern Territory Police requesting that they undertake increased periodic speed enforcement along Wanguri Terrace in relation to any speed variance above the speed limit.
- D. THAT Council write to the relevant stakeholders, including residents, property owners, schools and the Wanguri Traffic Action Group advising that no additional traffic calming measures will be implemented along Wanguri Terrace.

BACKGROUND

Wanguri Terrace is a major road within the suburb of Wanguri, linking Lee Point Road with Tambling Terrace, servicing a local shopping centre, public school and residences along its route. The northern section of Wanguri Terrace between Tambling Terrace and Kailis Street, forms part of Darwin Bus Service Route 2.

Wanguri Terrace is classified as a Secondary Collector road and has a 10.8m wide sealed and kerbed single lane two way carriageway with painted edge lines and a centreline to delineate a 3.5m lane in each direction.

The current speed limit along this road is the default urban speed limit of 50km/hr. However, it should be noted that this road was originally designed for a speed of 60km/hr, which is typical for a road of this function.

Following a history of concerns raised by the Wanguri Traffic Action Group regarding speeding in the suburb of Wanguri, several traffic investigations have been undertaken.

As a result of the initial investigation, undertaken prior to the School Zone LED Flashing and Lee Point Road upgrade projects, concept designs for traffic calming

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measures were produced for Wanguri Terrace and were the subject of a community engagement process.

The proposed traffic calming measures involved the installation of roundabouts at the intersections of Canaris Street and Perez Street and kerb build outs along both sides of Wanguri Terrace.

Following an assessment of the outcomes of the community consultation process, Council resolved to refer the installation of the proposed traffic calming measures to the 2013/2014 Budget process for consideration. However, the works were not funded in the 2013/2014 budget and did not proceed.

In 2013/2014 Council commenced a trial of the School Zone LED Flashing Lights in Wanguri Terrace and the Lee Point Road Upgrade. These projects were completed in July 2014 and October 2014 respectively.

As these projects were likely to alter traffic behaviour along Wanguri Terrace, Council decided that prior to the implementation of any traffic calming measures, a review of Wanguri Terrace traffic would be undertaken following the completion of the Lee Point Road upgrade and School Zone LED Flashing Light Project, to determine any changes in behaviours and to inform future actions and priorities.

This report provides the details of this traffic review and recommendations as to what actions should be undertaken.

Prior Council Decision:

At the Environment and Infrastructure Committee Meeting on 19 November 2013, Council resolved as follows:

Wanguri Terrace Petition

Report No. 13TS0243 DL:vl (19/11/13) Common No. 1668356

- A. *THAT Report Number 13TS0243 DL:vl entitled Wanguri Terrace Petition, be received and noted.*
- B. *THAT prior to implementation of traffic calming measures on Wanguri Terrace, Wanguri, Council undertake a review of Wanguri Terrace traffic in 2014 following the completion of the Lee Point Road Upgrade and School Zone LED Flashing Light Project, to determine any changes in behaviours and to inform future actions and priorities as identified in Report Number 13TS0243 DL:vl.*
- C. *THAT Council write to the Wanguri Traffic Petition organisers advising them of this decision, thanking them for their petition and of the forthcoming trial of LED flashing light panels in the Wanguri Terrace school zone.*
- D. *THAT a report be provided to Council on the outcomes of the Wanguri Terrace traffic review as identified in Report Number 13TS0243 DL:vl including recommended actions, timeframes, costs and priorities.*

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DECISION NO.21\1637

(26/11/13)

General Consent

DISCUSSION

With the completion of the School Zone LED Flashing Light Project in July 2014 and the Lee Point Road Upgrade in September 2014, a review of Wanguri Terrace traffic was undertaken in February 2015 in accordance with the above Council resolution.

This review was undertaken to determine what, if any change in terms of traffic behaviour has occurred since the completion of the above mentioned works and involved an analysis of the three key indicators or warrants used to determine the safety record of a road.

These three indicators were vehicle speeds, traffic volumes and accident data and the results are summarised below.

Vehicle Speeds

Note that the 85th percentile speed is the speed at which 85 percent of vehicles travel at or below and is used for design and assessment related purposes.

It is acknowledged that a percentage of vehicles travel at speeds greater than and less than the 85th percentile speed. However, these are associated with the minority of vehicles traveling along the road and are not used for assessment and design related purposes.

Tables 1 to 3 below summarise the speed data collected along Wanguri Terrace during and after school times.

Table 1

85th Percentile Speeds during School Zone Times 7am to 5pm (Speed Limit 40km/hr)

Location	December 2009	May 2011	November 2013	June 2014	February 2015
Lot 6685 - outside school zone	-		-	-	-
Lot 6618	47.2		-	-	-
Lot 6400	-		-	-	43.9
Lot 6403	-	49.7	45.7	45.7	45
Lot 6275 - outside school zone	-		-	-	-

The vehicle speeds measured during school times, while varying slightly from 2009 to the present, have remained relatively steady in this period of time.

The 85th percentile speeds measured during school times all exceed the 40km/hr road speed limit. The average 85th percentile speed in December 2009 was

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47.2km/hr compared to 44.5km/hr in February 2015, a decrease of approximately 2.7 km/hr. This is likely due to the implementation of the flashing lights installed along Wanguri Terrace.

Table 2

85th Percentile Speeds capturing the peak time slots during School Zone Times (Speed Limit 40km/hr)

Location	November 2013				February 2015			
	7am-9am	9am-2pm	2pm-3pm	3pm-5pm	7am-9am	9am-2pm	2pm-3pm	3pm-5pm
Lot 6403	43.9	47.2	42.8	-	40.7	46.1	40	44.6

The 85th percentile speeds recorded during the morning and afternoon peaks are considerably lower than those recorded outside of these times, indicating that most motorists are more conscious of the 40km/hr school zone speed limit during these important drop-off and pick-up times. This is likely due to the implementation of the flashing lights installed along Wanguri Terrace.

Table 3

85th Percentile Speeds after School Zone Times 5pm to 7am (Speed Limit 50km/hr)

Location	December 2009	May 2011	November 2013	June 2014	February 2015
Lot 6685	59.8		-	-	55.8
Lot 6618	-		52.6	53.3	-
Lot 6400	58		-	-	55.8
Lot 6603	-	59	52.9	54.7	55.1
Lot 6275	59.4		-	-	57.2

The vehicle speeds measured outside of school times while varying slightly from 2009 to present, have remained relatively steady in this period of time.

The 85th percentile speeds measured outside of school times exceed the 50km/hr road speed limit. However, the average 85th percentile speed in December 2009 was 59km/hr compared to 56km/hr in February 2015, which represents a decrease in speed of 3 km/hr subsequent to the completion of the Lee Point Road Upgrade and School Zone LED Flashing Lights projects.

Traffic Volumes

Table 4 below summarises the traffic volumes measured along Wanguri Terrace at different locations.

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Table 4: Wanguri Terrace Traffic Volumes (average vehicles per day)

Location	December 2009	May 2011	November 2013	February 2015
Lot 6685	743		-	1076
Lot 6618	-		2293	1648
Lot 6400	1550		-	1947
Lot 6403	-	1538	2494	2180
Lot 6275	811		-	770

The average daily traffic volumes measured over this period have also fluctuated with the volumes increasing slightly at some locations and reducing at others.

The average traffic volume recorded in December 2009 was 1,041 vehicles per day compared to 1,264 in February 2015, an increase of 223 vehicles per day. The measured traffic volumes are not considered excessive and are within the capacity of the road.

Accident Data

Five accidents have been recorded along Wanguri Terrace since January 2009. The details of these accidents are listed below.

Date/Time	Type	Location
22/12/10; 7:30pm Wed.	hit parked car while reversing	150m south Canaris St
3/3/12; 6:30am Sat.	hit parked car	97 Wanguri Terrace
16/12/12; 2:30pm Tues.	rear end prior to intersection	100m north Lyons St
21/6/14; 4:45pm Sat.	hit parked car – alcohol related	intersection of Perez St.
19/12/15; 11:00pm Fri.	hit parked car	200m west of Lee Pt Rd.

Four of the five accidents occurred during parking manoeuvres, with one of these alcohol related and the fifth accident was a rear end collision involving vehicles approaching an intersection.

Two of the recorded accidents occurred on a Saturday and one late on a Friday night. One injury was reported from these five accidents but did not require medical treatment.

Latest correspondence from Wanguri Traffic Action Group

The Wanguri Traffic Action Group has written to the Lord Mayor requesting that Council complete the Wanguri Terrace traffic review as a matter of urgency and make a decision as to whether or not to install traffic calming measures along Wanguri Terrace (**Attachment A**).

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In response, the Wanguri Traffic Action Group was advised that the matter would be put to the Environment and Infrastructure Committee Meeting on the 21 April 2015. Furthermore, it was advised that the Council papers would be available through the City of Darwin web site prior to the meeting and that the Wanguri Traffic Action Group will be informed in writing of the outcome of this matter (**Attachment B**).

Summary:

The traffic review undertaken considered the three indicators: traffic volumes; accidents; and vehicles speeds.

The 85th percentile speeds measured during and outside of school times marginally exceed the speed limits. However, it is not unusual for these speeds to be slightly higher than the speed limit, with enforcement measures usually applying when individual speeds are around 10% higher than the road speed limit.

These measured speeds alone would not warrant the implementation of any additional traffic calming measures and would best be addressed by enforcement.

The traffic volumes recorded along Wanguri Terrace are considered low when compared to those expected for roads of a similar type and function. Wanguri Terrace is classified as a Secondary Collector road under City of Darwin's Road Classification Plan, expected to carry up to 7,000 vehicles per day which is considerably higher than the daily volumes recorded along Wanguri Terrace.

In addition to the relatively low traffic volumes, the number and type of accidents that have occurred along Wanguri Terrace in the past six years indicates that this road has a relatively good safety record and is functioning as intended.

Of the five accidents recorded in this period, the data indicates that there were no crashes reported where high speed is likely to have been a factor. Four of the five accidents occurred during parking manoeuvres, with one of these alcohol related and the fifth accident being a rear end collision involving vehicles approaching an approaching an intersection.

Based on the results of this traffic review, it is considered that there are insufficient warrants in terms of traffic volumes, accidents and vehicle speeds for the implementation of any additional traffic calming measures along Wanguri Terrace. It is therefore recommended that no further traffic calming measures be implemented along Wanguri Terrace.

It is also recommended that Council write to the Northern Territory Police advising them of the findings of the traffic review and requesting their assistance in undertaking increased periodic speed enforcement and to the relevant stakeholders advising that further traffic calming measures will not be implemented along Wanguri Terrace.

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CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Design Team Leader

Any implementation of further traffic calming measures along Wanguri Terrace will require an extensive community consultation process.

It is recommended that the relevant stakeholders, including residents, property owners, schools and the Wanguri Traffic Action Group be advised of Council's decision on this matter.

POLICY IMPLICATIONS

City of Darwin's Policy No 25 Community Consultation Policy.

BUDGET AND RESOURCE IMPLICATIONS

There are no budget or resource implications as a result of the recommendations of this report.

The previous order of cost estimate for the implementation of the Stage 1 traffic calming measures (construction of 2 round-a-bouts) was \$450,000.

There are currently no funds available in the City of Darwin's 2014/2015 Capital Works Budget for these works.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Motorists have a legal obligation to drive at the road speed limit.

The enforcement of road speed limits is the responsibility of the Northern Territory Police.

ENVIRONMENTAL IMPLICATIONS

Not assessed.

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

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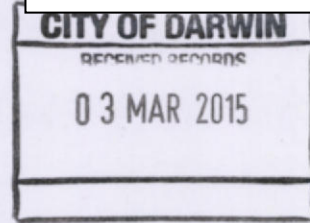
DROSSO LELEKIS
MANAGER DESIGN PLANNING &
PROJECTS

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

For enquiries, please contact Drosso Lelekis on 89300414 or email:
d.lelekis@darwin.nt.gov.au.

Attachments:

- Attachment A:** Latest correspondence from the Wanguri Traffic Action Group (3 March 2015)
- Attachment B:** Response to the latest correspondence from the Wanguri Traffic Action Group (6 March 2015)



The Right Worshipful The Lord Mayor of Darwin
Katrina Fong Lim
City of Darwin
GPO Box 84
DARWIN NT 0801

Chen Ward
Bob Elix
Robin Knox

Dear Lord Mayor

Re: Traffic Management in Wanguri

Jeanette Anikunmide

Attached is a traffic information update that the Wanguri Traffic Action Group distributed recently to the residents of Wanguri. A similar information update will be delivered to the residents of Wanguri each quarter for the foreseeable future.

Richardson Ward

The main message is that, after **5 ½ years** of procrastination, we would like the council to show some sense of urgency in making a decision about whether or not to install traffic calming measures along the 'Wanguri Speedway'.

Further, considering the delays, the matter should be treated as a priority and any traffic calming measures approved should be included in the capital works section of the council's 2015/2016 Municipal Plan.

Alan Missett

After **5 ½ years**.

The Hon. Adam Giles MLA
Chief Minister of the Northern Territory

Further procrastination is simply unacceptable.

The Hon. Bob Price MLA
Minister for Local Government and Community Services

Yours sincerely

A handwritten signature in blue ink that reads "Rob Hudson". The signature is enclosed in a large, loopy blue scribble.

Rob Hudson
Coordinator – Wanguri Traffic Action Group
Email: robert_hudson777@hotmail.com
3 March 2015

Courtesy copies (PTO)

Aldermen**Chan Ward**

Bob Elix
Robin Knox
Kate Worden

Lyons Ward

Jeanette Anictomatis
Helen Galton
Simon Niblock

Richardson Ward

Garry Lambert
George Lambrinidis
Rebecca Want de Rowe

Waters Ward

Justine Glover
Gary Haslett
Allan Mitchell

The Hon. Adam Giles MLA
Chief Minister of the Northern Territory

The Hon. Bess Price MLA
Minister for Local Government and Community Services

Nicole Manison MLA
Member for Wanguri

WANGURI TRAFFIC UPDATE

The Lee Point Road upgrade has been completed. The 'LED flashing-light' pilot project - which operates at either end of the school crossing on Wanguri Terrace – has been completed. As a consequence, the 'City of Darwin' (the council) has advised us that they are now able to proceed with the review of traffic along Wanguri Terrace that they announced just over a year ago (in November 2013). Below are the two important dates:

January 2015. The council will commence the review of Wanguri Terrace ("and some surrounding roads").

April 2015 (anticipated). The findings of the review will be presented to Council.

"Council will [then] consider the findings and determine [if] any further actions and /or priorities including whether any funding or otherwise will be provided in future budgets."

What do we want?

We want Council to treat the review and its implementation as a priority. Specifically, we want the council to make a decision early enough to allow any traffic calming measures that are approved to all be included in the capital works section of their 2015/2016 Municipal Plan. This means the work will be completed in the 2015/2016 financial year.

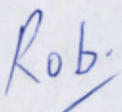
This is a fair and reasonable request considering tens-of-thousands of dollars that have been spent to date, and the time that has elapsed. It has been over **5 years** since the community first raised concerns about the excessive speed, and the corresponding noise of traffic, along the 'Wanguri Speedway'. In our view, an efficient and effective council would have made a decision long ago.

Unfortunately, we have no confidence that the Council will include any approved traffic calming measures in their 2015/2016 Municipal Plan: it has never shown any sense of urgency in resolving this matter despite two primary schools being situated along the 'Wanguri Speedway'.

With the upgrade of Lee Point Road, the traffic authorities have been playing 'catch-up' in an area where there are now thousands of extra vehicles on the road due to the development of Lyons and Muirhead. Two new suburbs are planned north of Lyons and Muirhead; this will lead to even more drivers zig-zagging at speed through Wanguri to reach their destination earlier. It is going to get worse. After **5 years** of procrastination, further delays by the council are simply unacceptable.

Thank you everyone for your on-going support and encouragement. We will provide you with a further update in May/June 2015.

Kind Regards



Rob Hudson
 Coordinator – Wanguri Traffic Action Group
 robert_hudson777@hotmail.com
 21 January 2015

6 March 2015

Please quote: 1668356 LC:jw

Mr Robert Hudson
Coordinator – Wanguri Traffic Action Group
54 Wanguri Terrace
WANGURI NT 0810

via email – robert_hudson777@hotmail.com

Dear Mr Hudson

Traffic Management in Wanguri

The Lord Mayor has requested that I write to you in response to your dated 3 March 2015.

This matter will form the basis of a report that is currently scheduled to be tabled at the Environment and Infrastructure Committee Meeting on 21 April 2015.

Council meeting papers can be accessed through the City of Darwin website;
<http://www.darwin.nt.gov.au/council/council-meetings>

I will also inform you in writing of the outcome in relation to this matter.

In the meantime, if you have any further queries please do not hesitate to contact me on 8930 0581 or l.cercarelli@darwin.nt.gov.au.

Yours sincerely



LUCCIO CERCARELLI
GENERAL MANAGER INFRASTRUCTURE

ENCL: ENVIRONMENT & INFRASTRUCTURE
YES COMMITTEE/OPEN

AGENDA ITEM: 9.4

SMITH STREET WEST - PARKING RESTRICTIONS

REPORT No.: 15TS0064 NK:jg

COMMON No.: 3029748

DATE: 21/04/2015

Presenter: Manager Design Planning & Projects, Drosso Lelekis

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to inform Council of an assessment of on-street parking at Smith Street West between Daly Street and Packard Place/Dashwood Crescent and to seek Council's endorsement to implement the parking restrictions proposed.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

2 Vibrant, Flexible and Tropical Lifestyle

Outcome

2.1 Improved access and connectivity

Key Strategies

2.1.3 Manage the road network to meet community needs

KEY ISSUES

- Complaints have been received regarding parked vehicles restricting sightlines for motorists wishing to enter Smith Street (West of Daly Street) from side streets and private properties.
- There is a high concentration of on-street parking within the area.
- The intersection of Smith Street and Mauna Loa Street has existing parking restrictions (yellow lines).
- Options for implementing parking restrictions have been provided, with the preferred option recommended for Council's endorsement.

RECOMMENDATIONS

THAT it be a recommendation to Council:-

- A. THAT Report Number 15TS0064 NK:jg entitled Smith Street West - Parking Restrictions, be received and noted.

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 SUBJECT: SMITH STREET WEST - PARKING RESTRICTIONS

- B. THAT Council endorse the implementation of the proposed parking restrictions contained within Option 3 (**Attachment C**) of Report Number 15TS0064 NK:jg entitled Smith Street West - Parking Restrictions.
- C. That a further report investigating the feasibility of providing additional car parking spaces within the wide verge along the southern side of Smith Street be prepared for Council's consideration in November 2015.

BACKGROUND

Complaints have been received regarding parked vehicles restricting sightlines for motorists wishing to enter Smith Street West in the area between Daly Street and the Packard Place/Dashwood Crescent intersections.

As the result of the intensification created by the development of residential and commercial buildings within Larrakeyah, there has been a concentration of on-street parking along Smith Street West.

DISCUSSION

An assessment of on-street parking was undertaken for a section of Smith Street from west of the Daly Street roundabout to the intersection of Smith Street/Packard Place/Dashwood Crescent as shown in Figure 1.1 below.



Figure 1.1 Assessment Area

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The carriageway width along Smith Street west is approximately 10.6 metres, which is considered sufficiently wide to accommodate on-street parking, whilst maintaining adequate travel lane widths.

During the assessment of the area, the following issues were observed:

- a high level of on-street parking is occurring in the area,
- double parking was observed in off-street parking areas.
- vehicles were parked close to intersections (within 10 metres),
- a number of driveways had vehicles parked close to them.

The Australian Road Rules state that “a driver must not stop on a road within ten metres from the nearest point of an intersection without traffic lights”¹. It was observed that many drivers were ignoring this rule at the Smith Street intersections with Peary Street, Packard Place and Dashwood Crescent.

The intersection of Smith Street and Mauna Loa Street has parking restrictions (yellow lines) applied. It was observed that parked vehicles were complying with the restrictions at this site. It appears that the use of yellow line marking reinforces the rule of not parking within 10 metres of an intersection.

In order to improve safety for road users it is recommended that yellow lines are introduced at other intersection corners, to reinforce the rule of not parking within 10 metres of an intersection.

It was observed that at a number of driveways along Smith Street, vehicles were parked on-street close to the driveway and these parked vehicles were restricting the sight lines of exiting vehicles (Figure 1.2). The Australian Road Rules only stipulate that a “driver must not stop on or across a driveway”². Although the City of Darwin has previously resisted putting yellow lines across driveways or adjacent to driveways to increase sight distances and reinforce the Australian Road Rules due to the cost of implementing this practice, due to the extent of the parking congestion in this area, it is recommended that yellow lines are introduced at the junction point of driveways to improve sight distance.

¹ Australian Road Rules, part 12, Division 3, Rule 170, sub-rule (3)

² Australian Road Rules, Part 12, Division 6, Rule 198, sub-rule (2)

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Figure 1.2 Parking near driveways

Proposed Parking Restrictions

Three options to implement parking restrictions within the subject area were considered and Options 1, 2 and 3 are provided at **Attachments A, B and C** respectively of this report.

While Council could let the existing parking conditions remain in place, this is not recommended due to the increased risk to road users that the parking congestion is causing in the area.

The advantages and disadvantages for each option are provided in the table below.

Parking Restriction	Advantages	Disadvantages
Option 1 Attachment A	Clear sightlines are provided at the Mauna Loa and Peary Street intersections	Decreases on-street parking availability along Smith Street between Daly Street and Packard Place, particularly on the southern side.
	Reduces parking congestion predominantly along southern side of Smith Street	Requires additional parking enforcement. Council's current after hours enforcement of parking restrictions is limited, therefore the effectiveness after hours without increased enforcement may be reduced.
	Retains substantial on-street parking on northern side of Smith Street	Vehicles may begin to park in the large verge area causing damage and safety concerns
	Addresses sight line complaint received in relation to driveway at Lot 5577 Smith Street	

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Option 2 Attachment B	Clear sightlines are provided at the Mauna Loa Peary Street, Harriet Place and Packard Place/Dashwood Crescent intersections	Decreases on-street parking availability along both sides of Smith Street between Daly Street and Packard Place.
	Reduced parking restrictions along southern side of Smith Street for purely intersection and driveway sight distance.	Requires more additional parking enforcement than Option 1. Council's current after hours enforcement of parking restrictions is limited, therefore the effectiveness after hours without increased enforcement may be reduced.
	Provides better sight distance for driveways on both sides of Smith Street than Option 1	
	Reduces parking congestion along both sides of Smith Street	Vehicles may begin to park in the large verge area causing damage and safety concerns
Option 3 Attachment C	Clear sightlines are provided at the Mauna Loa Peary Street, Harriet Place and Packard Place/Dashwood Crescent intersections	Decreases on-street parking availability along both sides of Smith Street between Daly Street and Packard Place to a greater extent than Options 1 and 2
	Reduces parking congestion along both sides of Smith Street.	Requires more additional parking enforcement than Option 1. Council's current after hours enforcement of parking restrictions is limited, therefore the effectiveness after hours without increased enforcement may be reduced.
	Allows greater sight distance for driveways along southern side of Smith Street than Option 2	
		Vehicles may begin to park in the large verge area causing damage and safety concerns

While all three options provide the desired outcome to differing extents, Option 3 is preferred as it provides the best compromise of providing sightlines, whilst still retaining some on-street parking within the area.

The effectiveness of the proposed parking restrictions will be monitored for a period of 12 months and may be modified if deemed necessary.

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Potential for Future Verge Parking

It has been observed that vehicles are informally parking within the wide verge along the southern side of Smith Street adjacent to intersection with Packard Street. Consideration of the feasibility of providing formalising parking within the verge of Smith Street may be an option for Council to address this issue. A further report providing options and an order of cost estimate for formalising parking within the wide verge along the southern side of Smith Street could be developed for Council's consideration.

Observations during the assessment and anecdotal evidence suggest that the area is being used by workers in the CBD for all day parking.

A number of public on-street parking spaces are provided in Harriet Place. During the assessment it was observed that double parking was occurring in this vicinity as well as parking off road within the open space of Harriet Park. The vehicles in question appeared to be related to a business in the area.

Parking bays within Harriet Place include three bays reserved for taxis. The actual usage of these bays is unknown and City of Darwin officers will make enquiries to the Department of Transport to ascertain if the usage of these bays can be optimised and if appropriate reduce the size of the rank.

CONSULTATION PROCESS

In order to ensure that the community are well informed of any additional parking restrictions to be implemented in the area, the following methods will be undertaken prior to the implementation of the parking restrictions.

- Property owners and residents will be advised in writing of the intended changes.
- Flyers will be placed on parked vehicles in the days prior to the implementation of the parking restrictions.
- A public notice will be placed in the Northern Territory News advising of the parking restrictions prior to their implementation.

In preparing this report, the following City of Darwin officers were consulted:

- Team Leader Design
- Manager Regulatory Services
- Team Leader Capital Works

In preparing this report, the following External Parties were consulted:

- Jacobs Group

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POLICY IMPLICATIONS

Council does not have a policy position regarding the implementation of parking restrictions.

BUDGET AND RESOURCE IMPLICATIONS

The implementation of the parking restrictions will require enforcement to ensure compliance. It is envisaged that an initial campaign of warning drivers would be conducted before the issue of infringement notices.

The cost of installing the parking restrictions (yellow no stopping lines) and undertaking parking enforcement during normal operational hours can be accommodated within existing programs.

Should Council wish to undertake enforcement of parking restrictions outside of normal operational hours, consideration of the additional resources and costs associated with the enforcement will need to be considered.

A report providing options and an order of cost estimate for formalising parking within the wide verge along the southern side of Smith Street will be provided for Council's consideration in the November meeting cycle and for consideration in Council's 2016/2017 budget deliberations.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

The implementation of parking restrictions through yellow no parking lines will likely improve road safety within the area.

Their introduction will have the negative effect of reducing the available space within the road reserve for on-street parking.

The reduction in on-street parking may result in an increase in motorists using the wide verge along the southern side of Smith Street to park. This may result in damage to infrastructure and pose a risk to users of the shared path. Alternatively, drivers may choose to park elsewhere, thereby creating congestion in other locations.

It is envisaged that the introduction of the additional parking restrictions will generate polarised views within the community and Council may receive negative feedback from the community regarding the restrictions, particularly from those directly affected.

ENVIRONMENTAL IMPLICATIONS

Increased sight lines and decreased congestion contribute to a safer road environment for all road users.

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COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

DROSSO LELEKIS
MANAGER DESIGN,
PLANNING & PROJECTS

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

For enquiries, please contact Drosso Lelekis on 893000414 or email:
d.lelekis@darwin.nt.gov.au.

Attachments:

Attachment A: Car Parking Restrictions Concept Plan – Option 1

Attachment B: Car Parking Restrictions Concept Plan – Option 2

Attachment C: Car Parking Restrictions Concept Plan – Option 3 - Recommended



AMENDMENTS			
No.	DESCRIPTION	DATE	INITIAL
E			
D			
C	SINGLE YELLOW LINES ADDED	16/03/15	RM
B	SINGLE YELLOW LINES ADDED	09/03/15	RM
A	SINGLE YELLOW LINES ADDED	04/03/15	RM

WARNING
 ALL REASONABLE CARE HAS BEEN TAKEN TO ACCURATELY SHOW THE POSITION OF EXISTING SERVICES. HOWEVER, THE POSITION OF SUCH SERVICES SHOULD BE PROVEN ON SITE AND NO GUARANTEE CAN BE GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DRAWN RM	DESIGNED
SCALE NTS	CHECKED
APPROVED	DATE MAR '15
	SHEET 1 OF 1

SMITH STREET, DARWIN CITY
 PROPOSED CAR PARKING RESTRICTIONS
 CONCEPT PLAN - OPTION 1





LEGEND	
	NEW SINGLE YELLOW LINE
	EXISTING SINGLE YELLOW LINE

AMENDMENTS

No.	DESCRIPTION	DATE	INITIAL
E			
D			
C	SINGLE YELLOW LINES ADDED	16/03/15	RM
B	SINGLE YELLOW LINES ADDED	09/03/15	RM
A	SINGLE YELLOW LINES ADDED	04/03/15	RM

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DRAWN RM	DESIGNED
SCALE NTS	CHECKED
APPROVED	DATE MAR '15
	SHEET 1 OF 1

SMITH STREET, DARWIN CITY
 PROPOSED CAR PARKING RESTRICTIONS
 CONCEPT PLAN - OPTION 2





LEGEND

- NEW SINGLE YELLOW LINE
- EXISTING SINGLE YELLOW LINE

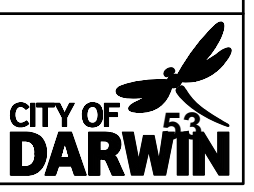
AMENDMENTS			
No.	DESCRIPTION	DATE	INITIAL
E			
D			
C	SINGLE YELLOW LINES ADDED	16/03/15	RM
B	SINGLE YELLOW LINES ADDED	09/03/15	RM
A	SINGLE YELLOW LINES ADDED	04/03/15	RM

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DRAWN RM	DESIGNED
SCALE NTS	CHECKED
APPROVED	DATE MAR '15
	SHEET 1 OF 1

DRAWN RM	DESIGNED
SCALE NTS	CHECKED
APPROVED	DATE MAR '15
	SHEET 1 OF 1

SMITH STREET, DARWIN CITY
 PROPOSED CAR PARKING RESTRICTIONS
 CONCEPT PLAN - OPTION 3



ENCL: ENVIRONMENT & INFRASTRUCTURE
 YES COMMITTEE/OPEN

AGENDA ITEM: 9.5

FUNDING FOR IMPROVED STRATEGIC LOCAL ROADS INFRASTRUCTURE PROGRAM

REPORT No.: 15TS0062 DL:jg

COMMON No.: 3053954

DATE: 21/04/2015

Presenter: Manager Design Planning & Projects, Drosso Lelekis

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to advise Council of the new funding opportunity released by the Northern Territory Government (NTG) and to seek Council's endorsement of the projects to be submitted in application for funding for the "Improving Strategic Local Roads Infrastructure" program.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

2 Vibrant, Flexible and Tropical Lifestyle

Outcome

2.1 Improved access and connectivity

Key Strategies

2.1.3 Manage the road network to meet community needs

KEY ISSUES

- On 18 March 2015, City of Darwin received correspondence from the NTG advising it had established a new fund to assist local government in improving road infrastructure that supports economic enabling industries, or is of a strategic nature for the community.
- The \$5 million funding program "Improving Strategic Local Roads Infrastructure" is open to all local governments in the Northern Territory and applications close Monday 27 April 2015.
- Requests for funding can be made for two types of projects:
 1. Feasibility Studies, detailed Project Planning or Design Funding; or
 2. Infrastructure projects relating to transport.
- The program focuses on delivery of Northern Territory Government Economic strategies outlined in the *Framing the Future* plan and Northern Territory *Economic Development Strategy* by delivering road infrastructure that supports the Northern Territory's economic enabling industries.

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 INFRASTRUCTURE PROGRAM

- Various projects emanating from the Nightcliff and Rapid Creek Education Precinct Road Safety Assessment, the Traffic Signal Audit and Traffic Management Upgrade Program, the Darwin Bike Plan and the future Capital Works Program are nominated for submission.

RECOMMENDATIONS

THAT it be a recommendation to Council:-

- A. THAT Report Number 15TS0062 DL:jg entitled Funding For Improved Strategic Local Roads Infrastructure Program, be received and noted.
- B. THAT Council endorse the following projects for submission for funding to the Improving Strategic Local Roads Infrastructure Program:
1. Cavenagh Street and Bennett Street Intersection Upgrade
 2. Engineering Study for Lee Point Road between McMillan's Road and Vanderlin Drive
 3. Urban Feasibility Study for Bradshaw Terrace between Dripstone Road and Trower Road
 4. Engineering Study for Nightcliff Road and Progress Drive Intersection
 5. Traffic Signal Upgrade Program – Years 2 and 3
 6. Darwin Bike Plan 2015-2020 Implementation Plan – Years 2 and 3
- C. THAT Council note that for Project 5 – Traffic Signal Upgrade Program and Project 6 – Darwin Bike Plan 2015-2020 Implementation Plan as described in Report Number 15TS0062 DL:jg entitled Funding For Improved Strategic Local Roads Infrastructure Program, a 50/50 funding arrangement would be sought utilising existing approved Council funds for these programs.

BACKGROUND

Correspondence received by City of Darwin from the NTG's Department of Transport on 18 March 2015 advised that the Government had approved a new fund to assist local government in improving road infrastructure strategic and significant projects and requested submissions for funding.

This new funding program, "Improving Strategic Local Roads Infrastructure" is a one-off program requiring project funding to be expended within an 18 month timeframe.

The letter from the Department of Transport advising of the new funding program is included for information as **Attachment A** to this report.

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 INFRASTRUCTURE PROGRAM

DISCUSSION

The Improving Strategic Local Roads Infrastructure funding program will focus on projects that contribute to the delivery of the Northern Territory Government's *Framing the Future* plan for a prosperous economy that creates wealth and jobs. Selected projects will also contribute to the delivery of the draft *Northern Territory Economic Development Strategy* by assisting local government to develop road infrastructure that supports the Northern Territory's economic enabling industries.

Eligible projects will:

- Be considered for one-off capital or minor new works funding or planning for economic infrastructure;
- Have no other Northern Territory Government single funding source available;
- Demonstrate how receipt of a grant would result in increased productivity or economic outlines for the community;
- Demonstrate some level of joint funding contribution or in principle commitment for joint funding from other funding sources such as local government or the Australian Government or other programs such as Stronger Regions Fund;
- Have attempted to resolve any land tenure issues with Traditional Owners and the relevant land council; and
- Be able to include larger joint projects that include multiple entities.

Funding can be requested for two types of projects:

1. Feasibility Studies, Detailed Project Planning or Design; or
2. Infrastructure projects relating to transport.

Assessment criteria for the application process for feasibility studies, planning and design includes project intent, expected business and employment outcomes, timeframe and readiness to commence planning stages.

For the larger capital investment and minor new works projects assessment criteria includes the level of funding matched by the Local Government or other funding partner, evidence of how the project will support new or increased productivity or economic growth, how the infrastructure will be maintained, number of local jobs and local construction jobs that would be created, evidence to support the proposed investment option, letters of support from key stakeholders, evidence of readiness to commence design or construction stage.

The release of this funding program provides Council with the opportunity to identify strategic transport related infrastructure projects that are either in forward plans or have been identified as key sites to address traffic and road safety issues.

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INFRASTRUCTURE PROGRAM

As such, a number of projects across the City have been identified that can be fast tracked to assist stimulating economic growth including job creation. The following projects are recommended to Council for endorsement to submit a funding application to the Improving Strategic Local Roads funding program.

For projects 1 to 4, it is intended that 100% of funding of the estimated cost would be sought. These projects are considered strategic and stem from known problem sites with reported traffic safety issues but are yet to be placed on a City of Darwin program for construction and future funding.

1. Cavenagh Street and Bennett Street Intersection Upgrade

This major intersection within the Darwin Central Business District provides a link to the City Centre from one its major arterial roads; Cavenagh Street and Bennett Street intersection is considered a critical transport solution to address traffic safety and congestion in the City Centre. The intersection upgrade will complement the Northern Territory Government's Tiger Brennan Drive Duplication Project. Consistent with the objectives of the Tiger Brennan Drive Duplication project, this project is designed to improve traffic flow and ease congestion during peak hours, improve travel times from Darwin to Palmerston and the rural areas, and improve traffic safety and pedestrian movements at intersections.

In excess of 78,000 vehicles enter the City via this route each week and as a result major congestion occurs at the intersection with Cavenagh Street during peak times. Over the past five years 20 accidents have been recorded at this intersection.

Upgrading this intersection will contribute to the broader economic objectives of the Northern Territory Government with local construction jobs and continued investment in key Darwin City Centre projects.

The proposed upgrade for this site focuses on reducing congestion and improving safety with the construction of dedicated left turn lane and a through lane; on Bennett Street inbound. A draft concept design is attached at **Attachment C** and identifies some loss of parking in Cavenagh Street east and losses of street trees in Bennett Street inbound. Minimal loss of car parking, estimated to be four bays, is unavoidable however all options will be considered to minimise the impact and retain the amenity of the area.

Estimated costs for this project are currently being sought and it is recommended to seek \$1.1M funding from the Improving Strategic Local Roads funding program.

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INFRASTRUCTURE PROGRAM

2. Lee Point Road between McMillan's Road and Vanderlin Drive – Engineering Study

This important sub arterial road services a major portion of Darwin's northern suburbs and the ongoing development of the most northern of these suburbs has increased the volume of traffic utilising this route. Lee Point Road also serves as an alternate route and connector road linking the northern suburbs and regional areas with the airport and the City.

The primary objectives of the study will assess transport options taking into consideration ongoing economic growth in the area and safety concerns. A series of traffic issues have been reported along this section of the road over the years, with 37 accidents being recorded since 2010.

It is recommended to seek a maximum of \$100,000 funding from the Improving Strategic Local Roads funding program to undertake this study.

3. Bradshaw Terrace between Dripstone Road and Trower Road – Urban Feasibility Study

The increasing expansion of this already extremely busy area of the northern suburbs has led to increased traffic and pedestrian movements along and around Bradshaw Terrace.

Bradshaw Terrace provides access to the Casuarina Bus interchange, the Casuarina Shopping Complex, a Post Office and Public Library and several Banks and variety shops. The recently completed Student Accommodation and pending Casuarina Shopping Complex expansion will continue to contribute to the increased vehicular and pedestrian traffic volumes in this area and along Bradshaw Terrace.

A multitude of traffic issues, both vehicular and pedestrian, together with constant parking problems continues to occur along Bradshaw Terrace and an Urban Feasibility Study would assist Council in determining how best to deal with these issues. The Feasibility Study will focus on identifying options that improve the urban design, accessibility and amenity outcomes.

It is recommended to seek a maximum of \$100,000 funding from the Improving Strategic Local Roads funding program to undertake this study.

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INFRASTRUCTURE PROGRAM

4. Nightcliff Road and Progress Drive Intersection – Engineering Study

This busy intersection was identified in the Nightcliff and Rapid Creek Education Precinct Road Safety Assessment as being within its operational capacity and recommended a further study be undertaken at this site.

A detailed traffic modelling exercise would review potential treatment options for this intersection.

It is recommended to seek a maximum of \$60,000 funding from the Improving Strategic Local Roads funding program to undertake this study.

Project 5 – Traffic Signal Upgrade Program and Project 6 – Darwin Bike Plan 2015-2020 Implementation Plan have been identified as strategic transport programs that can be fast tracked in order to stimulate ongoing economic growth and creation of construction jobs. A 50/50 funding arrangement would be sought for these projects.

5. Traffic Signal Upgrade Program – Years 2 and 3

Recently Council was presented with a program of works for the Traffic Signal Upgrade Program. The program is designed to ensure that traffic signal assets are maintained to an acceptable standard and to identify opportunities for improving the system and connectivity of the City.

Much of the year one program of works has been undertaken during 2014/15 and funded from previous years budgets. Proposed capital expenditure has been included for future years in the long term capital works plan over a nine year period. An opportunity exists to apply for additional funding in order to fast track years two and three of the program.

Year 2 (2015/16) projects total \$90,000 and include the installation of LED pedestrian count down timers at the following locations:

- Knuckey Street and Cavenagh Street Intersection
- Knuckey Street and Smith Street Intersection
- Knuckey Street and Mitchell Street Intersection
- Daly Street and Mitchell Street Intersection

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 INFRASTRUCTURE PROGRAM

Year 3 (2016/17) projects total \$90,000 and include the installation of traffic signal controller power backup at the following locations:

- Bennett Street and Cavenagh Street
- Knuckey Street and Cavenagh Street

And, radar pedestrian detection at pedestrian crossings located at:

- East Point Road
- Dick Ward Drive

It is recommended to seek a maximum of \$90,000 funding from the Improving Strategic Local Roads funding program to undertake this project.

6. Darwin Bike Plan 2015-2020 Implementation Plan - Years 2 and 3

The Darwin Bike Plan is integral to the City of Darwin's and Northern Territory Government's strategies for catering for cyclists and providing ongoing transport options that connect our community. The objectives of the Darwin Bike Plan 2015-2020 Implementation Plan provide for a coordinated and connected bicycle network, quality, safe and convenient infrastructure and facilities and a "whole of journey" approach to enabling bike riding across the City.

A number of infrastructure and design projects were identified for implementation during the 2014/15 financial year and funded accordingly. Some of these projects will carry forward to the 2015/16 financial year.

An opportunity exists to apply for additional funding in order to fast track years two and three of the program with the potential for efficiencies in program delivery by coordinating complimentary projects.

Year 2 (2015/16) infrastructure and design projects total \$290,000 and include:

- Constructing the missing section of path along the inside of Abala Road, south of Marrara Stadium
- Rectification of existing shared path along the front of Nightcliff Pool
- Upgrading shared path connections at Malak Park

Year 3 (2016/17) infrastructure and design projects total \$275,000 and include:

- The provision of on-road cycle lanes and improved connectivity along Daly Street from McMinn Street to the Esplanade and improved use of off-road space at the Smith Street roundabout and Esplanade

A funding submission to the NTG's Improved Strategic Local Roads Infrastructure Program for these sites could provide financial assistance to expedite delivery of these important infrastructure projects.

It is recommended to seek a maximum of \$282,500 funding from the Improving Strategic Local Roads funding program to undertake this project.

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 INFRASTRUCTURE PROGRAM

A summary overview of the projects for submission to the Improving Strategic Local Roads funding program is provided at **Attachment B**.

CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Design Team Leader
- Manager Strategy and Outcomes

POLICY IMPLICATIONS

No policy implications identified.

BUDGET AND RESOURCE IMPLICATIONS

The nominated projects have a total estimated value of \$2,105,000.

With the City of Darwin having already established a program for funding and delivery for projects identified in the Traffic Signal Upgrade Program and the Darwin Bike Plan a 50/50 funding contribution could be sought for approved projects. Council's and the Northern Territory Governments contribution to these projects total \$372,500 each respectively.

For those sites nominated but yet to be programmed or funded, a 100% funding contribution would be sought. (\$1,360,000)

A breakdown of the estimated costs for the nominated projects is provided at **Attachment B**.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Approved funding must be used for the purpose identified in the funding guidelines for Improving Strategic Local Roads Infrastructure. City of Darwin would be required to sign a Grant Agreement that defines responsibilities regarding the management of projects (18 month delivery timeframe), reporting and acquittal of the grant funding.

There is a risk for future funding opportunities should Council not meet these obligations.

ENVIRONMENTAL IMPLICATIONS

Implementing appropriate road safety measures will likely result in a safer road environment for all road users.

Fast tracking the Darwin Bike Plan 2015-2020 Implementation Plan may result in demonstrated environmental and social benefits sooner.

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REPORT NUMBER: 15TS0062 DL:yg
SUBJECT: FUNDING FOR IMPROVED STRATEGIC LOCAL ROADS
INFRASTRUCTURE PROGRAM

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

DROSSO LELEKIS
MANAGER, DESIGN, PROJECTS
& PLANNING

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

For enquiries, please contact Drosso Lelekis on 893000414 or email:
d.lelekis@darwin.nt.gov.au.

Attachments:

- Attachment A:** Letter from the Department of Transport advising of the funding opportunity and requesting submissions.
- Attachment B:** Summary overview of projects for funding submission
- Attachment C:** Draft design concept – Cavenagh Street and Bennett Street Intersection

Chief Executive
Level 1 Energy House
18 -20 Cavenagh Street

Postal address GPO Box 2520
Darwin NT 0801
Tel 08 8924 7029
Fax 08 8924 7324
Web www.nt.gov.au/transport

Our ref: DDOT2015/0310

Mr Brendan Dowd
CEO
City of Darwin
GPO Box 84
DARWIN NT 0801

Dear Mr Dowd *Brendan*

RE: Request for submissions: Funding for Improving Strategic Local Roads Infrastructure

Recently, the Northern Territory Government approved a new fund to assist local government in improving road infrastructure that supports our economic enabling industries, or is of a strategic nature for the community.

The Department of Transport will be administering this new initiative and I am pleased to now call for submissions. Attached with this letter are the guidelines for requests for funding. Funding can be requested for two types of projects:

1. Feasibility Studies, Detailed Project Planning or Design Funding; or
2. Infrastructure projects relating to transport.

A total of \$5 million is available under this program in 2014-15. Submissions should be emailed to tipd.dot@nt.gov.au by close of business Monday 27 April 2015.

There is an opportunity for local government to use this funding as their contribution to a Stronger Regions funding submission to Regional Development Australia.

If you have any questions regarding the submission process, please contact Mr Aftab Abro of the Department of Transport on telephone 8924 7121.

Yours sincerely

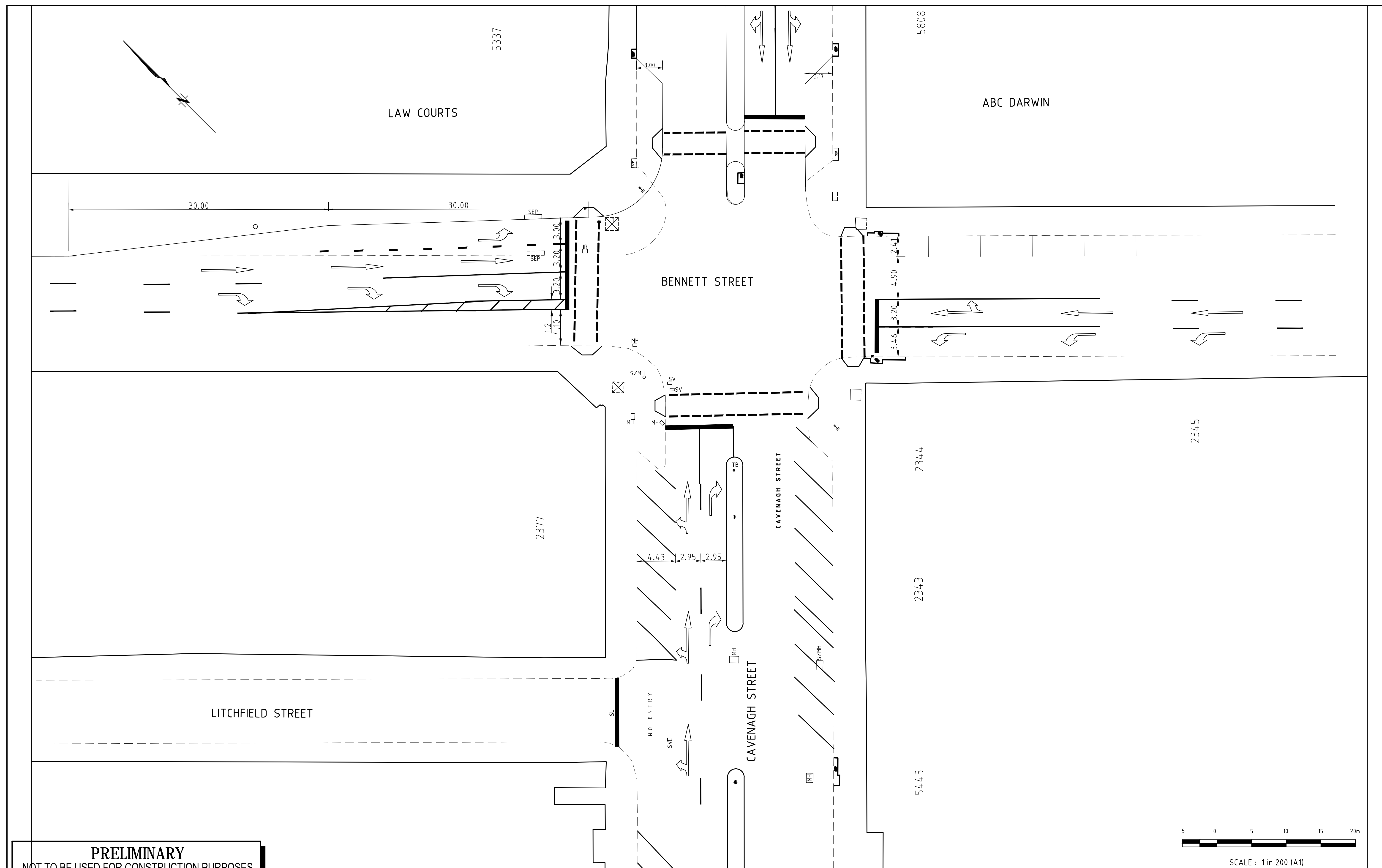


Clare Gardiner-Barnes

18 March 2015

Project	Project Cost	NTG Funding	Council contribution
Cavenagh Street and Bennett Street Intersection Upgrade	\$1,100,000	\$1,100,000	\$0
Lee Point Road between McMillan's Road and Vanderlin Drive – Engineering Study	\$100,000	\$100,000	\$0
Bradshaw Terrace between Driestone Road and Trower Road – Urban Feasibility Study	\$100,000	\$100,000	\$0
Nightcliff Road and Progress Drive Intersection – Engineering Study	\$60,000	\$60,000	\$0
Traffic Signal Upgrade Program – Years 2 and 3 consisting of: <ul style="list-style-type: none"> • Knuckey Street and Cavenagh Street Intersection • Knuckey Street and Smith Street Intersection • Knuckey Street and Mitchell Street Intersection • Daly Street and Mitchell Street Intersection • Bennett Street and Cavenagh Street Intersection • Knuckey Street and Cavenagh Street • East Point Road Pedestrian Crossing • Dick Ward Drive Pedestrian Crossing 	\$180,000	\$90,000	\$90,000
Darwin Bike Plan 2015-2020 Implementation Plan – Years 2 and 3 consisting of: <ul style="list-style-type: none"> • Constructing the missing section of path along the inside of Abala Road, south of Marrara Stadium • Rectification of existing shared path along the front of Nightcliff Pool • Upgrading shared path connections at Malak Park • The provision of on-road cycle lanes and improved connectivity along Daly Street from McMinn Street to the Esplanade and improved use of off-road space at the Smith Street roundabout and Esplanade 	\$565,000	\$282,500	\$282,500
Total	\$2,105,000	\$1,732,500	\$372,500

ATTACHMENT C



PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION PURPOSES

AMENDMENTS			
No.	DESCRIPTION	DATE	INITIAL
3	NEW COD LOGO	15-04-2015	GM
2	CAVENAGH STREET LEFT TURN LANE DELETED	14-04-2015	GM
1	TURNING MOVEMENTS DELETED	13-04-2015	GM
0	ISSUED FOR COMMENTS	25-11-2014	GM

WARNING
ALL REASONABLE CARE HAS BEEN TAKEN TO ACCURATELY SHOW THE POSITION OF EXISTING SERVICES. HOWEVER, THE POSITION OF SUCH SERVICES SHOULD BE PROVEN ON SITE AND NO GUARANTEE CAN BE GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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DRAWN GM	DESIGNED TP
SCALE AS SHOWN	CHECKED TP
APPROVED -	DATE NOV. 2014
	SHEET - OF -

CAVENAGH STREET / BENNETT STREET
INTERSECTION UPGRADE
LAYOUT PLAN

SHEET SIZE A1 DRAWING No. DC1420-C02 AMENDT. 3



**ENCL: ENVIRONMENT & INFRASTRUCTURE
NO COMMITTEE/OPEN**

AGENDA ITEM: 9.6

**INFRASTRUCTURE - DESIGN, PLANNING & PROJECTS - MARCH 2015 QUARTERLY
REPORT**

REPORT No.: 15TS0055 DL:jg

COMMON No.: 1832896

DATE: 21/04/2015

Presenter: Manager Design, Planning & Projects, Drosso Lelekis

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to provide an update on the activities of the Infrastructure Department Design, Planning & Projects Section for the January to March 2015 Quarter.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

2 Vibrant, Flexible and Tropical Lifestyle

Outcome

2.2 A sense of place and community

Key Strategies

2.2.3 Improve the landscaping, streetscape, infrastructure and natural environment

KEY ISSUES

- A number of traffic and road safety issues raised by members of the community were investigated and resolved.
- Work continued on the review of on-street parking in the CBD.
- The updated draft Darwin Bike Plan was submitted for Council's adoption.
- Developer Contribution Plans for stormwater drainage upgrading in the Darwin CBD were adopted by Council.
- Community consultation for the Nightcliff and Rapid Creek Education Precinct Road Safety Assessment was completed.
- The review/audit of the City of Darwin's traffic signals throughout the Darwin Municipality was completed and reported to Council.
- Work progressed on the design of stage 1 Coastal Erosion report actions adopted by Council.
- Work progressed on the draft Darwin City Centre Master Plan 2014/2015 projects.

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REPORT NUMBER: 15TS0055 DL:jg
SUBJECT: INFRASTRUCTURE - DESIGN, PLANNING & PROJECTS - MARCH 2015
QUARTERLY REPORT

RECOMMENDATIONS

THAT the Committee resolve under delegated authority:-

THAT Report Number 15TS0055 DL:jg entitled Infrastructure - Design, Planning & Projects – March 2015 Quarterly Report, be received and noted.

BACKGROUND

Quarterly reports on the activities of the Design, Planning and Projects Section of the Infrastructure Department are provided to inform the City of Darwin.

The key roles of the Design and Projects teams within the Design, Planning and Projects Section of the City of Darwin's Infrastructure Department are to undertake technical investigations, provide responses to external and internal stakeholder enquiries, facilitate designs and undertake construction of items both within the City of Darwin's Capital Works programs and as required.

The key roles of the Planning team within the Design, Planning and Projects section of the City of Darwin's Infrastructure Department are to assess and respond to Development Applications to the Northern Territory Government's Development Assessment Services, to report on Development Applications of particular significance to the City of Darwin and to assess, respond to and report on Alfresco Dining and Signage applications, respond to Northern Territory Planning Scheme amendment proposals and deal with Strategic Planning matters if and when they arise.

DISCUSSION

The following provides highlights of activities which have occurred in the Section during the January to March 2015 quarter and is provided for Council's information:

- Approximately 50 traffic, and associated road safety issues raised by members of the community and others with a vested interest in these matters were investigated by City of Darwin officers. These issues included pedestrian and road safety matters, on-street parking, speeding vehicles, disability access and stormwater drainage problems. Of the approximately 50 issues received 30 have been, or are in the process of being resolved with the remainder under investigation and assessment. Any sites identified as requiring remedial works as the result of these investigations will be prioritised against other works and programmed according to available budget in current or future years.
- The City of Darwin managed the Nightcliff and Rapid Creek Education Precinct Road Safety Assessment on behalf of the Northern Territory Government and the Nightcliff and Rapid Creek Education Precinct Road Safety Assessment went out for broader community consultation which has now concluded. The outcomes of the consultation will be reported to Council in the next Quarter.

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 REPORT NUMBER: 15TS0055 DL: jg
 SUBJECT: INFRASTRUCTURE - DESIGN, PLANNING & PROJECTS - MARCH 2015
 QUARTERLY REPORT

- Work continued on certain elements of the CBD Parking Strategy Implementation Plan. This included further review of parking in the Darwin CBD (including taxi parking) and a response to the Department of Transport's paper on the review of commercial passenger vehicles (including taxis and minibuses) was provided. A draft report outlining proposed changes to on-street parking is being prepared and will be presented to Council for consideration in the next Quarter. The information obtained from the updated on-street and off-street car parking inventory and utilisation study was utilised to inform the review.
- The community feedback received in response to the draft Darwin Bike Plan was assessed and a report on the outcomes of this consultation was presented to Council, seeking the adoption of the updated draft Darwin Bike Plan and associated documents. This report has been laid on the table and will be considered at the May Committee meeting.
- Public exhibition of Developer Contribution Plans for stormwater drainage upgrading in the Darwin CBD occurred. Council has now finalised and adopted these plans and they will be gazetted in the 4th Quarter.
- The review/audit of the City of Darwin's traffic signals throughout the Darwin Municipality has been completed. The work included an audit, review for best practice, review in line with CBD traffic study outcomes and a review in regard to new technologies for these traffic signals. A flexible upgrading program was arrived at to address the outcomes of the review and was presented to Council in March. This endorsed program will now be implemented. Council is seeking great opportunities to assist in delivering this week.
- Works continued on the design of the Nightcliff north rock seawall and other associated actions from the Coastal Erosion report adopted by Council. The sea wall will be delivered during the 2015 Dry Season with funding for the project split over the 2014/15 and 2015/16 financial years.
- Work progressed on a number of Darwin City Centre Master Plan projects, including the upgrading of the Bennett Street/Smith Street and Smith Street/Esplanade intersections, Smith Street/Daly Street intersection upgrade, upgrade of Tamarind Park and new Esplanade promenade path. It is expected that several of these projects will go to tender in the 4th Quarter. These projects are further detailed in the Capital Works Report.

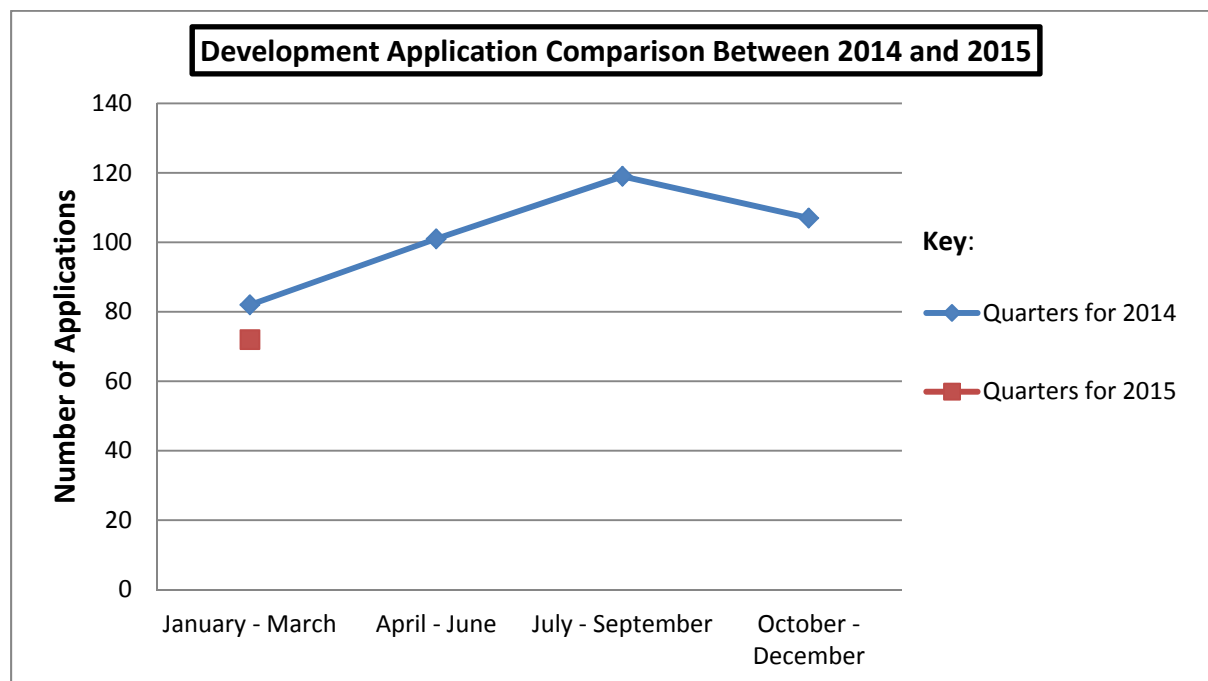
Development Applications for the Quarter, 1 January 2015 – 31 March 2015

Council endorsed 72 letters in response to Development Applications made to the Northern Territory Government Development Assessment Services, for the Darwin Municipality in the January to March 2015 quarter.

Of the 72 Development Applications, 13 were the subject of individual reports to Council. Of the 13 reports presented to Council, four were to amend the Northern

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 SUBJECT: INFRASTRUCTURE - DESIGN, PLANNING & PROJECTS - MARCH 2015
 QUARTERLY REPORT

Territory Planning Scheme, one related to Strategic Planning, five were Summary Reports, and the rest were individual responses to Development Applications.



Sign Applications, Place Names and Outdoor Dining for the Quarter, January to March 2015.

The following two sign applications were received and considered against the City of Darwin Policy No: 042 - Outdoor Advertising Signs Code.

	Description	Permit Issued Y/N or N/A
1.	Nightcliff Woolworths Beer Wine Spirits	Sign is not readily viewable from a public place, no permit required
2.	Westpac Bank – Berrimah Business Park	Pending Council decision - Report to April 1 st Ordinary Meeting

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 QUARTERLY REPORT

Sign Complaints

The City of Darwin received 11 complaints regarding advertising signs.

	Description	Resolved
1.	3 x Variable Message boards (VMB) advertising a business – Goyder Road, Parap, Trafficwerx	VMB's removed by business
2.	3 rd party moveable sign – Edmund Street , CBD, Kebab House	Sign removed by business
3.	Variable Message board (VMB) advertising a business positioned on footpath blocking pedestrian access – Chapman Road, Nightcliff, Essington School.	Sign removed by school
4.	Inappropriate moveable sign - Edmund Street , CBD, Squires Tavern	Sign removed by business
5.	3rd party moveable sign – Cavenagh Street, CBD, Full Moon Massage	Sign removed by business
6.	Oversized moveable sign on nature strip causing a traffic hazard – Benison Road, Winnellie, Battery Power Centre	Sign removed by business
7.	3rd party moveable sign – Cavenagh Street, CBD, Koko Massage	Sign removed by business
8.	3 rd party banner – Lee Point Road, Lyons, Tracey Village Cricket Club	Sign removed by cricket club
9.	3 rd party Variable Message board (VMB) advertising a business – Stuart Highway, Stuart Park, Jamie's Tender Meats	City of Darwin Notice to be issued
10.	<i>ClickFix</i> BM Insurance Oval naming sign	City of Darwin Notice for removal has been issued
11.	<i>ClickFix</i> Oversized business sign – 50 Mitchell Street, Value Inn	Currently under investigation

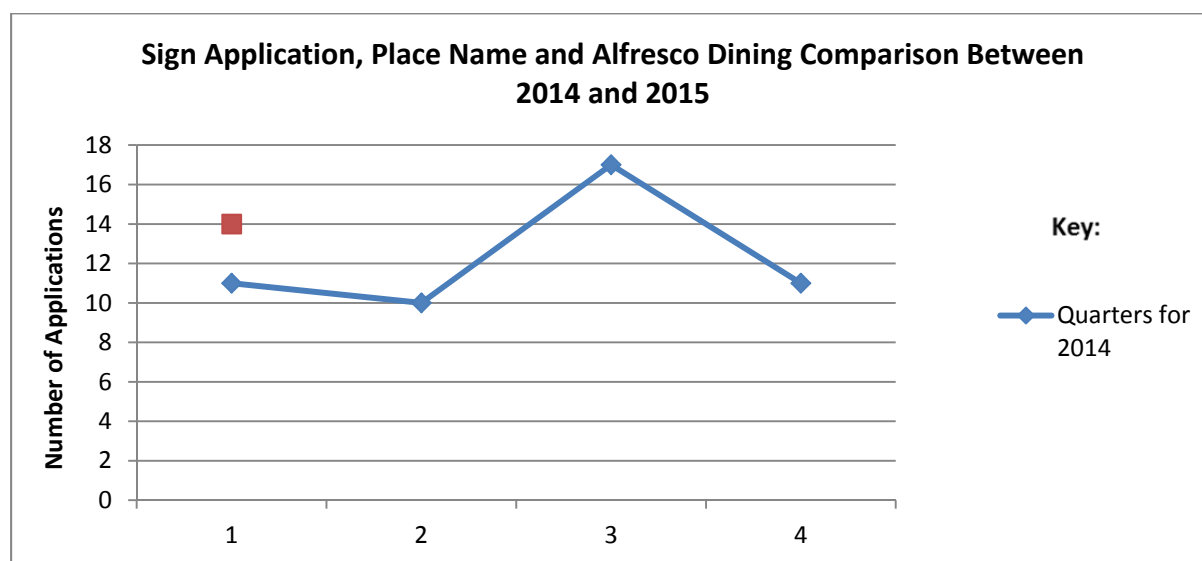
Place Names

There were nil Place Name applications received during this period. However, notification was received from the Place Names Committee, who recently approved the names of 3 parks in Muirhead, Juliet Shields Park, Ted Rowe Park and William Forster Park. All have now been entered in the Place Names Register

Outdoor Dining

One application was received for Outdoor Dining during this period for Mad about Coffee and Tea at Shop, 2 Parap Place, Parap.

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 SUBJECT: INFRASTRUCTURE - DESIGN, PLANNING & PROJECTS - MARCH 2015
 QUARTERLY REPORT



CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Strategic Town Planner.
- Team Leader Design.
- Team Leader Capital Works.

POLICY IMPLICATIONS

All works and activities are undertaken in accordance with the City of Darwin's policies.

BUDGET AND RESOURCE IMPLICATIONS

All of the activities are undertaken in accordance with the City of Darwin's 2014/15 Capital Works and/or Operational budgets.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Consideration of risk, legal and legislative requirements forms part of all considerations of works and activities undertaken by the section.

ENVIRONMENTAL IMPLICATIONS

Environmental considerations form part of all activities and assessments.

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SUBJECT: INFRASTRUCTURE - DESIGN, PLANNING & PROJECTS - MARCH 2015
QUARTERLY REPORT

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

DROSSO LELEKIS
MANAGER DESIGN, PLANNING
& PROJECTS

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

For enquiries, please contact Drosso Lelekis on 8930 0414 or email:
d.lelekis@darwin.nt.gov.au.

**ENCL: ENVIRONMENT & INFRASTRUCTURE
NO COMMITTEE/OPEN**

AGENDA ITEM: 9.7

**INFRASTRUCTURE MAINTENANCE QUARTERLY REPORT - JANUARY TO MARCH
2015**

REPORT No.: 15TS0068 KS:je

COMMON No.: 1887505

DATE: 21/04/2015

Presenter: Manager Infrastructure Maintenance, Kerry Smith

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to provide an update on the activities of the Infrastructure Department – Infrastructure Maintenance section for the January to March 2015 quarter.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan:-

Goal

2 Vibrant, Flexible and Tropical Lifestyle

Outcome

2.2 A sense of place and community

Key Strategies

2.2.3 Improve the landscaping, streetscape, infrastructure and natural environment

KEY ISSUES

Infrastructure maintenance completes routine, programmed and reactive maintenance tasks to ensure Council's parks and reserves, road and path network, stormwater drainage network and buildings are provided in a safe, clean and serviceable condition to meet the expectations of the Darwin community.

RECOMMENDATIONS

THAT the Committee resolve under delegated authority:-

THAT Report Number 15TS0068 KS:je entitled Infrastructure Maintenance Quarterly Report - January To March 2015, be received and noted.

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 REPORT NUMBER: 15TS0068 KS:je
 SUBJECT: INFRASTRUCTURE MAINTENANCE QUARTERLY REPORT - JANUARY TO MARCH 2015

BACKGROUND

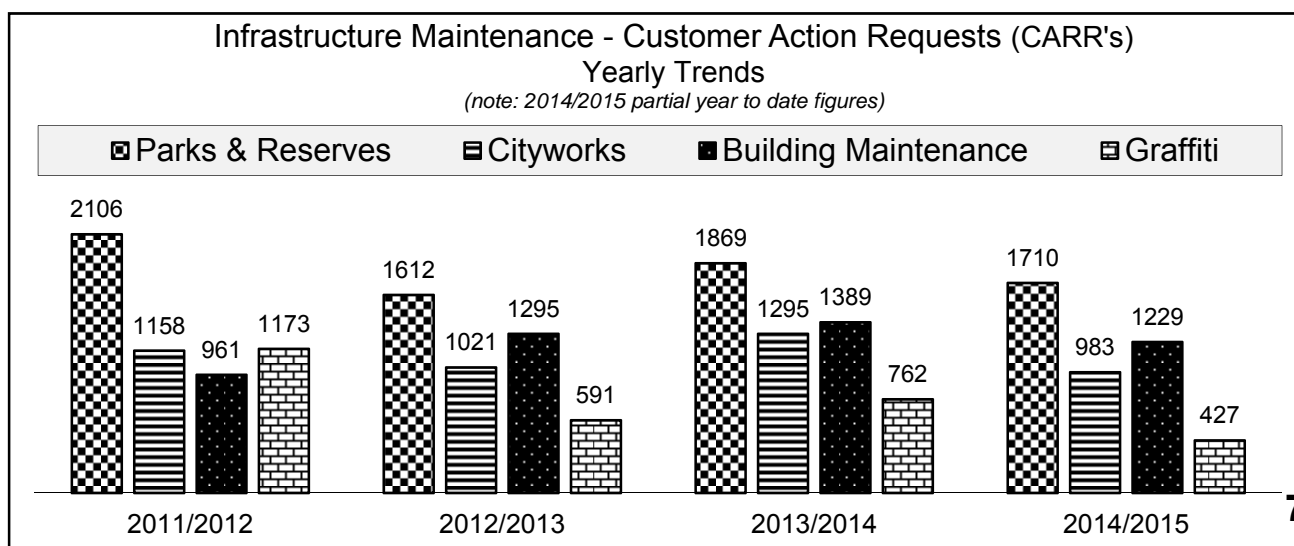
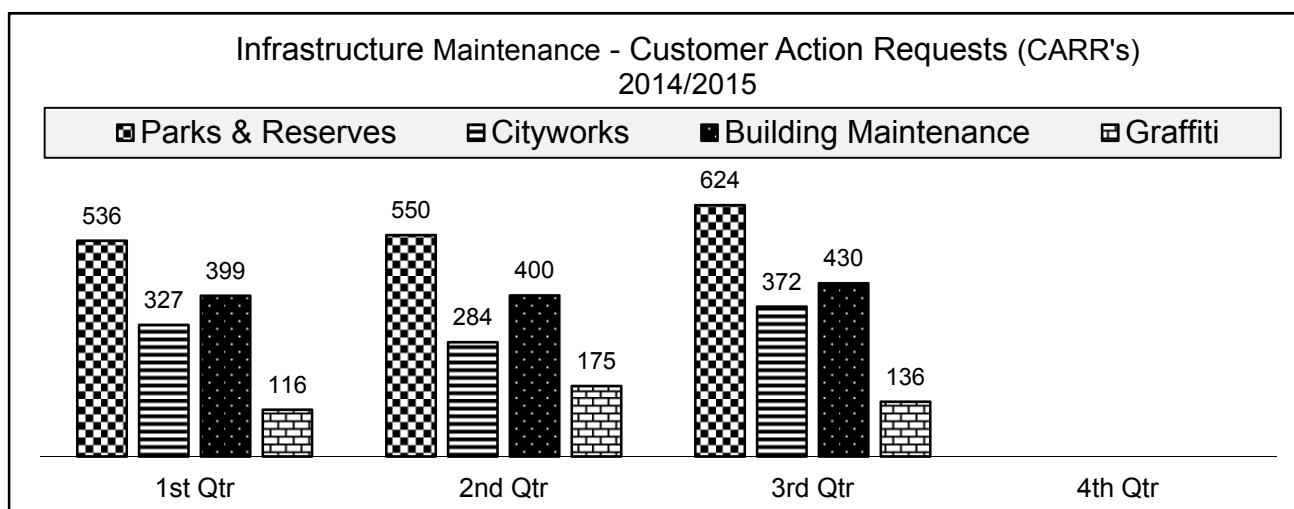
Quarterly reports provide a snapshot of the activities for the Infrastructure Maintenance section within the Infrastructure Department and are provided to inform Council of activities undertaken.

DISCUSSION

The following information provides a broad snapshot of activities and tasks undertaken through Council's Infrastructure Maintenance section. This report also provides some understanding of the variety and quantity of work completed within the section.

Infrastructure Maintenance completes routine, programmed and reactive maintenance tasks to ensure Council's parks and reserves, road and path network, stormwater drainage network and buildings are provided in a safe clean and serviceable condition to meet the expectations of the Darwin community.

In addition to maintenance programs, capital works projects are completed with in-house staff and contractors.



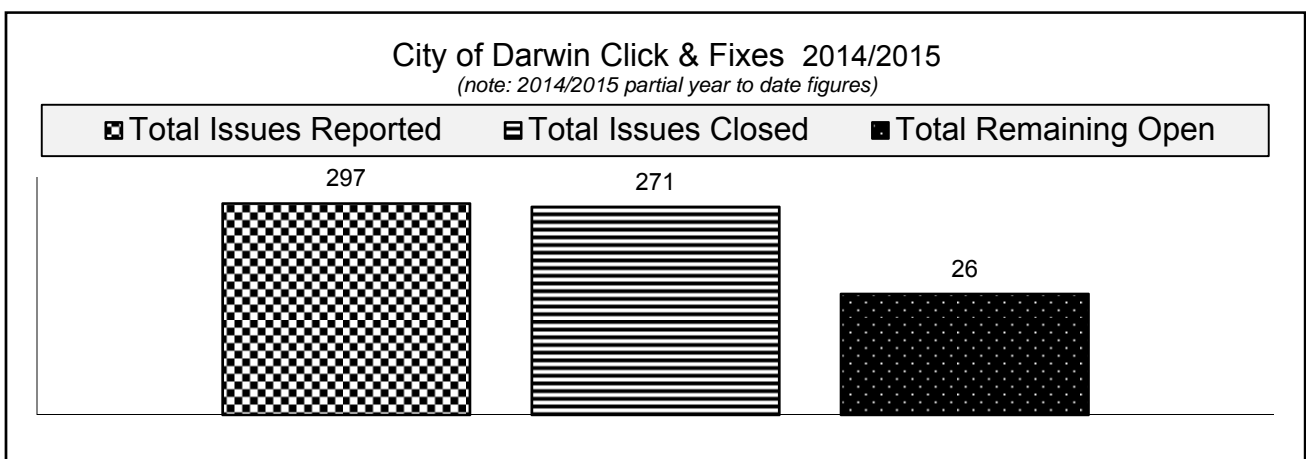
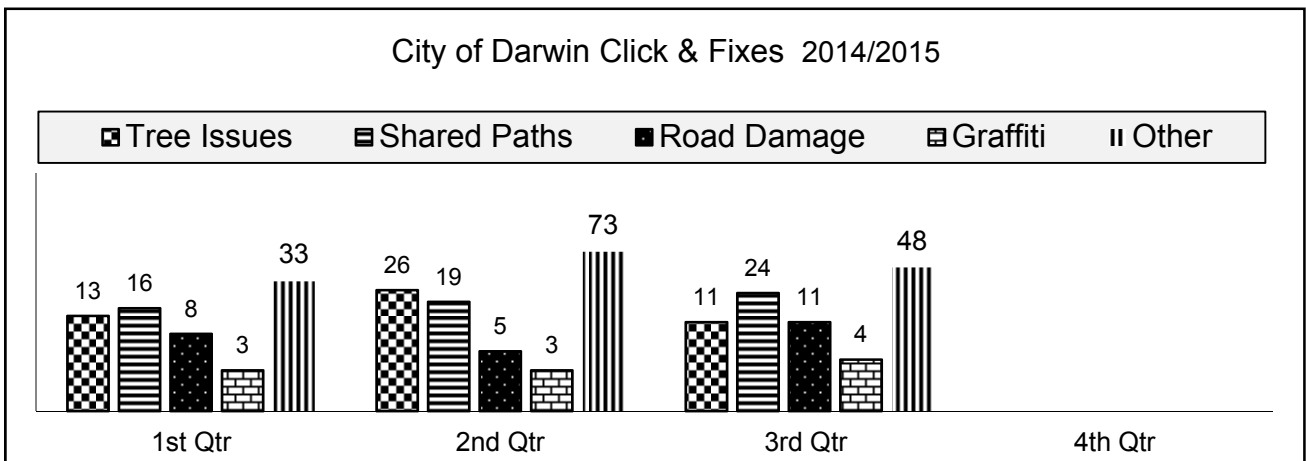
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City of Darwin adopted the use of the “See Click Fix” application in August 2014.

Darwin Click & Fix allows anyone to report and track non-emergency issues anywhere via the internet or application on their smart phone.

Darwin Click & Fix gives Council the ability to work together to enhance our neighborhoods, raise our community standards and improve the overall service provision to the community through a more responsive and more interactive reporting system.

Below are statistics for the current financial year for Infrastructure Maintenance Department.



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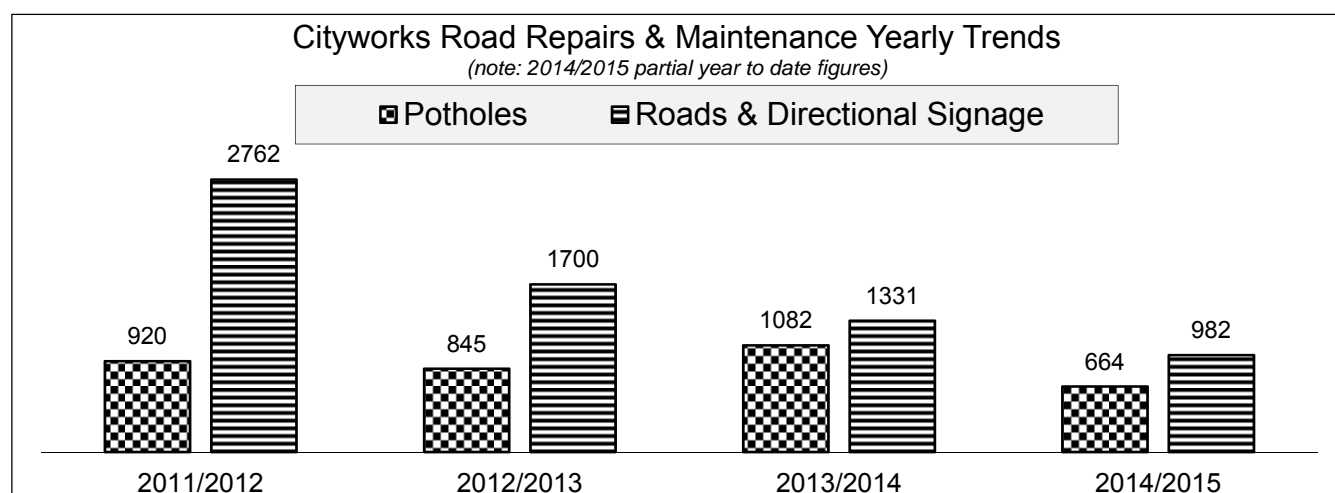
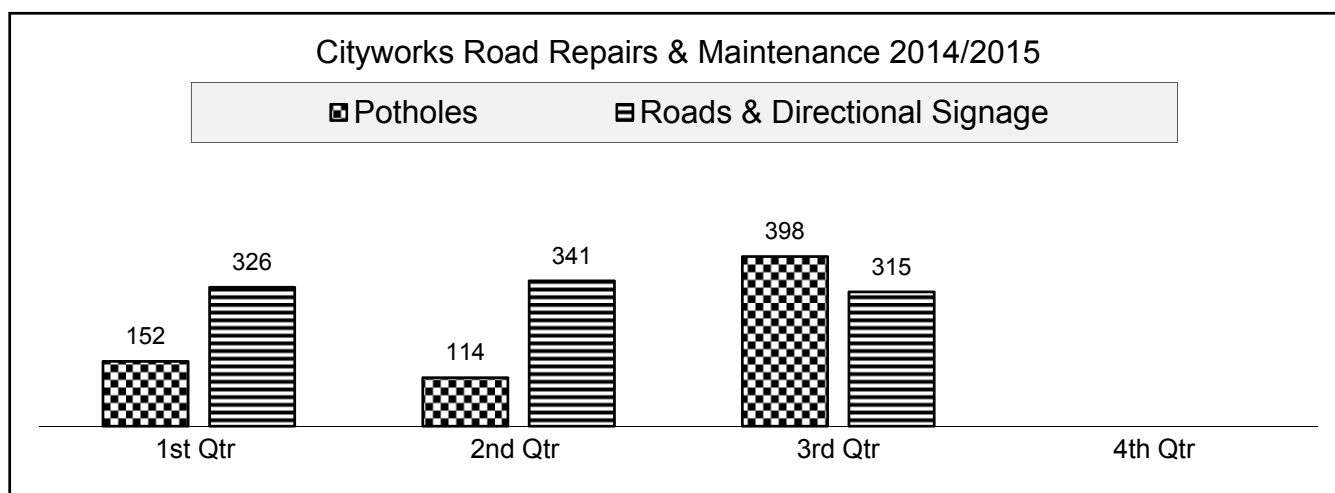
A brief summary of works completed by sections within the department in the January to March 2015 quarter is as follows.

CITYWORKS

Cityworks actioned approximately 372 Customer Action Requests in addition to programmed and proactive maintenance tasks.

Repairs and Maintenance

- Approximately 25 lineal metres of kerb and gutter replaced.
- 250 lineal metres 1.2 wide footpath replaced;
 - Approximately 139m² exposed aggregate concrete footpath replaced.
- Storm water network repairs;
 - Eight side entry pits replaced.
 - Twenty side entry pits repaired.
 - Approximately 450 side entry pits cleared.
- Approximately 398 potholes repaired.
- 315 road and directional signage repaired or replaced.

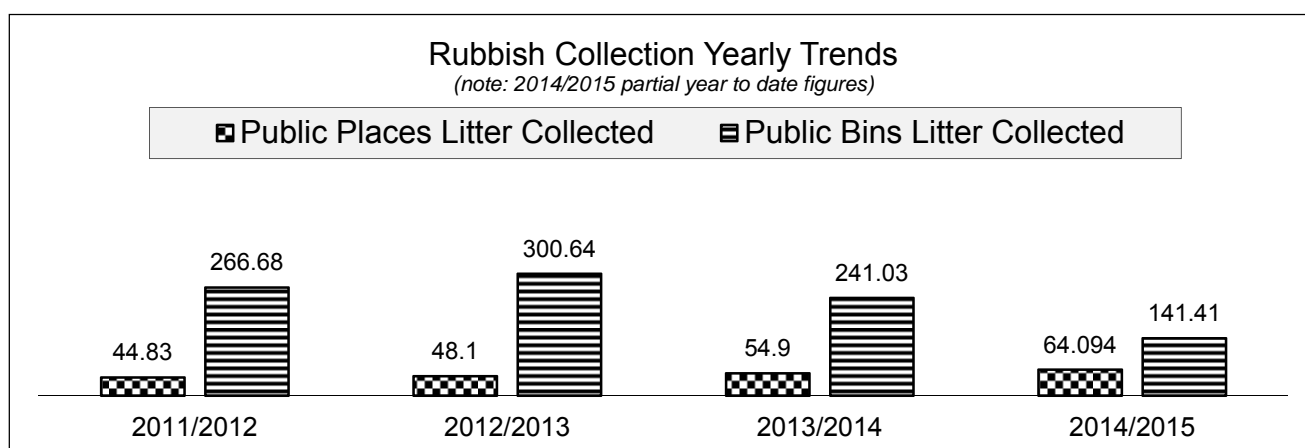
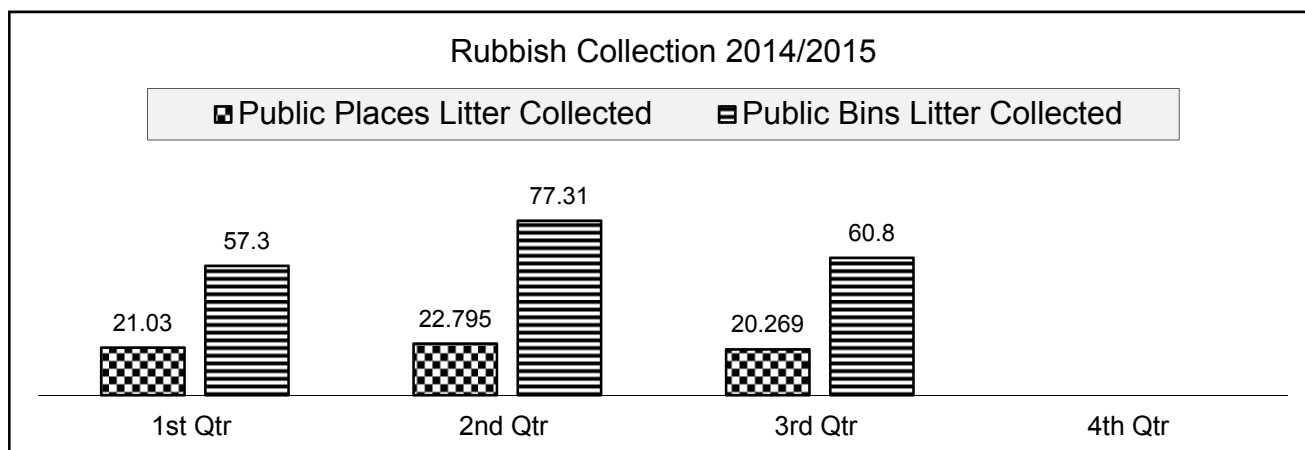


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Rubbish Collection

Foot patrols through the CBD and foreshore reserves collected approximately 20.3 tonnes of litter.

2264 public litter bin collections occurred in the quarter resulting in 60.8 tonnes of rubbish being removed.



Major Works Undertaken for the Quarter

- Approximately 37,000m² of high-pressure cleaning in The Mall, CBD and Parap Shopping Village.
- 23,444m² of asphalt overlay as part of the Road Reseal Program.
- Major road repair works completed at Nudle Steet, Armidale Street Stuart Park, Mitchell Street Darwin, Reichardt road Winnellie
- Repairs of storm water collapse at Jingili Water Gardens.

Major Works Programmed Within the Next Quarter

- Upgrade Parap Shops Vimy Lane
- Walkway Resurfacing Program will include walkways at:
 - Norcock Place and Becker Place to Rapid Creek Road.
 - Curnow Place and Dempsey Place to Ryland Road.
- Fabrication access & egress structures for gross pollutant traps.

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 SUBJECT: INFRASTRUCTURE MAINTENANCE QUARTERLY REPORT - JANUARY
 TO MARCH 2015

PARKS AND RESERVES

The Parks and Reserves section actively maintains approximately 574 hectares of open space. The section actioned 624 Customer Action Requests in addition to proactive maintenance tasks. These requests covered irrigation repairs, vandalism repairs, grass cutting and verge maintenance, tree pruning/removals, stump grinding, fence repairs, litter collection and playground maintenance.

The Parks and Reserves are divided into precinct areas as follows:

- The CBD Precinct maintains 132 hectares in 202 separate areas of public open space including, ovals, road reserve, roundabouts, shopping centre garden beds and street gardens throughout the suburbs of Darwin CBD, Larrakeyah, Bayview, Stuart Park, The Gardens, Parap, Woolner, Winnellie and Berrimah.
- The Central Precinct team maintains 117 hectares in 152 separate areas throughout Nightcliff, Fannie Bay, Coconut Grove, Rapid Creek, Alawa and Nakara.
- The Northern Precinct team maintains 222 hectares in 85 separate areas throughout Anula, Wulagi, Leanyer, Malak, Karama Jingili, Moil, Wagaman, Wanguri and Tiwi.
- The Urban Bush land team is responsible for weed control/herbicide application, litter control, planting programs, re-vegetation and walk trail maintenance to approximately 103 hectares of natural and remnant bush.
- The turf and irrigation team maintains all irrigation systems at approximately 400 sites and 17 active sports reserves within the Municipality.

Major Works Undertaken for the Quarter

- Events & Programs – Bombing of Darwin, Borella Walk, Operation Slipper and Cyclone Tracy commemoration.
- Bicentennial Park turf Restoration.
- Nightcliff Caltrop control.
- Street Tree Planting Program – Tiwi Gardens Road.
- Irrigation installations - Stage 2 Darwin General Cemetery.
- Street Tree Pruning Program – Alawa, Marrara, Moil and Wagaman.

Routine Inspections

- Parks Safety Audits.
- Quarterly Tree Risk Inspections.
- Contractor Due Diligence - 99.4% compliance for the quarter, mowing 1950 parks, greenbelts and ovals.

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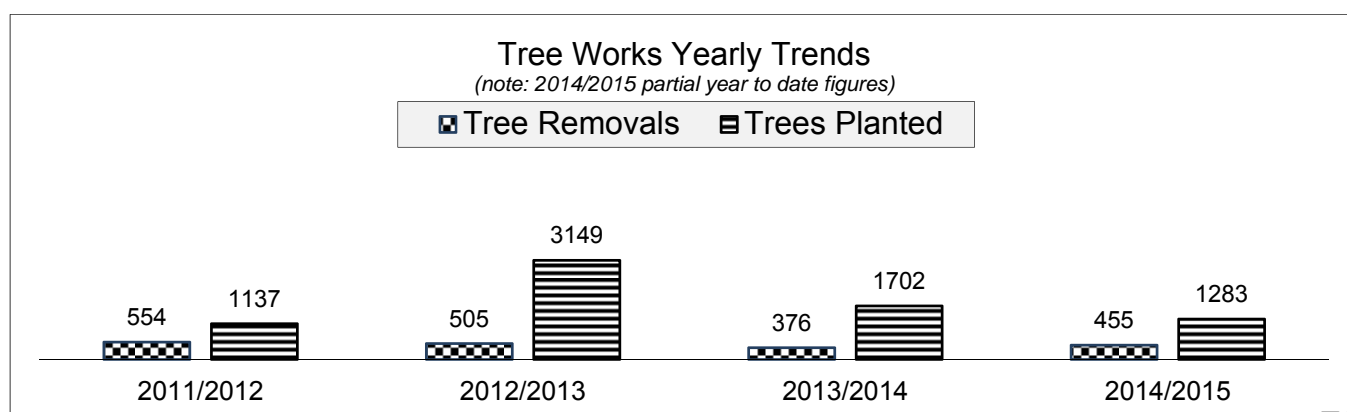
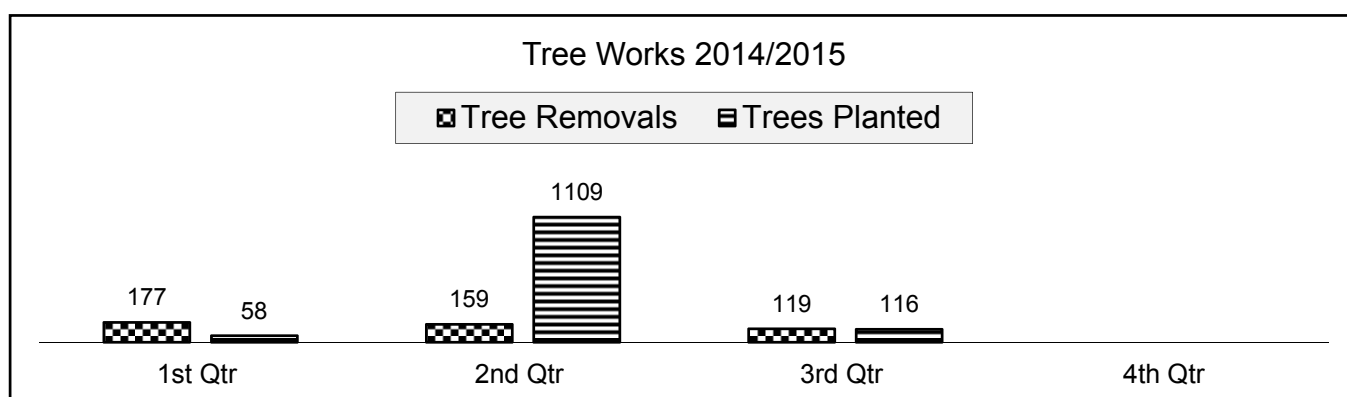
Proposed Major Works Programmed Within the Next Quarter

- Event preparation;
 - ANZAC Parade,
 - Bass in the Grass,
 - Mindil Beach Markets,
 - Italian Festival,
 - Sea breeze Festival and
 - Million Paws Walk.
- Playground installation and refurbishments;
 - Brazil Park,
 - Moil Park and
 - Greenwood Park.
- Jingili Skate Park redevelopment.
- Street Tree Planting Program - 60+ customer verge request plantings.
- Irrigation installations – Stage 3 Darwin General Cemetery, Armidale Park and Savannah Park.
- Street Tree Pruning Program – Suburbs of Brinkin, Karama, Leayner, Malak, Nakara and Woolner.

URBAN FOREST MANAGEMENT

In the Quarter:

- 116 trees were planted in irrigated areas; and
- 119 trees removed.

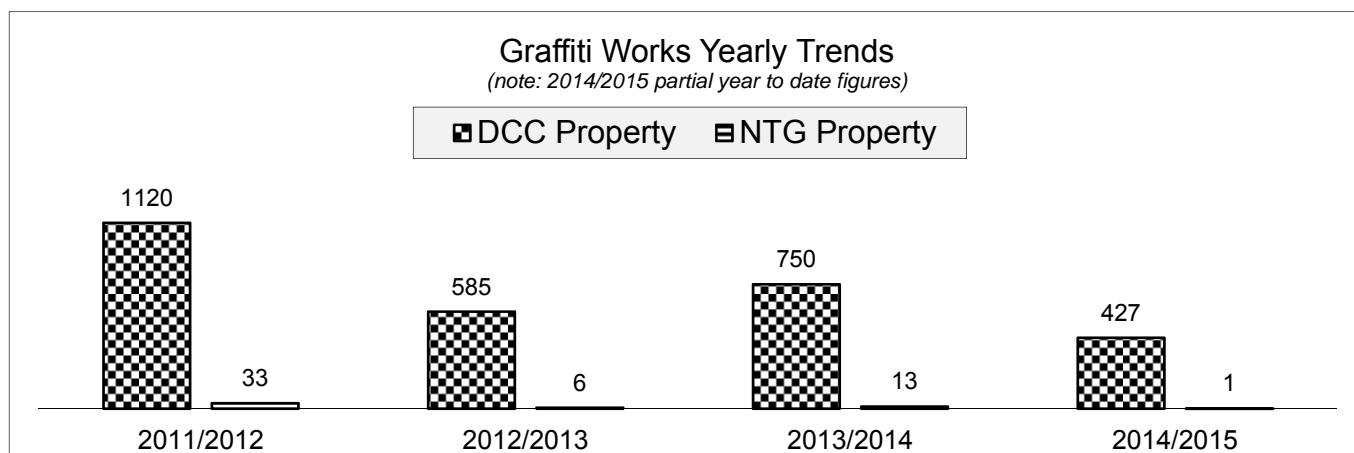
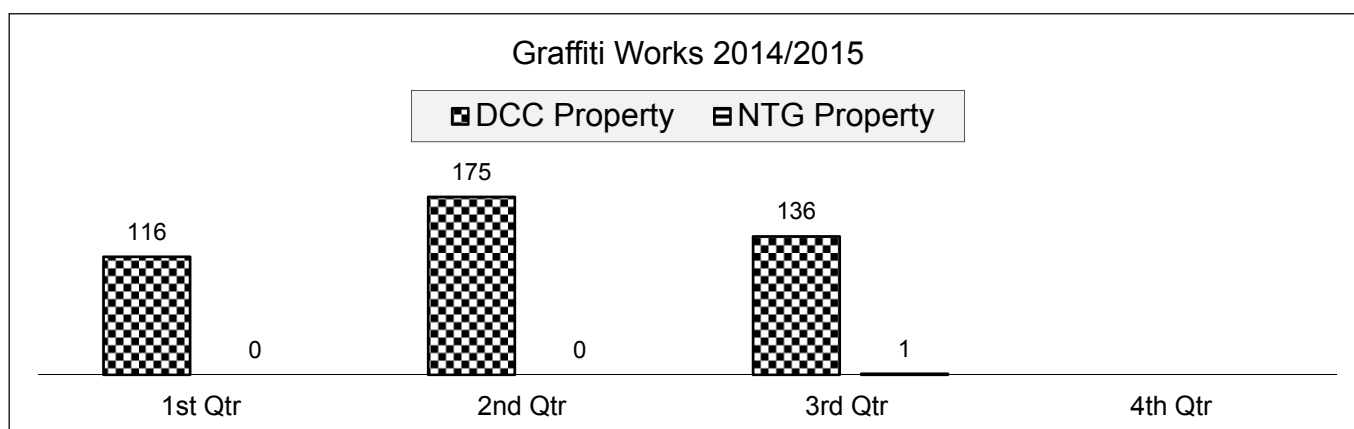


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 SUBJECT: INFRASTRUCTURE MAINTENANCE QUARTERLY REPORT - JANUARY TO MARCH 2015

BUILDING SERVICES

Building services responded to 430 Customer Action Requests over the quarter in addition to proactive maintenance tasks.

Council's Graffiti Team responded to 136 Customer Action Requests relating to City of Darwin and one Northern Territory Government controlled assets, over the quarter.



Some Highlights for the Quarter Include

- Upgrade to Mindil amenities (High school end).
- Bicentennial Park light poles and information booth painted for ANZAC commemorations.
- Office Upgrade Civic Centre.
- Nightcliff and East Point pavilions painted.
- Civic and Operations Centre test and tag completed.
- All lifts certified as required.
- Malak Oval Facilities room upgrade

Major Works Programmed Within the Next Quarter

- Upgrades to Civic Centre Infrastructure office.
- Roof anchors to Raintree Park awning .
- Casuarina Pool upgrade / Auto fill, check-meter.
- Casuarina Library supplementary air-conditioning to public meeting room.
- Upgrade of Mindil amenities (Casino end).

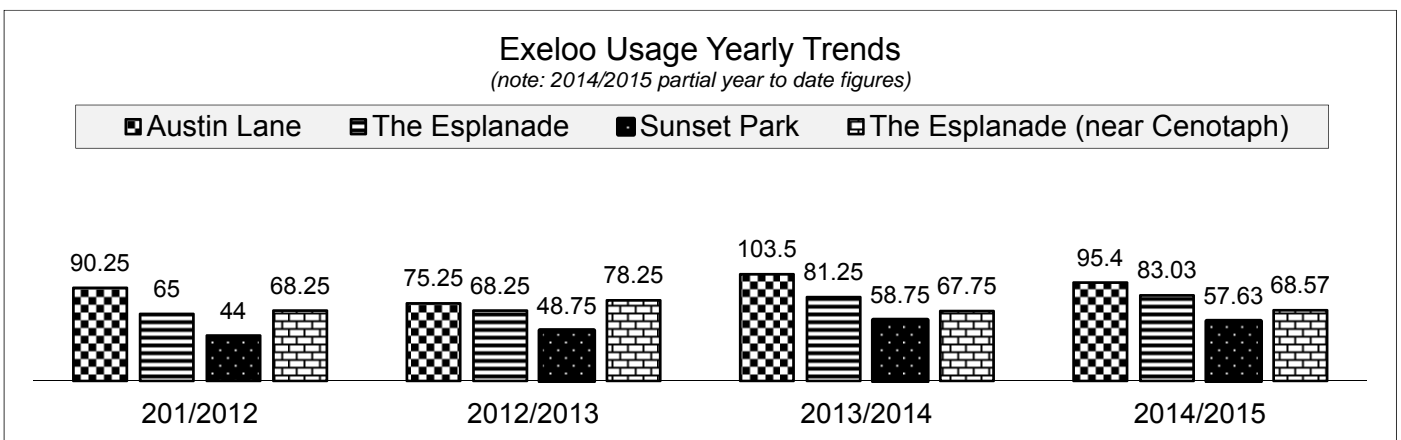
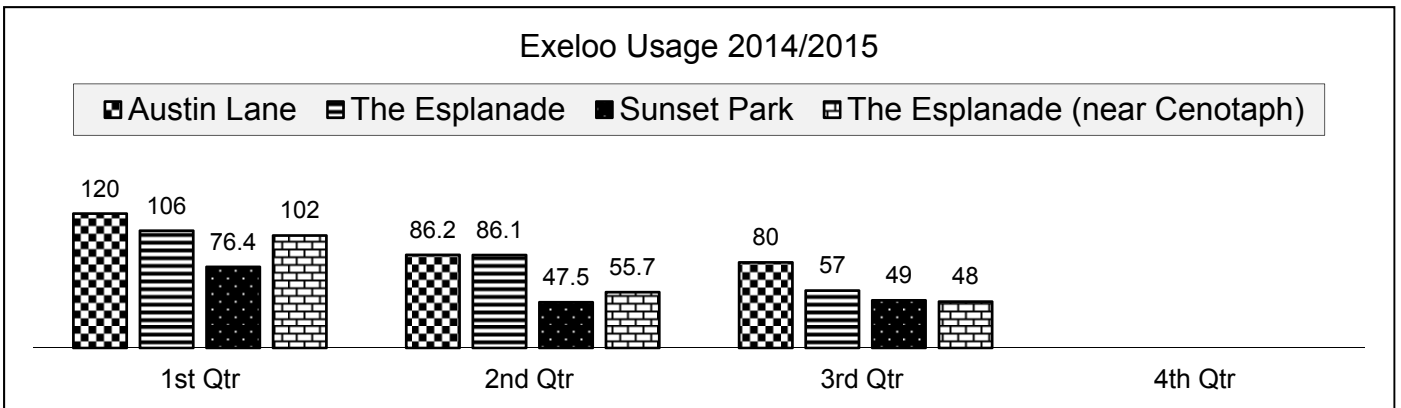
Exeloo Public Toilet Usage

Council operates six public exeloo toilets and four of these are automated to collect statistics on daily usage rates.

The facilities are accessible 24 hours a day, 7 days a week.

Average daily usage rates for the quarter were;

- Austin Lane Exeloo – 80 per day.
- Esplanade Exeloo – 57 per day.
- Sunset Park Exeloo – 49 per day.
- Esplanade Exeloo (near Cenotaph) – 48 per day.



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REPORT NUMBER: 15TS0068 KS:je
SUBJECT: INFRASTRUCTURE MAINTENANCE QUARTERLY REPORT - JANUARY
TO MARCH 2015

CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Team Coordinator Parks & Reserves
- Acting Team Coordinator Cityworks
- Acting Team Coordinator Building Services
- Team Leader Cleaning Services

POLICY IMPLICATIONS

All works undertaken by the section are in accordance with Council policies.

BUDGET AND RESOURCE IMPLICATIONS

Infrastructure Maintenance operates within the current operational and capital works budgets.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Works undertaken through Infrastructure Maintenance are in accordance with legislative requirements and to mitigate Councils risk wherever possible.

ENVIRONMENTAL IMPLICATIONS

Environmental consideration forms part of the quadruple bottom line reporting which guides service levels, procedures and work activities.

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

KERRY SMITH
MANAGER INFRASTRUCTURE
MAINTENANCE

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

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ENCL: ENVIRONMENT & INFRASTRUCTURE
NO COMMITTEE/OPEN

AGENDA ITEM: 9.8

CAPITAL WORKS - MARCH QUARTERLY REPORT

REPORT No.: 15TS0054 NK:jg

COMMON No.: 1541601

DATE: 21/04/2015

Presenter: Manager Design, Planning & Projects, Drosso Lelekis

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to provide an update on the status of Capital Works projects within the 2014/2015 budget, for the January to March 2015 Quarter.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

5 Effective and Responsible Governance

Outcome

5.5 Responsible financial and asset management

Key Strategies

5.5.1 Manage Council's business based on a sustainable financial and asset management strategy

KEY ISSUES

- The City of Darwin's 2014/15 Capital Works budget is \$34.7 million.

Original Budget	\$19,857,018
Carry Forward	\$ 8,633,374
1 st Qtr Budget Variation	\$ 6,146,490
2 nd Qtr Budget Variation	\$ 64,320
Total	<u>\$34,701,202</u>

- This report updates Council on the progress of the 2014/2015 Capital Works projects managed by the Infrastructure Department (total \$30.2 million) for the January to March 2015 Quarter.

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 REPORT NUMBER: 15TS0054 NK:jg
 SUBJECT: CAPITAL WORKS - MARCH QUARTERLY REPORT

RECOMMENDATIONS

THAT the Committee resolve under delegated authority:-

THAT Report Number 15TS00054 NK:jg entitled Capital Works - March Quarterly Report, be received and noted.

BACKGROUND

City of Darwin's 2014/2015 Capital Works Budget as at 31 March 2015, is \$34.7million.

As of the end of March 2015, City of Darwin has committed or completed projects to the value of \$21.1 million which represents 60.80% of the City of Darwin's total Capital Budget.

Of the total Council Capital Works Budget, \$30.2 million is directly managed and delivered by the Infrastructure Department. This report focuses on the progress of projects within the Infrastructure Department.

DISCUSSION

As of the end of March 2015, the Infrastructure Department has committed or completed projects to the value of \$18.4 million which represents 60.92% of the total infrastructure component of the City of Darwin's Capital Budget. A number of the significant projects are subject to separate reports and decisions of Council.

The following is a summary of the status of some significant valued projects within the 2014/2015 Infrastructure Capital Works Program as of the end of March 2015:

- **Road Resurfacing: \$2.6 million.**
 The road resurfacing program commenced in September 2014 and all works are expected to be completed by early June 2015. The works have been programmed and commenced, with the bulk of works to be undertaken in the 4th quarter following the end of the Wet Season. A contract is in place and works have been programmed.
- **Playground Refurbishment: \$1.6 million.**
 The status of some of the projects within this program are as follows:
 - i). Playground Refurbishment 2013/14 Program (carry forward) - \$131,604. Young Park, Duke Park, Anthony Memorial Park, Dashwood Park, Warrego Park and Allen Park were completed in July 2014. Cameron Park was delayed due to equipment supply issues, but is now completed.

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 SUBJECT: CAPITAL WORKS - MARCH QUARTERLY REPORT

ii). Anula Regional Playground additional shading - \$50,000
 Project has been re-scheduled while community consultation is undertaken into the refurbishment of the Anula regional playground. A 3rd quarter budget variation to move the funds to the Asset Refurbishment Reserve has been prepared for Council's consideration. Works will occur after July 2015 to coincide with the major upgrade and the funds will be re-drawn from the reserve when required.

iii). Playground refurbishment 2014/15 - \$240,823
 Community consultation was undertaken in January/February 2015 for the refurbishment of Greenwood Park, Moil and Brazil Park, Karama. Quotes for the works have been obtained with works to be committed in April for construction in June 2015.

A consultation plan will be developed for the Anula Regional Playground refurbishment. Consultation is intended to be undertaken in April and May 2015. Funding provided is for preliminary design, consultation and works, with the balance of works to be undertaken in 2015/2016, subject to budget provision.

iv). Lyons Hall Playground Shade - \$40,000
 Procurement finalised, with project delivery May 2015.

v). Moil Oval Playground - \$45,000
 Community consultation was undertaken in January/February 2015. Quotes for the works have been obtained with works to be committed in early April for construction in May/June 2015.

vi). Jingili Water Gardens Skate Park Upgrade - \$424,823
 Tender for detailed design and construction was awarded in November 2014. Demolition and construction of the park will commence early April 2015. The park is due to be completed in June 2015. It is intended to have the skate park in use for the mid-year school holidays.

Construction of the facility will be in concrete and finished to a standard that meets with key performance indicators for skate parks developed by Skateboarding Australia, the peak body for skateboard sports in Australia.

vii). Richardson Ward Playgrounds Project - \$315,045
 Construction of all playground works is complete.

- **Nightcliff Oval Fence - \$50,000**

Grant funding of \$50,000 was received in the 4th quarter of 2013/14 from the Northern Territory Government to fund the replacement/construction of a fence around the Nightcliff Oval playing surface. The new fence will be a 1.2 metre high, galvanised post, top and bottom rail with black chainmesh infill. Construction is currently underway and is due to be completed mid April 2015 to coincide with changes in sport seasons.

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- **Nightcliff Pool Pump: \$772,626**

The majority of works and commissioning of equipment were completed in December 2014. The pool was reopened to the public on 7 December 2014. Minor landscape finishing works are being undertaken this quarter in conjunction with the Master Plan, Lot 8657 Nightcliff Foreshore works (Stage 1).

- **Nightcliff Café: \$1.5 million**

Council approved the design concept for the Nightcliff Café at its Ordinary Meeting on 9 December 2014. Design and documentation finalisation for the building is underway. A Development Application for the project has been lodged and the exhibition period has closed. The matter is still to be considered by the Development Consent Authority. The Café is expected to be opened in November 2015.

- **Master Plan, Lot 8657 Nightcliff Foreshore (Stage 1)**

Council endorsed the Master Plan in December 2014. Council further approved the implementation of Stage 1 works identified by the Plan to be undertaken over the 2014/2015 and 2015/2016 financial years, subject to available budget.

Works have commenced with the relocation and upgrade of the Nightcliff Pool fence expected to be completed in April 2015.

The foreshore fencing proposed to close gaps that exist in this area is progressing with materials ordered. It is envisaged that construction on site will commence in April 2015 and be completed by mid May 2015.

Design work has commenced on the new shared path which will follow the foreshore

- **Malak Oval Training Lights: \$375,768**

Project has been completed and was launched in April 2015.

- **Stormwater Upgrades: \$1.47 million**

2014/15 Program consists of one major project, being Tiwi Gardens Road and Manbulloo Street, Tiwi.

A contract was awarded and funds have been committed.

Works commenced in November 2014 and are progressing. The project is expected to be completed by May 2015.

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- **Anula Shopping Centre Additional Car Parking Bays:\$65,000**

Two design options, traditional pavement and permeable pavement, have been assessed for suitability. A traditional pavement design has been selected option due to the following reasons:

- Additional construction costs due to the technology employed in permeable pavement construction
- The recharge of ground water or watering of vegetation at this site does not provide the desired environmental outcomes expected of a permeable pavement.

The estimated cost for each pavement type is:

Permeable Pavement	\$70,000.00
Traditional Pavement	\$42,000.00

The project is scheduled to be delivered prior to 30 June 2015 with works commencing in May 2015.

A number of existing palms in the green space will be removed and replaced with native trees.

Council will continue to explore applications for the use of permeable pavements.

- **Shared Path Construction and Reconstruction: \$738k**

Projects for the 2014/15 financial year will be determined by recommendations from the Darwin Bike Plan once it has been adopted by Council. It is envisaged that the Bike Plan will be adopted in May 2015.

There may be a need to carry forward a proportion of the 2014/15 Shared Path Construction and Reconstruction budget, as there will be insufficient time to complete all of the proposed Year 1 Bike Plan infrastructure projects by the end of June 2015. This will be reviewed once the draft Bike Plan has been adopted.

- **Pathway Construction and Reconstruction: \$1.058 million**

Community consultation has been undertaken. Footpath construction has commenced and is progressing. The program is scheduled to be completed by end of June 2015.

- **Road to Recovery (Esplanade Resurface Reconstruction) 1.6 million**

The design/documentation for the Esplanade Resurface Reconstruction Project, which was the subject of a Road to Recovery funding bid, is complete and the production of tender documents is underway. Funding confirmation has been received from the Australian Government and the project will go to tender in April 2015. Construction will commence by June 2015 and be completed by November 2015. The total project value over the two (2) financial

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year period is estimated at \$3.4million and the roadwork's are funded by the Australian Government.

Landscaping, LED street lighting upgrade and an on-road cycle lane are included in the overall project.

A 3rd quarter budget variation has been prepared for Councils consideration to adjust the grant funding in the 2014/15 Capital Program for this project from \$1.6m to \$0.6m to align with current expenditure forecasts. The balance of the funding will be expended in 2015/2016. This adjustment does not affect timeframes on grant funding but reflects actual delivery.

- **Coastal Erosion: \$946,000**

The status of projects within this program is as follows:

- i). Coastal Erosion Management Plan - \$852,733

Design and documentation for the Nightcliff North rock seawall is being finalised. Environment Protection and Biodiversity Conservation Act self-assessment has been undertaken with the final report received in January 2015. An Aboriginal Areas Protection Authority Certificate has been issued for the works.

Tender documentation is being finalised for advertising in the fourth quarter with construction envisaged to commence in June 2015. Community consultation to inform the community of the project will commence in the fourth quarter.

The construction of the sea wall will be undertaken during the 2015 Dry Season with funding for the project split over the 2014/15 and 2015/16 financial years. As the majority of the expenditure on the project will occur in the 2015/16 financial year, a budget variation will be prepared for Council's consideration for \$500,000.00 to be transferred from the 2014/15 Capital Works Program into the Asset Refurbishment Reserve to be re-drawn in 2015/2016.

The total project cost is estimated at \$1.6 Million.

- ii). Rock Wall Kurrajong Street – \$50,000

Project has been completed. Consideration is being given to extending the scope of this project in 2015/2016 to protect a larger area of the foreshore.

- **Darwin City Centre Master Plan Projects: \$3 Million**

Master Plan Projects (MPP) were subject to a separate report presented to Council in September 2014.

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An overall communication plan for the MPP has been developed and discrete community consultation plans are being developed to suit individual projects.

The following is a summary of the progress of each of the identified projects:

Project	Status
MP002 Smith Street/The Esplanade Intersection Treatment	Detailed design and documentation is nearing completion. Tender documentation being prepared for advertising in April 2015.
MP009 Bicentennial Park Playground	Detailed engineering survey completed. Project brief being developed for advertising of a Request for Proposal to design and construct in April 2015. Innovation is being sought as well as inclusion of water play elements. Feasibility into making this area and/or the whole Esplanade Wifi accessible is being undertaken for inclusion if considered viable. Community information will commence in April 2015.
MP010 Bicentennial Park View Corridors	Works completed September 2014.
MP012 Esplanade Parade	Detailed engineering survey completed. Assessment of feasibility to construct path underway.
MP032 Smith– Daly Street Intersection	Intersection analysis concept design and cost estimation of the works is progressing. Council has been successful in securing funding from the Black Spot Program to the value of \$550,000. Anticipated call for tenders in the 4 th quarter following community information program. A separate report will be presented to Council on this project.
MP036 Smith–Bennett Street Intersection	Detailed design and documentation is nearing completion. Tender documentation being prepared for advertising in April 2015.
MP037 Tamarind Park Upgrade	Detailed engineering survey is complete. Consultation with stakeholders has been undertaken to inform design concept. Concept design completed. Tender documentation being finalised for advertising in April 2015. Project will include elements such as improved connectivity, Wifi, upgraded lighting and flexible spaces for use. Council has also been successful in obtaining a grant of \$42,000 for this project.
MP044 Cooling Weather Protection Prototype	Consultation on geo thermal cooling potential with CDU has identified that use of geo thermal cooling does not have potential. Other options to provide project deliverables will be explored in 2015.

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- **CBD Public Toilet - \$250,000**

Tenders for the provision of an automated toilet as per the intent of the approved 2014/2015 budget were called in February and closed in March 2015. Submissions are currently under assessment.

The toilet will be positioned in Civic Park adjacent to Smith Street. Its final location has been determined following consultation with adjoining property owners and has taken into consideration factors such as CPTED principles and service locations.

The facility will be operated such that it is accessible 24 hrs a day, seven days a week.

- **Photovoltaic System Operations Centre - \$200,000**

Tenders were called for the installation of a photovoltaic system at Council's Operations Centre in Bishop Street in February 2015.

Power Water Corporation has approved a system to a maximum size of 100KVA for the facility.

Works are anticipated to be completed by 30 June 2015.

- **Emergency Back Up Generators - \$600,000**

- i. Bishop Street

Works on a generator and new UPS to provide power in the case of an emergency to the entire facility have been completed.

- ii. Civic Centre, CBD

Tenders were called in February 2015 and have been awarded. Works are anticipated to be completed by 30 June 2015.

- **West Lane Car Park Fire Service Upgrade - \$220,000**

The design and documentation for the upgrade to the water services in the event of a fire and the replacement of underground water services to tenancies was completed. Tenders were called in January with the contract for services awarded in March 2015. Works anticipated to be completed by June 2015.

- **Monty's On The Mall**

Detailed design and documentation is underway, public tender for the project will be called once final documents have been received.

- **Nightcliff Community Hall Air Conditioner - \$220,000**

A scope of works was finalised following consultation with the hall stakeholder group, Corrugated Iron. Tenders were called in February 2015 and are

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currently under assessment. Award of a contract is envisaged in April with works anticipated to be completed in June 2015.

CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Asset Accountant
- Team Leader Capital Works
- Manager Infrastructure Maintenance
- Team Leader Design
- Team Coordinator Building Services

POLICY IMPLICATIONS

All works are undertaken with consideration of Council policies.

BUDGET AND RESOURCE IMPLICATIONS

As provided within the body of this report.

A number of 3rd quarter budget variations have been prepared for Council's consideration to reflect status of projects. Where required funds will be redrawn from the reserves when required for delivery of the projects.

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

All works undertaken within the capital works program will be undertaken in compliance with appropriate legislation.

ENVIRONMENTAL IMPLICATIONS

Deliverables from the projects identified within this report will have where practical, sustainable aspects built into them such as solar powered energy efficient devices, re-use of water and consideration of long-term maintenance outcomes.

Environmental implications for the construction of the Nightcliff Seawall (Coastal Erosion program) have been assessed and a report identifying any impacts and addressing mitigation measures was received in January 2015.

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COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

DROSSO LELEKIS
MANAGER DESIGN, PLANNING
& PROJECTS

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

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ENCL: ENVIRONMENT & INFRASTRUCTURE
NO COMMITTEE/OPEN

AGENDA ITEM: 9.9

WASTE AND RECYCLING - MARCH QUARTERLY REPORT

REPORT No.: 15TS0066 ND:mn COMMON No.: 1738353

DATE: 21/04/2015

Presenter: Manager Technical Services, Nadine Douglas

Approved: General Manager Infrastructure, Luccio Cercarelli

PURPOSE

The purpose of this report is to provide an update on Council's waste management and recycling activities for the January to March 2014/2015 quarter.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

3 Environmentally Sustainable City

Outcome

3.1 Council's carbon footprint reduced

Key Strategies

3.1.3 Reduce Council's waste production

KEY ISSUES

- Council's waste management services including Shoal Bay Waste Management Facility (SBWMF) and waste collection continued throughout the quarter.
- The planning for the 2015 pre-cyclone clean-up has commenced, with the dates being 29-30 August for the northern suburbs and 19-20 September for the southern suburbs.
- 106 white goods and air-conditioning units containing gases were degassed and recycled by the Recycling Facility contractor this quarter.
- Work on the Waste Management Strategy has commenced with a workshop held in February 2015.
- The trial for the new transfer station barriers commenced in March with the installation of barriers at 2 of the 8 bays.

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 REPORT NUMBER: 15TS0066 ND:mn
 SUBJECT: WASTE AND RECYCLING - MARCH QUARTERLY REPORT

RECOMMENDATIONS

THAT the Committee resolve under delegated authority:-

THAT Report Number 15TS0066 ND:mn entitled, Waste and Recycling – March Quarterly Report, be received and noted.

BACKGROUND

Quarterly reports on waste management and recycling activities are provided to inform Council of recycling and waste collection volumes and trends.

DISCUSSION

Shoal Bay Waste Management Facility

The Shoal Bay Waste Management Facility provides a transfer station and mulching operations for use by domestic users, landfill for commercial users, recycling collection with sales facility and a landfill gas processing plant.

Gas Extraction Operations

On average, sufficient power is now generated from the gas extraction process to power more than 1,100 Darwin homes per annum. At the time of writing the report, the data for the last quarter was not available for reporting.

Mulching Operations

The quantity of residential green waste mulched has decreased from the previous quarter with a total of 3,430 m³ of residential green waste processed this quarter, as indicated in the graph below. This reflects the amount mulched, not the amount brought to the site, so processing periods can affect the numbers reported.



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 SUBJECT: WASTE AND RECYCLING - MARCH QUARTERLY REPORT

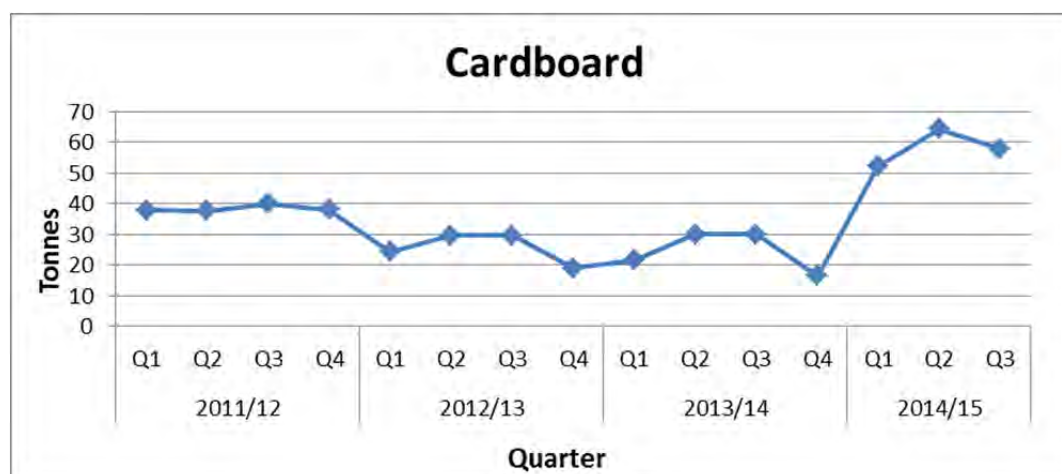
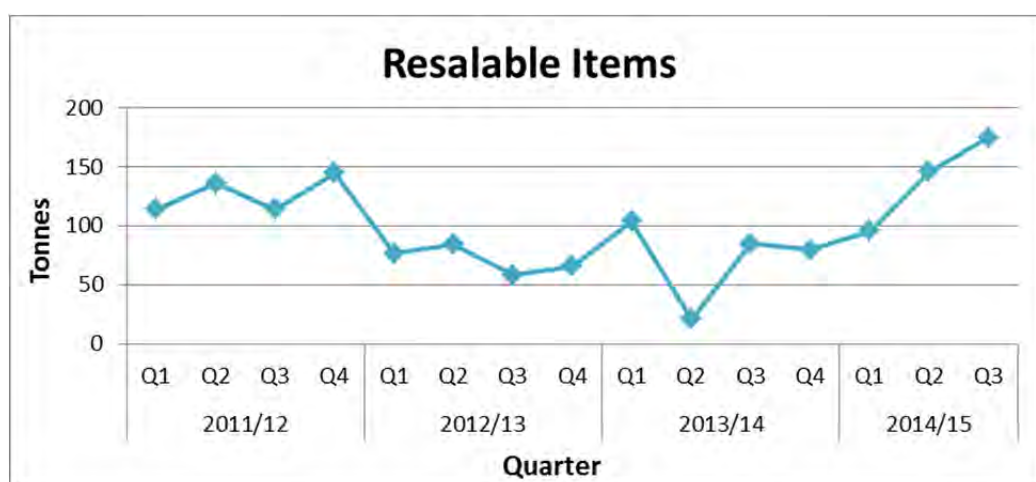
Recycling Operations

Material for resale and recycling is collected at the recycle facility, either from material being dropped off at the facility, or through the contractor collecting the material from the transfer station or inert waste landfill cell.

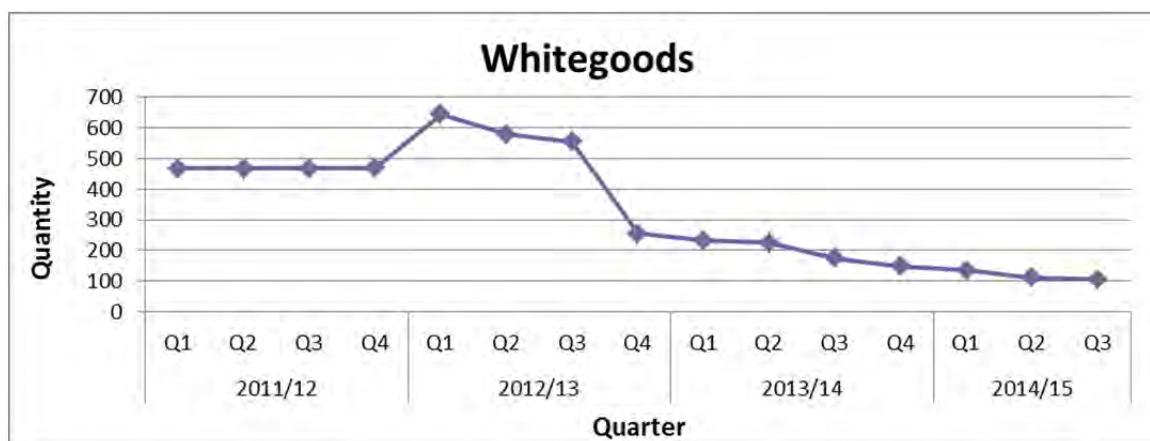
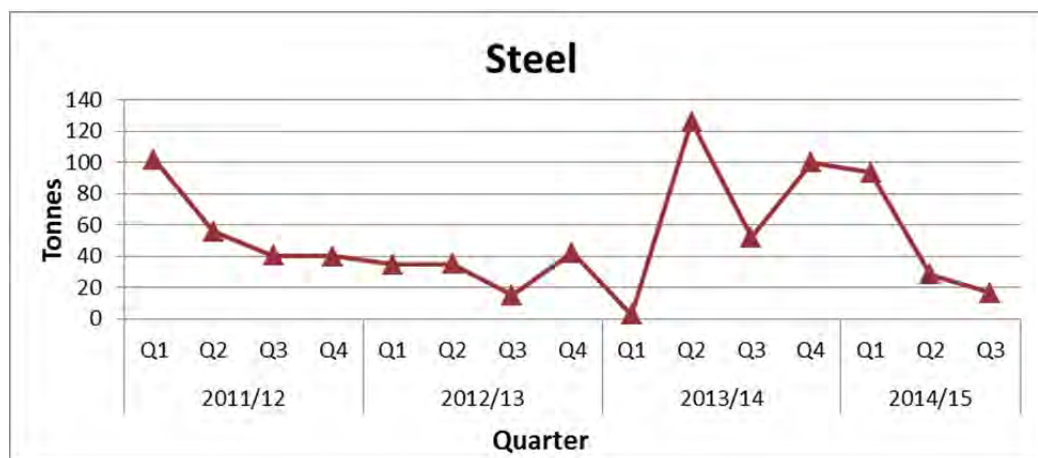
The volume of recyclables received at the recycling facility are listed for the quarter and graphed below.

- E-waste - 35 items collected for recycling with 25 being sold in the shop and the remaining 10 items being stored for recycling
- Recovered packaging recyclables – 18.5 tonnes of cardboard, 1.6 tonnes of glass and 1.25 tonnes of plastic
- Degassing - 106 white goods degassed and recycled
- Compact fluorescent lamps (CFLs) - 22 were accepted at the facility

The below graphs represent the quantities retrieved from landfill and the transfer station each quarter since 2011/12.



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There are no particular trends from the items being recycled through the facility. Education in relation to improving the usage of the recycling facility is an important function of the waste and recycling team and minor improvements, such as the increase in resalable items, are considered positives as it results in a reduction of overall material ending up in landfill.

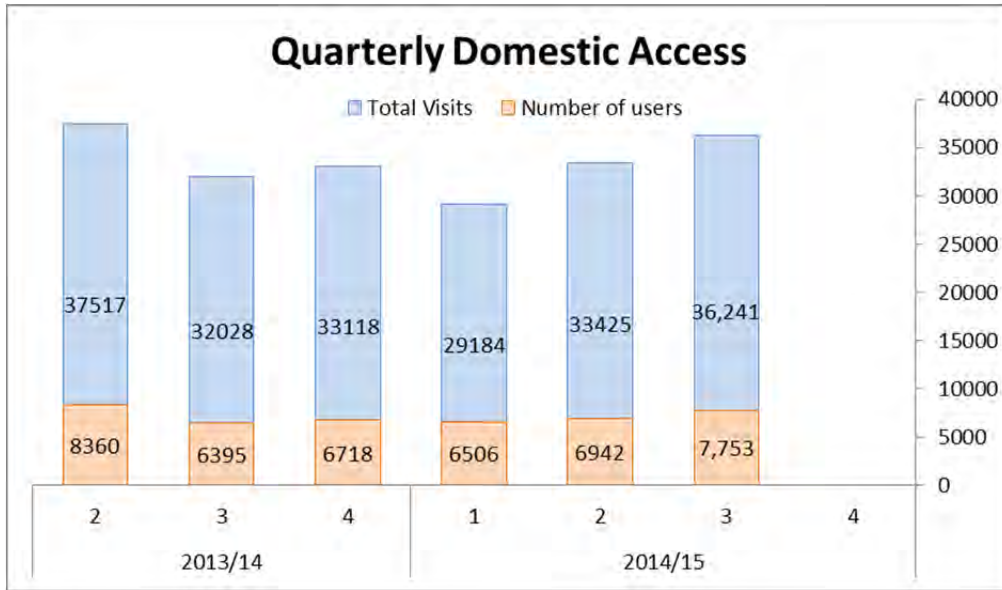
Domestic Access to Shoal Bay

There were a total of 36,241 visits to the site in this quarter which includes access to the transfer station and to the green waste disposal area. There has been an increase in the number of visitors from the previous quarter as well as an increase in the number of visits from the same quarter for the 2013/2014 financial year.

There were 7,753 domestic users of the transfer station and green waste disposal areas, for a total of 36,241 visits, representing an average of 4.7 visits per user over the quarter, which is consistent with the average number of visits for the last 5 recorded quarters.

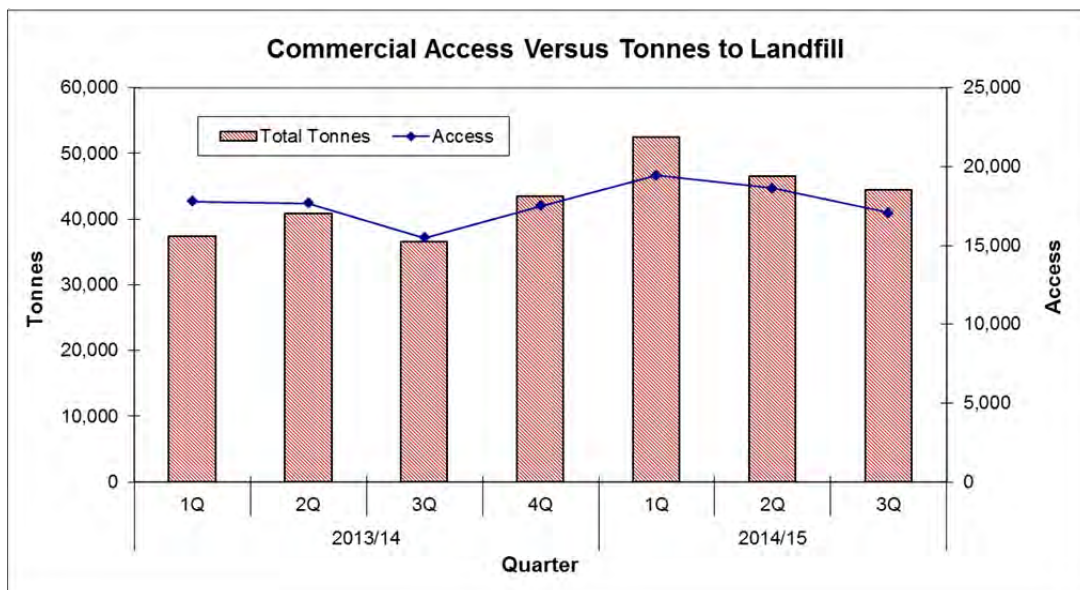
There are approximately 27,522 ratepayers able to access Shoal Bay via the tip tag system, therefore the 7,753 users over the quarter represents 28% of the municipality.

Three properties were identified with consistent high usage this quarter and were issued with letters requesting information on their access usage. All three have provided responses to Council explaining their high usage, which included one person disposing of small quantities of household putrescible waste daily, one disposing of small loads of palm fronds and one commercial user who is now using the commercial lane (and paying) for disposal.



Commercial Access to Shoal Bay

Commercial access includes all commercial users and waste accepted from Palmerston, Litchfield and Dundee transfer stations. The average commercial load disposed of at Shoal Bay this quarter was 2.60 tonnes with 44,463 tonnes brought in over 17,078 loads. This represents a decrease of 2,043 tonnes from the previous quarter and 1,555 less visits with the average load increasing by 0.11 tonnes.



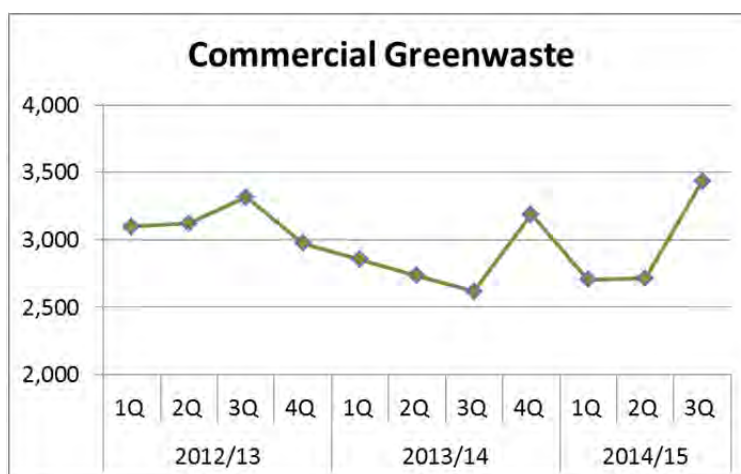
Special Waste and Asbestos

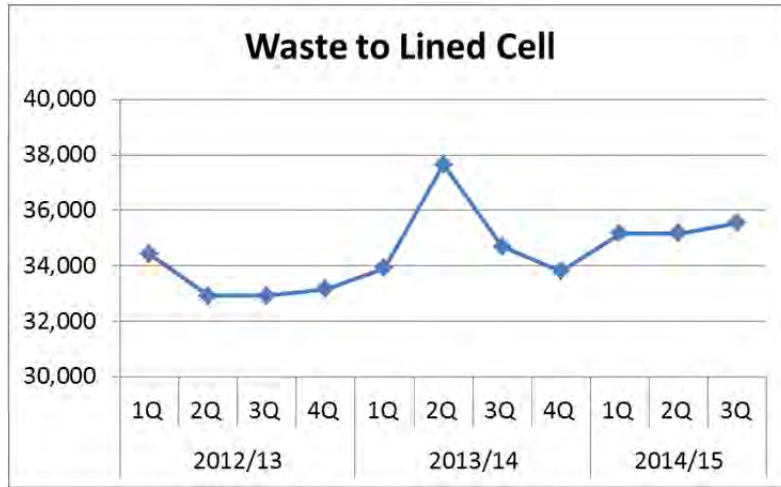
Special waste and asbestos decreased this quarter by 497 tonnes. There was a significant decrease of asbestos with a 548 tonne reduction of disposal and a slight increase in special wastes, brought up by 50 tonnes over the quarter. The quantities of these types of waste brought in per quarter depend on the industry at that point in time, and one large project can cause a spike in tonnages received.



Waste to Landfill by Waste Type

The majority of waste brought in to Shoal Bay is disposed of within the lined landfill cell, including all domestic waste and commercial green waste. Inert material is disposed of in an unlined cell and includes items such as concrete, plastics and tyres. There has been a rise in commercial green waste which is likely due to the wet season, this will be monitored to see if the increase continues in the coming quarter.

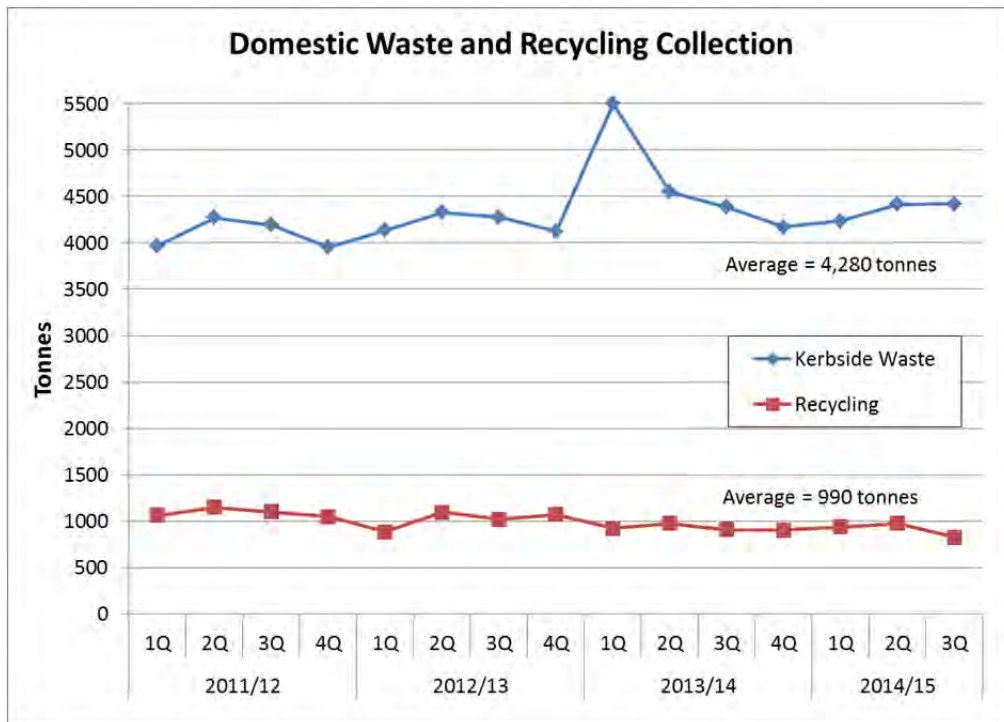




Domestic Waste and Recycling

The residential waste collection provides a general waste service (red lidded bin) and recycling service (yellow lidded bin) for use by residents either through kerbside or manual collection (for units). The waste from kerbside collection this quarter was 4,421 tonnes, 3% higher than the average of 4,288 tonnes. Recycling remained steady at 828 tonnes, just below the average of 990 tonnes per quarter.

Based on the current number of services (27,783 at the start of the quarter), the average waste per household this quarter was 160 kilograms, and recycling was 30 kilograms.

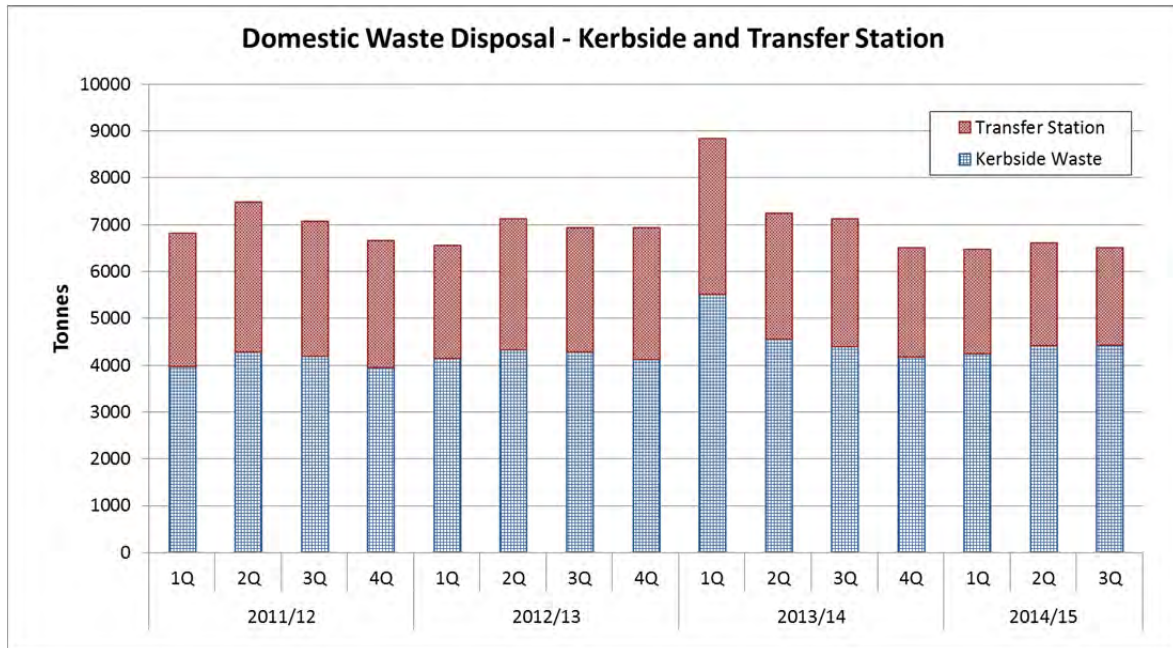


Transfer Station – Domestic Waste

There has been a slight decrease of 107 tonnes of domestic waste deposited in the transfer station bins this quarter from the previous quarter. This quarter’s volumes again remain less than the quarterly average of 2,752 tonnes, which appears to be a trend over the last 4 years. To note is that the use of the transfer station is steady, which may be reflective of more visits, or more green waste visits.



When the transfer station quantities are added to the kerbside waste collection, the total domestic waste can be calculated. This quarter’s overall tonnage of 6,507 tonnes is similar to the previous quarter and below the average of 7,039 tonnes.



The trial of new barriers at the transfer station has commenced with users encouraged to submit feedback to Council over the trial period. The trial barriers were installed on 27 March 2015 on 2 of the 8 bays and will be rolled out across all bays, replacing the temporary water filled barriers, following the trial and any amendments to the design made from the feedback received.

At the time of writing this report, from the monitoring of the usage through CCTV footage, the new barriers are being used and there's no evidence of users avoiding the new barriers over the temporary barriers. A variety of feedback has been received which is being considered over the trial period for any improvements that could be made to the design.



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 SUBJECT: WASTE AND RECYCLING - MARCH QUARTERLY REPORT

Waste Management Strategy

An update report on the progress of the Waste Management Strategy was provided to Council in March 2015 following a workshop held in February 2015. The report outlined the current efforts being undertaken, the timeframes and methodology of the Strategy. Research into demographics, planning and the Darwin waste profile as well as the initial workshop and site inspections have been completed. The policy development and guideline principles are currently underway.

The Strategy will provide a waste diversion target, or direction, for Council to implement across the Darwin Region. It will also develop a suitable action plan to achieve the desired result of reduction in both waste generation and waste to landfill. This will be accomplished working alongside both Council and the Community.

The final outcome of the Strategy work will be two documents;

- City of Darwin Waste Management Policy Framework
- City of Darwin Waste Management Strategy and Implementation Plan

Community Education

Community education has continued through planned events undertaken by Council, with kerbside recycling and school education being undertaken with the kerbside collection contractor (Cleanaway).

The activities conducted this quarter included;

- Provided Waste & Recycling information pack and give away items for the Kalymnos Sister City's 'Welcome to Darwin' event.
- Supporting Clean Up Australia Day event providing Kit supplies and free access to Shoal Bay.
- Cleanaway undertook education with a recycling program for 3 schools, covering 7 classes and 144 students.
- New merchandise for school visits and promotional activities

Upcoming Plans

Plans for the upcoming year include;

- Review of the Waste Management Policy following the Waste Management Strategy;
- Development of new advertising and educational material;
- Improvements to the education centre at the Shoal Bay Waste Management Facility;
- Review of waste and recycling materials on the Council website;
- Liaise with Master Builders Association to review site waste management practices;
- Information session for property managers to address contamination of the recycling stream at multiple unit dwellings.

PAGE: 11
 REPORT NUMBER: 15TS0066 ND:mn
 SUBJECT: WASTE AND RECYCLING - MARCH QUARTERLY REPORT

CONSULTATION PROCESS

In preparing this report, information was obtained from Council's waste contractors:

- Northern Territory Recycling Services (NTRS)
- Landfill Management Services (LMS)
- Territoria Civil (Shoal Bay Contractors)
- Transpacific Cleanaway

POLICY IMPLICATIONS

Operations and activities are undertaken in accordance with Council policies.

BUDGET AND RESOURCE IMPLICATIONS

Not assessed

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Not assessed

ENVIRONMENTAL IMPLICATIONS

Operations are conducted to minimise impacts on the environment through recycling initiatives, salvaging works and gas extraction from the landfill.

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

NADINE DOUGLAS
MANAGER TECHNICAL
SERVICES

LUCCIO CERCARELLI
GENERAL MANAGER
INFRASTRUCTURE

For enquiries, please contact Nadine on 8930 0417 or email:
 n.douglas@darwin.nt.gov.au.

**ENCL: ENVIRONMENT & INFRASTRUCTURE
NO COMMITTEE/OPEN**

AGENDA ITEM: 9.10

CLIMATE CHANGE ACTION PLAN QUARTERLY REPORT - JANUARY TO MARCH 2015

REPORT No.: 15TS0063 SG:nj COMMON No.: 1792647

DATE: 21/04/2015

Presenter: Manager Climate Change & Environment, Shenagh Gamble

Approved: Executive Manager, Mark Blackburn

PURPOSE

The purpose of this report is to inform the Committee of progress towards the Climate Change Action Plan and associated environmental initiatives.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

3 Environmentally Sustainable City

Outcome

3.1 Council's carbon footprint reduced

Key Strategies

3.1.1-Reduce Council's greenhouse gas emissions

KEY ISSUES

- Earth Hour Activities
- Energy Efficiency Implementation

RECOMMENDATIONS

THAT the Committee resolve under delegated authority:-

- A. THAT Report Number 15TS0063 SG:nj entitled Climate Change Action Plan Quarterly Report - January to March 2015, be received and noted.

PAGE: 2
 REPORT NUMBER: 15TS0063 SG:nj
 SUBJECT: CLIMATE CHANGE ACTION PLAN QUARTERLY REPORT - JANUARY TO MARCH 2015

BACKGROUND

This report provides an update on progress against the Climate Change Action Plan and associated activities as completed by the Climate Change & Environment Team in the period January – March 2015.

DISCUSSION

The January to March quarter is reasonably quiet in terms of community engagement, however a lot of activity was planned for late March and into April. This quarter also typically results in reduction in electricity consumption due to being a quieter period around workplaces and community spaces.

Earth Hour 2015

Primary CCAP Outcome Climate change and environment related community projects and programs are undertaken

This year Earth Hour was held on Saturday 28 March. Three events were held in support of this initiative, described below.

1. Free candle making and general promotion at Karama Shopping Centre (Friday 27 March 12 – 2pm)

The intent of this event was to open up discussions with the community around Karama. The shopping centre has high use and it was anticipated that families would find the event appealing. Unfortunately this event was not well attended. The event was not well advertised, relying more on passers-by that were heading to the various shops in the centre. On reflection, staff believe that the hurried nature of families attending to shopping chores resulted in little opportunity to pause for such an activity. In future, the event will be staged in a more casual setting, preferably the library, where people intend to linger, and more promotions will be made.



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 REPORT NUMBER: 15TS0063 SG:nj
 SUBJECT: CLIMATE CHANGE ACTION PLAN QUARTERLY REPORT - JANUARY TO MARCH 2015

2. Candle making as part of Story time at the City Library (Saturday 28 March 10 – 11am)

Building on the success of last year's event, the CCE team again worked with libraries to host a candle making workshop for the Saturday Story time at the City Library. Around 20 children and their carers attended the session, with positive feedback being received on the day. The numbers were quite less than the same event last year, and this is attributed to less advertising / promotion than was done last year. As successful as this has been, Libraries staff suggested a different activity for next year.



3. Switch off and Dance (Saturday 28 March 7 – 9:30pm)

This significant event was very well attended with around 70 participants. Lucky door prizes were offered and donations sought for the national Earth Hour campaign. A total of \$145.25 was raised, and donated directly into the Earth Hour account.

The event included:

- *Local food sampling "Taste of the Top End"*

The theme for this year's national Earth Hour campaign was "Appetite for Change", focusing on the impacts of climate change on Aussie farmers. To promote this theme, the CCE team provided a "taste of the top end" to highlight our local food industry to participants.

- *Solar powered screening of the Earth Hour documentary "Appetite for Change"*

Each year the national Earth Hour campaign promotes a documentary to highlight a particular aspect of climate change. To screen the documentary, the CCE team utilised a local solar powered cinema and sound system provider - Solar Media – to ensure the screening didn't use mains electricity.

- *"No Lights No Lycra" dance party*

No Lights No Lycra (NLNL) is a dance initiative started in Melbourne that encourages free movement, essentially dancing with no lights on (and no lycra because it is an informal dance class). NLNL partnered with Earth Hour nationally and established similar dance party events in each capital city. A coordinator from NLNL in Melbourne came to Darwin to help manage the event (at no cost to Council).

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 REPORT NUMBER: 15TS0063 SG:nj
 SUBJECT: CLIMATE CHANGE ACTION PLAN QUARTERLY REPORT - JANUARY TO MARCH 2015

Energy Audit Implementation

Primary CCAP Outcome: Council’s energy consumption is reduced.

Recommendations continue to be implemented across a number of sites, with no significant update to note.

Note – a technical error with the Planet Footprint software has resulted in some discrepancies in data availability. Generally, the software can not process “negative” reads, and so where Jacana Energy have estimated a read for a site (for example, Nightcliff Pool, Casuarina Library) and then corrected, a negative value is reflected in the invoices. The Planet Footprint software does not process this automatically, and so errors occur. This is being addressed, but as it only became apparent as data was being generated for this report not all issues were resolved. Where this has affected the graphs below the column will be represented with cross hatch.

Interval data for available sites has been requested from Jacana Energy. This data set will provide fine detail on consumption at 15 minute intervals. This will be provided at the next quarterly report, for the end of financial year.

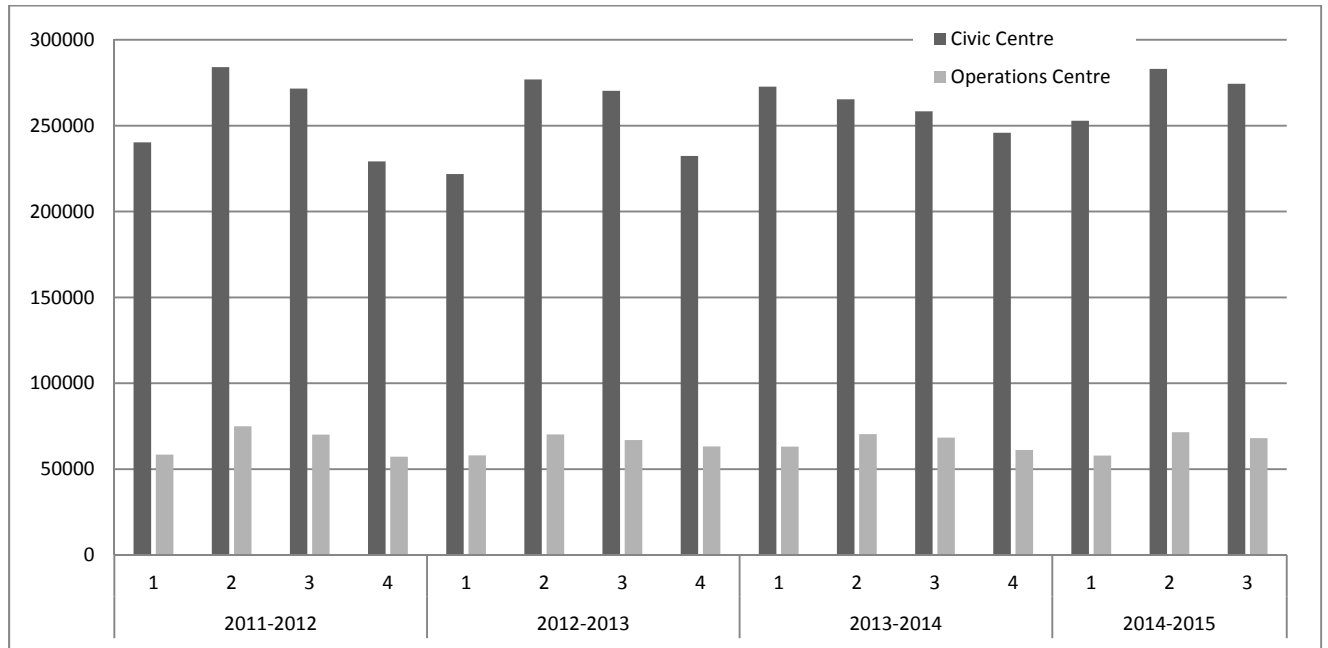


Figure 1 Electricity consumption of the Civic and Operations Centres

A slight drop in electricity consumption at both the Civic and Operations Centre, compared with last quarter is encouraging (4% and 5% respectively)

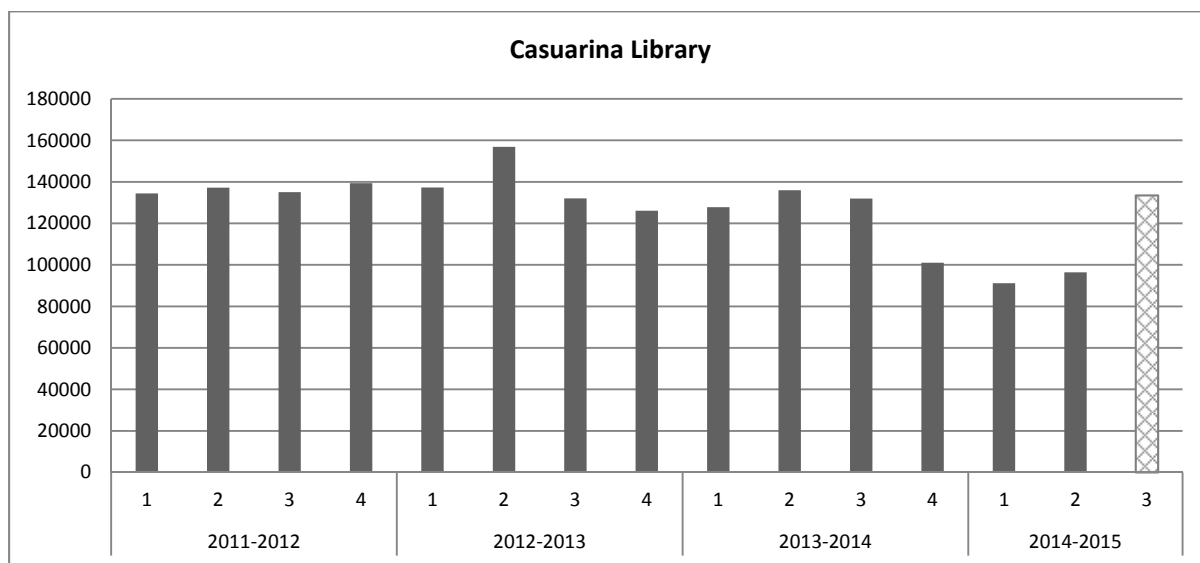


Figure 2 Electricity consumption of Casuarina Library

Note: due to estimated reads and subsequent negative data in invoices, the consumption data for this quarter is inaccurate. Scrutiny of the bills for this period reflects the trend of the previous quarters this year, of significantly less electricity being consumed from the grid – in keeping with the electricity being generated by the solar installation at this site.

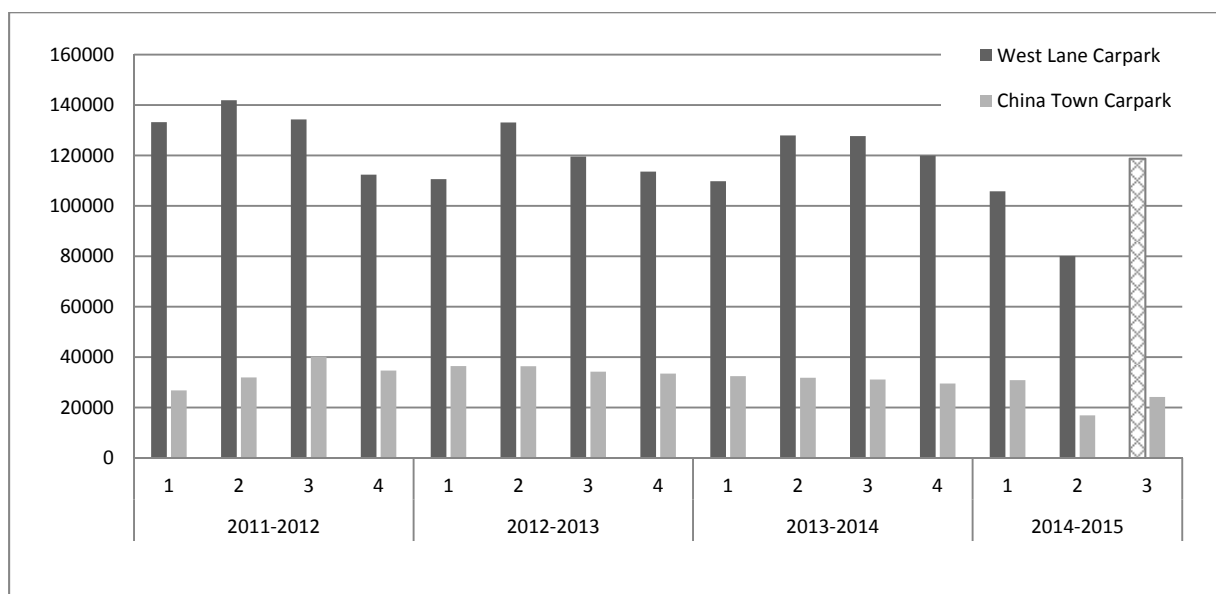


Figure 3 Electricity consumption of West Lane and China Town Carparks

Note: data discrepancies occur for this quarter. Scrutiny of available bills for this period reflects the trend of the previous quarters this year, of significantly less electricity being consumed – as a result of energy efficiency measures that have been installed at this site.

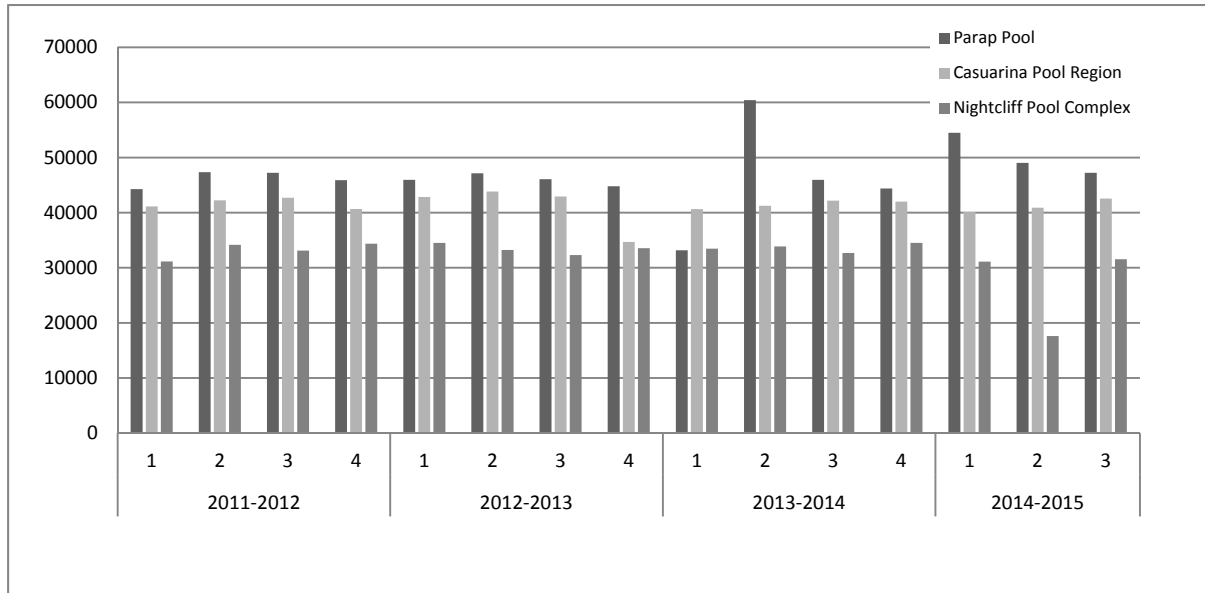


Figure 4 Electricity consumption of Parap, Casuarina & Nightcliff Pools

Nightcliff Pool was closed for two months during the second quarter, and this shut down is clearly shown in the graph above. There has been a slight drop in electricity consumption in this quarter, compared with the same time last year for Nightcliff Pool (4%).

Parap Pool also shows considerable decrease in electricity consumption over this financial year, coinciding with the installation of energy efficiency devices.

Casuarina shows consistent electricity consumption. There is no significant increase or decrease in electricity at this site. Further investigation will seek to identify if periodic maintenance works are essentially “overriding” energy efficiency measures at this site.

Total consumption and greenhouse gas emissions (shown in Figures 4 and 5 respectively below) still show a general decrease across the top consuming sites against the benchmark year of 2008/2009.

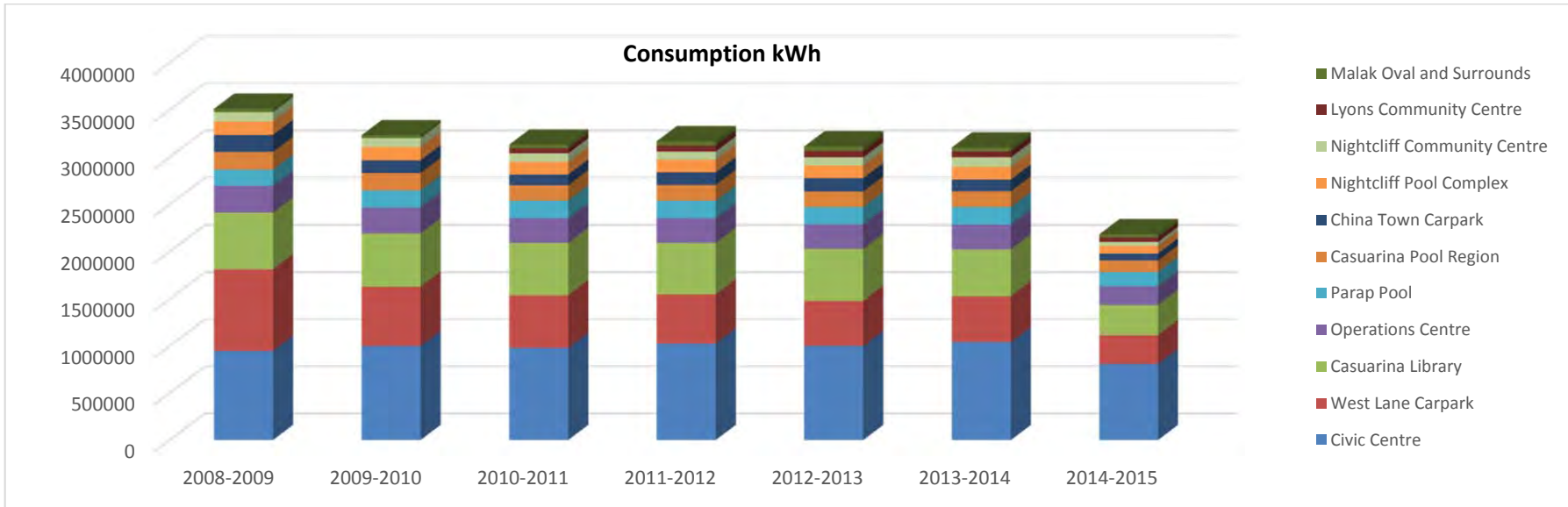


Figure 5 Total electricity consumption of the top 11 consuming sites.

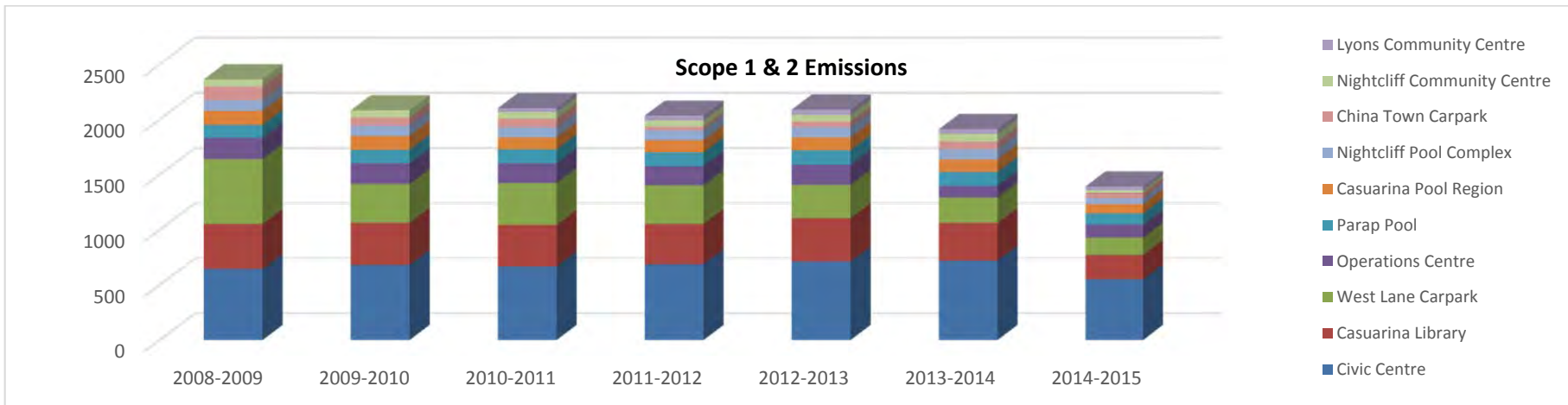


Figure 6 Total greenhouse gas emissions from the top 11 consuming sites.

CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Acting Manager Building Maintenance Services

In preparing this report, the following External Parties were consulted:

- Planet Footprint
- Jacana Energy

POLICY IMPLICATIONS

Nil

BUDGET AND RESOURCE IMPLICATIONS

Nil

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Nil

ENVIRONMENTAL IMPLICATIONS

Nil

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

SHENAGH GAMBLE
MANAGER CLIMATE CHANGE &
ENVIRONMENT

MARK BLACKBURN
EXECUTIVE MANAGER

For enquiries, please contact Shenagh Gamble on 89300530 or email:
s.gamble@darwin.nt.gov.au.

Attachments: None

**ENCL: ENVIRONMENT & INFRASTRUCTURE
YES COMMITTEE/OPEN**

AGENDA ITEM: 9.11

**EAST POINT BIODIVERSITY MANAGEMENT PLAN QUARTERLY REPORT – JANUARY
TO MARCH 2015**

REPORT No.: 15TC0051 JL:as

COMMON No.: 2415691

DATE: 21/04/15

Presenter: Manager Climate Change & Environment, Shenagh Gamble

Approved: Executive Manager, Mark Blackburn

PURPOSE

The purpose of this report is to provide an update on the actions outlined in the East Point Reserve Biodiversity 5 Year Management Plan 2014 – 2018.

LINK TO STRATEGIC PLAN

The issues addressed in this Report are in accordance with the following Goals/Strategies of the City of Darwin 2012 – 2016 as outlined in the 'Evolving Darwin Towards 2020 Strategic Plan':-

Goal

3 Environmentally Sustainable City

Outcome

3.3 Conserve and protect the Darwin environment

Key Strategies

3.3.2 Increase biodiversity richness and abundance across Darwin

KEY ISSUES

- The East Point Reserve Biodiversity 5 Year Management Plan 2014 – 2018 implementation is continuing with all actions on track
- At the end of financial year a 12 month review of the plan and associated actions will be conducted

RECOMMENDATIONS

THAT the Committee resolve under delegated authority:-

- A. THAT Report Number 15TC0051 JL:as entitled East Point Reserve Biodiversity Management Plan Quarterly Report – January To March 2015, be received and noted.

PAGE: 2
 REPORT NUMBER: 15TC0051 JL:as
 SUBJECT: EAST POINT BIODIVERSITY MANAGEMENT PLAN QUARTERLY
 REPORT – JANUARY TO MARCH 2015

BACKGROUND

At the 2nd Ordinary Council Meeting of 25 March 2014 Council confirmed the decision:

DECISION NO.21\1946 (25/03/14)

A. THAT Report Number 14TS0058 SG:nj entitled East Point Reserve Biodiversity 5 Year Management Plan 2014 - 2018, be received and noted.

*B. THAT Council endorse the East Point Reserve Biodiversity 5 Year Management Plan 2014 – 2018; **Attachment A**, to Report Number 14TS0058 SG:nj entitled East Point Reserve Biodiversity Five year Plan 2014 – 2018.*

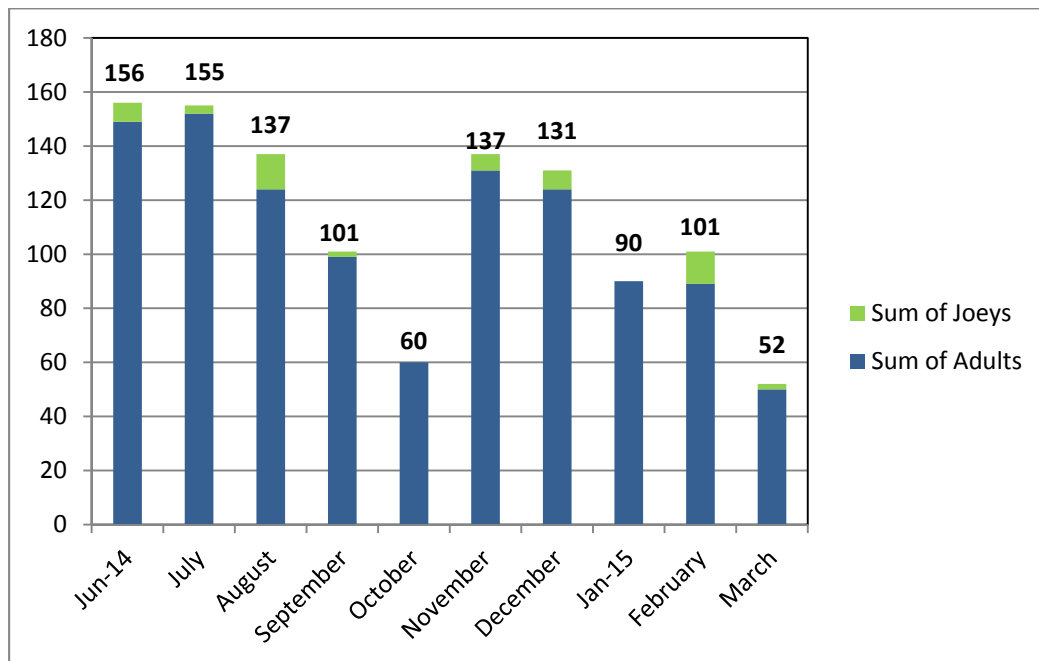
DISCUSSION

The Climate Change & Environment (CC&E) and Parks & Reserves teams have been implementing the *East Point Reserve Biodiversity 5 Year Management Plan 2014-2018 (The Plan)*. Many of The Plan's actions are in a maintenance phase over the wet season with several actions not viable such as weed spraying.

Of note this quarter are the continued low numbers of wallabies counted in wallaby surveys (Action 11), the need to review The Plan and details of actions after 12months of implementation.

Ongoing action updates are provided as a summary in Table 1 below.

Wallaby Surveys: As expected, the wet season reduces the movement and detectability of wallabies within the reserve. January survey; 90 wallabies, February 101 wallabies with an increase in visible joeys (12 counted). March resulted in the lowest count to date, with only 52 wallabies spotted. This may be due to a low pressure system causing weather instability (see Graph 1 below for overview of monthly wallaby counts since June 2014). Staff conducting surveys reported an increase in wallaby scattering when approached by vehicles, whereas in the past the wallabies have been quite resilient to vehicle traffic. This will be monitored to understand if the population has increased anxiety over human interaction or if it is in correlation to unstable weather conditions.



Graph 1 Wallaby counts June 2014 - March 2015

Farewell to the Shorebirds: CC&E hosted a “farewell to the shorebirds” community event on Friday 20 March at the rotunda on the northern side of the reserve to celebrate the commencement of shorebird migration to the northern hemisphere. The event was coordinated as part of the national campaign promoted by Birdlife Australia. The event included presentations from two resident East Point researchers investigating birdlife within the reserve including Amanda Lileyman who is tracking shorebird movements and John Rawsthorne who conducts bird mist netting to research population dynamics of birdlife within the reserve. Over 35 people attended the event including high profile scientists, researchers and locals many of whom brought binoculars and telescopes to view the departing birdcampaign which was included as part of this event.



Figure 1 Farewell to the Shorebirds Community Event

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Research: Research proposals this quarter included a Charles Darwin University student that has requested study plots within the reserve to undertake soil sampling and vegetation monitoring. This research is due to commence during 2015. Ongoing research activities include forest based bird mist netting and shore bird monitoring. The two researchers responsible for this monitoring presented at the farewell to shorebirds event in March.

In early 2014 the Northern Territory Governments Department Land Resource Management conducted research into urban small mammal decline; Council received the findings from this research in March. The report regarding small mammal survival and reptile decline across the Darwin region included two East Point Reserve monitoring sites. The paper did not make significant conclusions on decline in species in the Reserve however it did outline the need to incorporate camera trapping into future surveying methods as some species elude standard traps but were captured by cameras. This is a survey method Council has already incorporated into its biodiversity monitoring procedures. The survey also confirmed East Point is home to strong populations of Brushtail Possums, Agile Wallabies and Northern Brown Bandicoots (full final report can found in Attachment A).

Upcoming Activities: Priorities for the next quarter include a comprehensive review of The Plan as it has been 12 months since commencement. This will include reassessment of The Plans actions in terms of timeframes and specific details as well as removal of completed actions from ongoing reporting.

Priorities within The Plan identified for 2015 will continue, including:

- investigate funding opportunities to assist with the installation of an artificial Osprey nesting platform (Action 10),
- move from monthly wallaby surveys to quarterly surveys in June (Action 11), and
- further assess viability of reintroducing the Atlas moth (Action 12).

Summary of updates provided in Table 1 below:

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 REPORT NUMBER: 15TC0051 JL:as
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 REPORT – JANUARY TO MARCH 2015

Table 1 Summary Management Action updates

	Management Actions	Action update January - March 2015
Action 3	Continue regular vegetation management.	Refer to figures 2, 4, 6 in Attachment B
Action 6	Continued control of all weed species.	Refer to figures 1, 3, 5 in Attachment B
Action 7	a) Engage interested parties with the intention of developing an integrated approach to biodiversity management at the Reserve.	The Farewell to the shorebirds sundowner was well attended by East Point interested parties and allowed researchers to convey research findings to date. Interested parties were also invited to apply for the Climate Change and Environment Community grants to assist with biodiversity activities.
Action 9	Support the protection of shorebird roosting areas within and adjacent to the Reserve.	CC&E have been in contact with avid shorebird counters who frequent East Point Reserve and held a Farewell to the Shorebirds event as part of the national farewell to the shorebirds campaign.
Action 11	a) Train staff to undertake wallaby population surveys. b) Undertake wallaby population surveys each month for the first year to allow adequate on-the-job training.	New staff have been trained in surveying increasing the number of staff available to assist with surveys. January: 90 wallabies February: 101 wallabies March: 52 wallabies - this is the lowest count yet, possibly due to weather conditions including cyclone activity in the region.

CONSULTATION PROCESS

In preparing this report, the following City of Darwin officers were consulted:

- Parks and Reserves Coordinator
- Team Leader Central and Urban Precinct

POLICY IMPLICATIONS

Nil

BUDGET AND RESOURCE IMPLICATIONS

Nil

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REPORT NUMBER: 15TC0051 JL:as
SUBJECT: EAST POINT BIODIVERSITY MANAGEMENT PLAN QUARTERLY
REPORT – JANUARY TO MARCH 2015

RISK/LEGAL/LEGISLATIVE IMPLICATIONS

Nil

ENVIRONMENTAL IMPLICATIONS

This plan aims to maintain and improve biodiversity at East Point Reserve and will have positive environmental implications.

COUNCIL OFFICER CONFLICT OF INTEREST DECLARATION

We the Author and Approving Officers declare that we do not have a Conflict of Interest in relation to this matter.

SHENAGH GAMBLE
MANAGER CLIMATE CHANGE &
ENVIRONMENT

MARK BLACKNURN
EXECUTIVE MANAGER

For enquiries, please contact Shenagh Gamble on 89300530 or email: s.gamble@darwin.nt.gov.au.

Attachments:

- Attachment A:** Assessment of Small Mammal Fauna of The Darwin Area
Attachment B: Maps of East Point Reserve Biodiversity 5 Year Management Plan
January – March 2015



DEPARTMENT OF LAND RESOURCE MANAGEMENT

ASSESSMENT OF SMALL MAMMAL FAUNA OF THE DARWIN AREA

Final Report, February 2015

Danielle Stokeld and Graeme Gillespie

**Flora and Fauna Division
Land Resource Management**

and

NERP Northern Australia Hub



National Environmental
Research Program

1. Introduction

As part of the current focus on understanding patterns and causes of broad scale declines of native mammals across the Top End, small mammal trapping surveys were undertaken in the urban and peri-urban area of Darwin during January to March 2014. The aims of the study were: 1) to understand the pattern of distribution of small mammals in relation to the distribution of feral cats; and 2) to assess the health and disease status of small mammals in the (peri) urban environment.

2. Methods

2.1 Site Selection

Thirty sites were derived from a collection of sites that were previously (2001-2008) sampled for small mammals (Figure 1). Sites were stratified by distance from the CBD of Darwin to obtain an assemblage of sites across an urban-rural gradient. Six new sites were identified in three priority areas to meet the objectives of the NT Department of Health for surveillance work on Barmah Forest Virus (BFV) and Ross River Virus (RRV). Only sites that were surrounded by contiguous woodland (rather than small woodland remnants) were considered for trapping.

2.2 Trapping

A 50m x 50m trapping quadrat was established at each site utilising 20 Elliot and 4 cage traps. Traps were open for 4 nights at each site, except 3 sites that were trapped for 3 nights due to extreme weather.

Animals greater than 300g were anaesthetised for collection of a range of samples for disease investigations and general health profiling. Morphometrics (body weight, head length and width, foot length) were recorded for each animal.

An array of five camera-traps was deployed at each site for a minimum of 4 weeks. A peanut-butter, honey and oat mix was used as a lure to attract mammals to the focal area of the camera-trap.

2.3 Health and Disease

Serum samples were collected from 19 animals, including 2 Brushtail Possum (*Trichosurus vulpecula*), 5 Black-footed Tree-rat (*Mesembriomys gouldii*) and 12 Northern Brown Bandicoot (*Isodon macrourus*), across 11 sites for the arbovirus investigation undertaken by the NT Department of Health (Table 2). In addition, 2 Black Rat (*Rattus rattus*) and a Feral Cat (*Felis catus*) were opportunistically sampled from outside the set of sites when they were presented by wildlife rangers from Parks and Wildlife Commission NT.

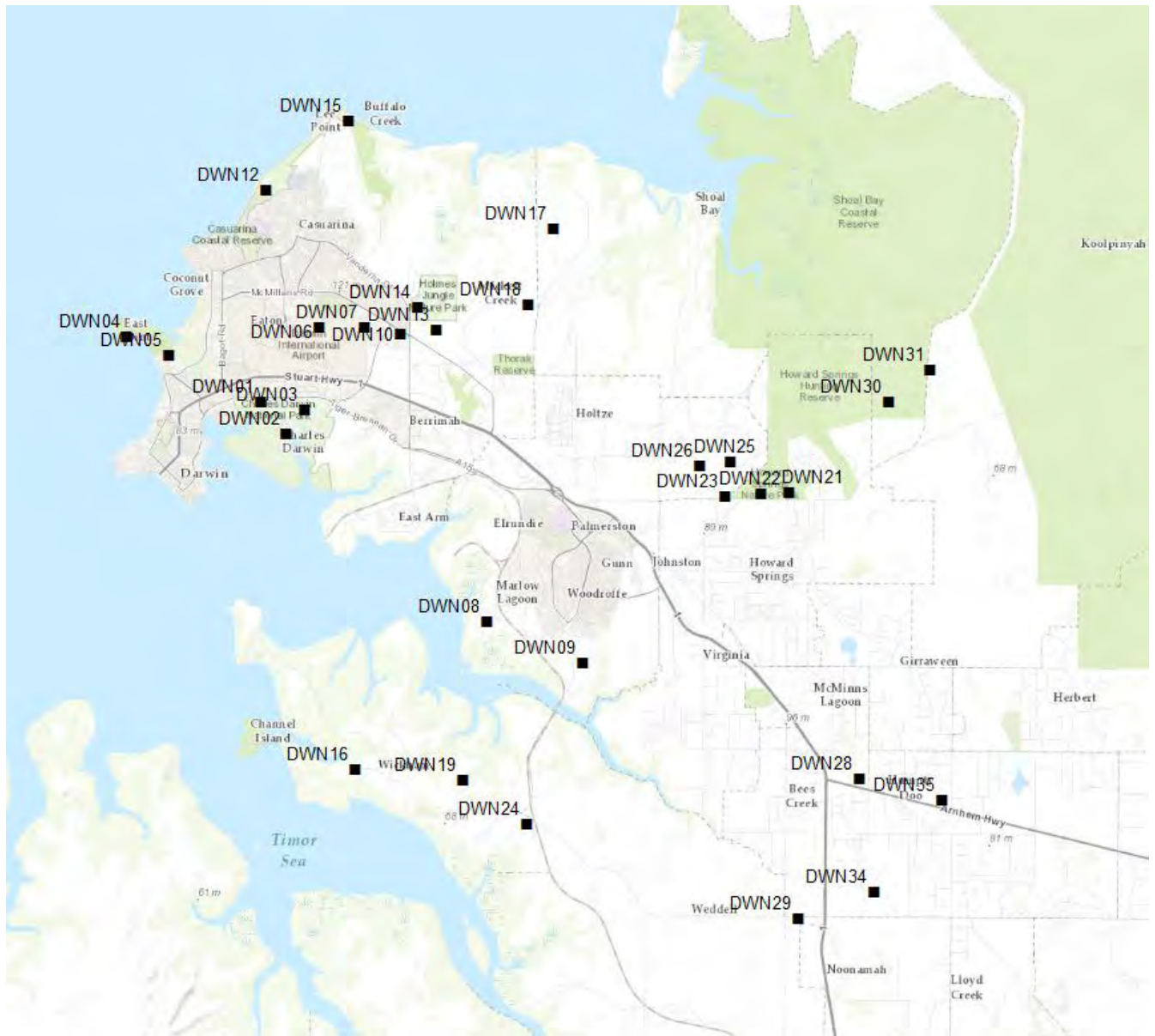


Figure 1. Sites surveyed for small mammals in the Darwin region between January and March 2014.

3. Results

3.1 Live Trapping

From the 30 sites surveyed, 58 mammal captures were recorded across 18 sites. Six species of small mammal were trapped including *Isoodon macrourus*, *Melomys burtoni*, *Mesembriomys gouldii*, *Rattus colletti*, *Rattus tunneyi*, *Trichosurus vulpecula*, with a minimum of 44 individual animals (Table 1). In comparison to previous live trapping at these sites between 2001 and 2008, the mean site diversity decreased by 1.3 species (range: 0 to 4) and mean capture rates dropped by 0.34 (range: 0 to 1.6) captures per trap night (Figure 2 and Appendix). Whilst Red-cheeked Dunnart (*Sminthopsis virginiae*), Northern Quoll (*Dasyurus hallucatus*), Fawn Antechinus (*Antechinus bellus*), and Delicate Mouse (*Pseudomys delicatulus*) were trapped in previous samples, these species were not trapped at any sites in 2014. In contrast, Dusky Rat (*Rattus colletti*) was trapped at one site in 2014 but was not previously recorded.

Table 1. Number of individuals of each species that were anaesthetised for general health surveillance, number sampled for the NT Health Department arbovirus study, and number of sites from where they were recorded.

Species	Total	Arbovirus Study	Number of sites
Brushtail Possum (<i>Trichosurus vulpecula</i>)	8 (5M:3F)	2	7
Northern Brown Bandicoot (<i>Isoodon macrourus</i>)	16 (7M:9F)	12	10
Black-footed Tree-rat (<i>Mesembriomys gouldii</i>)	6 (3M:3F)	5	5
Black rat (<i>Rattus rattus</i>)	2 (1M:1F)	2	-
Feral cat (<i>Felis catus</i>)	1 (1M)	1	-
Total number sampled	33	22	

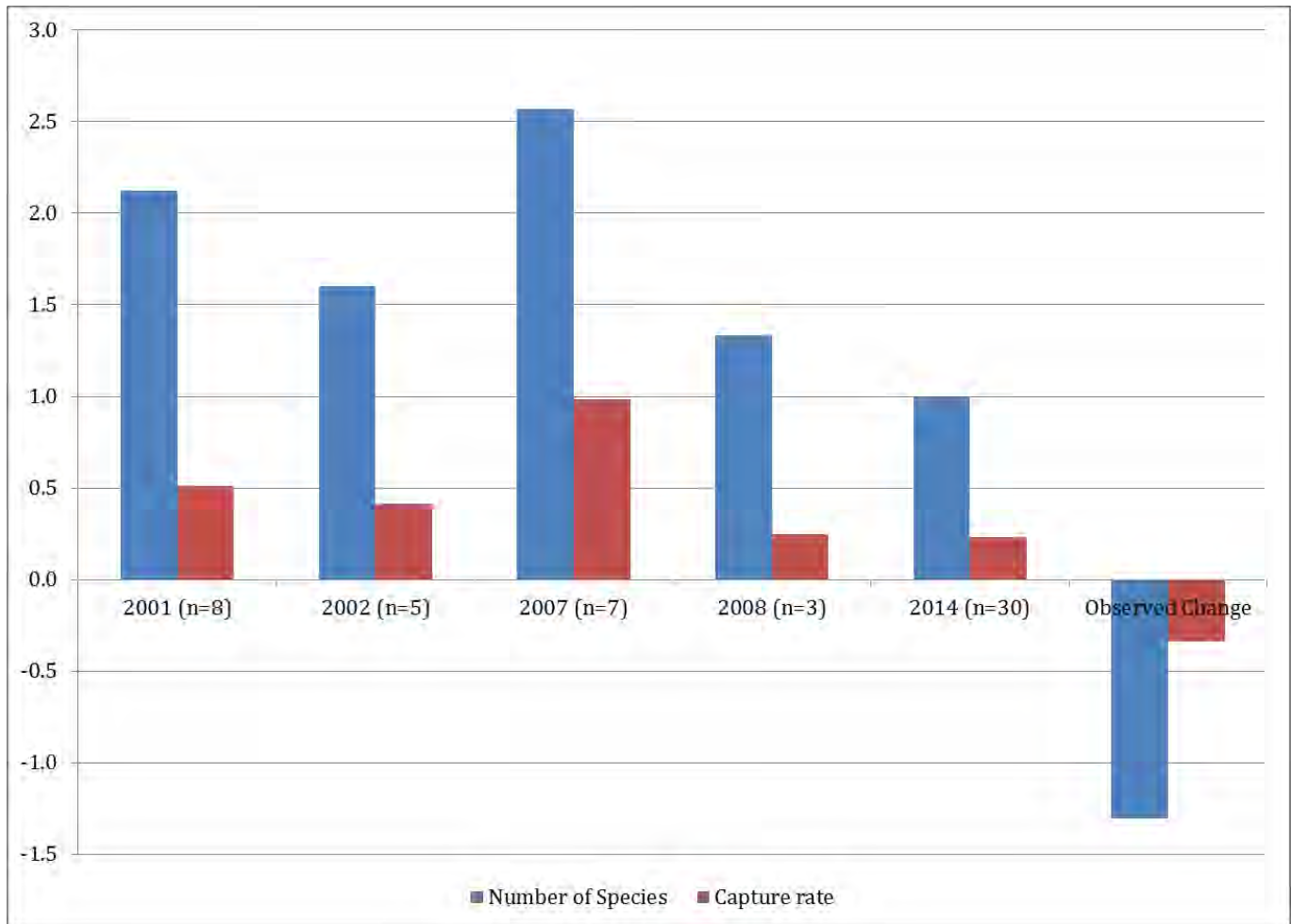


Figure 2. The mean number of species of small mammals, and the mean capture rate (abundance/no. trap nights), for sites during previous and 2014 survey; and the observed change between 2014 and combined previous surveys. Numbers in parentheses represent the number of sites replicated in the 2014 survey.

Table 2. Number of individual animals captured at each study site and the proportion of sites where each species was detected.

Site	<i>Isoodon macrourus</i>	<i>Melomys burtoni</i>	<i>Mesembriomys gouldii</i>	<i>Rattus colleti</i>	<i>Rattus tunneyi</i>	<i>Trichosurus vulpecula</i>
DWN01	1	2	-	-	-	1
DWN02	2	1	1	-	-	-
DWN03	-	-	-	-	-	-
DWN04	1	-	-	-	-	-
DWN05	1	2	-	-	-	1
DWN06	1	-	2	-	-	-
DWN07	-	-	1	-	-	-
DWN08	5	-	-	-	-	-
DWN09	2	-	-	-	-	-
DWN10	2	-	-	-	-	1
DWN12	-	-	-	-	-	-
DWN13	-	1	-	2	-	-
DWN14	-	-	-	-	-	-
DWN15	-	-	-	-	-	-
DWN16	-	-	1	-	1	-
DWN17	-	1	-	-	-	-
DWN18	-	-	-	-	-	-
DWN19	-	-	-	-	-	-
DWN21	-	-	-	-	-	-
DWN22	-	-	-	-	-	1
DWN23	-	-	-	-	-	1
DWN24	2	-	-	-	-	-
DWN25	-	-	-	-	-	-
DWN26	-	-	-	-	-	-
DWN28	2	-	1	-	-	2
DWN29	-	1	-	-	-	-
DWN34	-	-	-	-	-	-
DWN30	-	-	-	-	-	-
DWN31	-	-	-	-	-	-
DWN35	-	-	-	-	-	1
Total	19	8	6	2	1	8
Proportion of sites	33%	20%	17%	3%	3%	23%

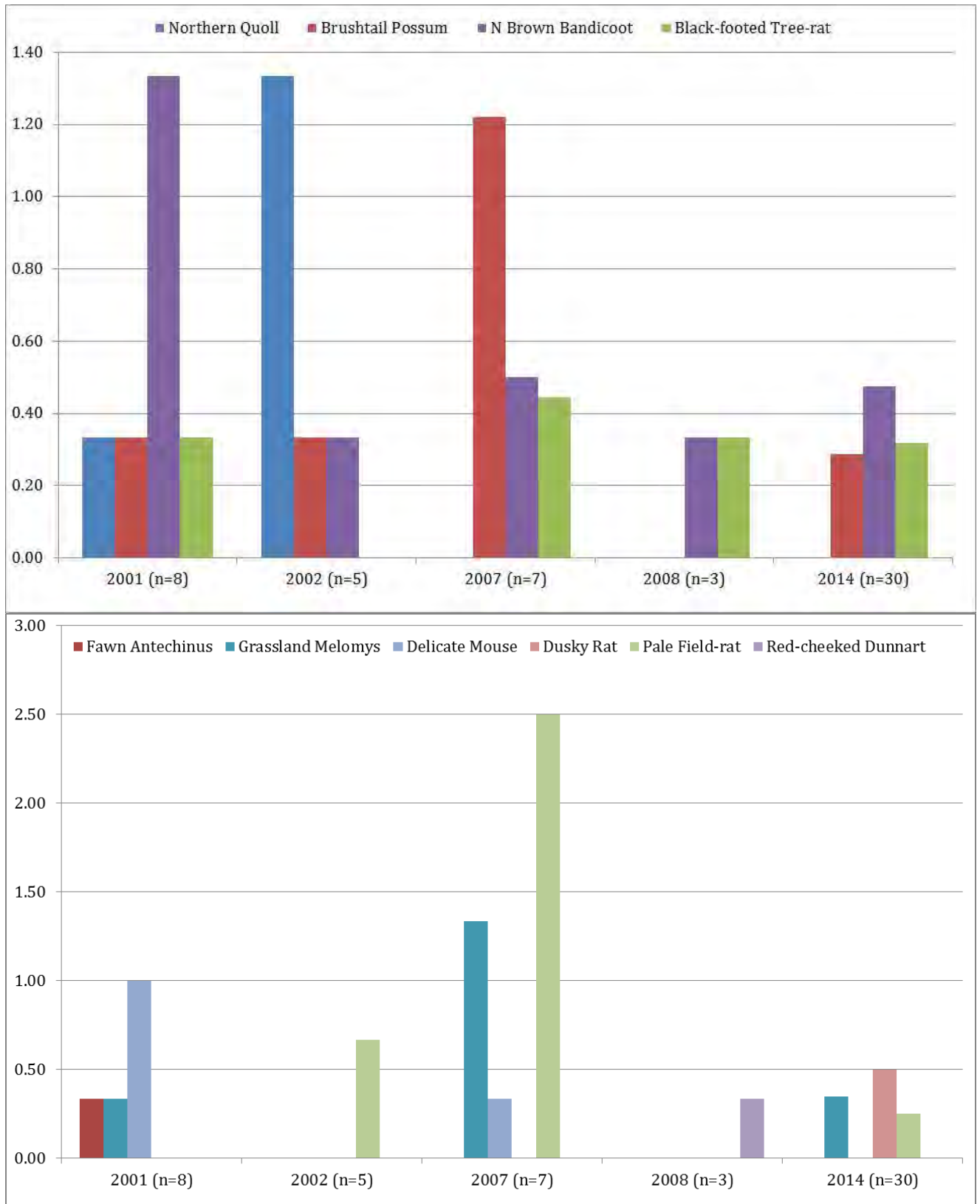


Figure 3. Mean capture rates (abundance/no. trap nights) for each species across sites during previous surveys and the 2014 survey. Numbers in parentheses represent the number of sites replicated in the 2014 survey.

3.2 Camera-traps

Mammals were captured on camera-trap at every site (Figure 4). Medium-sized mammals, such as Brushtail Possum, Black-footed Tree-rat and Northern Brown Bandicoot, were detected at ~ 55% more sites using camera-traps than undertaking live-trapping. However, small mammals, such as Pale Field-rat, Dusky Rat and Grassland Melomys, were not detected by camera-trap. Feral Cats were detected at 33% of the sites surveyed.

3.3 Health and Disease

Animals examined were generally in good health and body condition (Table 3). Six animals including 2 female bandicoots, 1 female possum and 3 male possums were assessed to be in sub-optimal body condition (body condition score below 2.5).

None of the animals tested positive for Barmah Forest Virus antibodies. Three of the 12 Northern Brown Bandicoots, 4 of the 5 Black-footed Tree-rats, and both Brushtail Possums showed elevated antibody levels to Ross River Virus.

Table 3. Summary of the mean body condition score, body weight, and head length and width of each species by sex and age class.

	Sample Size	Body Condition	Weight	Head Length	Head Width
Black-footed Tree-rat					
Adult female	3	3.0	505.3	75.1	29.9
Adult male	2	2.8	680.0	78.7	33.4
Sub-adult male	1	3.0	330.0	65.5	28.1
Brushtail Possum					
Adult female	3	2.7	1228.7	82.0	46.4
Adult male	4	2.1	1615.0	86.7	50.6
Northern Brown Bandicoot					
Adult female	9	2.8	1023.1	88.0	33.0
Adult male	7	3.0	1581.0	97.0	38.6

4. Conclusions

This study was undertaken as part of the Flora and Fauna Division's current focus on understanding broad scale declines of native mammals across the Top End. Of the 30 sites surveyed in the current study, 23 sites were previously surveyed between 2001 and 2008. For the sites previously surveyed, there was a decline in the number of species detected and the capture rate of species using live trapping. In particular, no dasyurid species were trapped in the current study or detected using camera-traps.

The use of camera-traps significantly increased the rate of detection of Northern Brown Bandicoot, Black-footed Tree-rat and Northern Brushtail Possum with 20 sites (~55% more sites) having species detected by camera-trap but not with live-trapping. This finding highlights the utility of incorporating camera-traps into standard mammal survey procedures and systematic monitoring programs.

The significance of changes in species richness and capture rates cannot currently be fully assessed due to the low number of repeated surveys at these sites, but is consistent with the significant and dramatic decline of small- and medium- sized species observed across the Top End. Establishment of a systematic monitoring program in the urban and peri-urban landscape would provide data to rigorously assess changes in species richness and abundance over time.

Study of the pattern of distribution of small mammals in relation to the distribution of Feral Cats in the Top End is still being undertaken by the Flora and Fauna Division and analysis of results are expected to be completed late 2015.

Although final results from the disease investigation will not be available until mid-2015, the general appearance and health of the animals trapped was within normal bounds.

Site	Black-footed Tree-rat	Brushtail Possum	Northern Brown Bandicoot	Cat	Dingo/Dog	Black Rat	Echidna	Agile Wallaby	Cow
DWN01	28	48	59	0	0	0	0	0	0
DWN02	10	0	62	0	0	0	0	24	0
DWN03	19	7	52	0	0	0	0	19	0
DWN04	0	16	139	6	3	0	0	148	0
DWN05	0	106	281	0	3	6	0	39	0
DWN06	11	14	89	0	11	0	0	80	0
DWN07	20	0	70	0	3	0	0	133	0
DWN08	6	63	138	0	0	0	0	28	0
DWN09	3	0	133	0	6	0	0	17	0
DWN10	0	25	25	9	0	0	0	0	0
DWN12	0	17	0	20	0	0	7	27	0
DWN13	0	0	152	4	15	0	0	15	11
DWN14	0	24	3	0	0	0	0	10	0
DWN15	3	13	193	0	0	0	0	13	0
DWN16	6	0	33	0	0	0	0	36	0
DWN17	0	0	0	6	0	0	0	31	0
DWN18	0	0	0	23	0	0	0	17	0
DWN19	0	21	82	0	3	0	0	35	0
DWN21	0	7	0	0	0	0	0	14	0
DWN22	0	41	0	0	3	0	0	14	0
DWN23	0	14	0	0	0	0	0	10	0
DWN24	0	6	74	0	0	0	0	32	0
DWN25	0	0	31	7	0	0	0	10	0
DWN26	0	12	0	4	4	0	0	15	0
DWN28	14	103	69	0	54	0	0	260	0
DWN29	0	6	0	0	0	0	0	3	0
DWN30	0	0	0	1	0	0	0	23	0
DWN31	0	0	0	0	0	0	0	50	0
DWN34	0	34	0	3	17	0	3	100	0
DWN35	23	117	23	0	0	0	0	9	0

Figure 4. Relative frequency of independent camera-trap 'captures' for each species at each site, numbers represent captures per 100 trap-days. Numbers in red represent sites where mammals were captured on camera but not by live-trapping. Blue bars provide graphical comparison.

Appendix

Table 4. Location and geographic information for each site surveyed in the 2014 Darwin urban study.

ID	Longitude	Latitude	Tenure
DWN01	130.8701	-12.4343	Charles Darwin National Park
DWN02	130.8793	-12.4452	Charles Darwin National Park
DWN03	130.8856	-12.4370	Charles Darwin National Park
DWN04	130.8219	-12.4115	East Point Reserve, Darwin City Council
DWN05	130.8369	-12.4179	East Point Reserve, Darwin City Council
DWN06	130.8913	-12.4081	RAAF Base, Department of Defence
DWN07	130.9070	-12.4070	RAAF Base, Department of Defence
DWN08	130.9514	-12.5109	Crown Land
DWN09	130.9857	-12.5251	Crown Land
DWN10	130.9193	-12.4115	CSIRO
DWN12	130.8721	-12.3584	Casuarina Coastal Reserve
DWN13	130.9295	-12.4083	Holmes Jungle Nature Reserve
DWN14	130.9258	-12.4004	Holmes Jungle Nature Reserve
DWN15	130.9010	-12.3352	Casuarina Coastal Reserve
DWN16	130.9046	-12.5632	Crown Land
DWN17	130.9747	-12.3723	Shoal Bay Receiving Station, Department of Defence
DWN18	130.9655	-12.3992	Shoal Bay Receiving Station, Department of Defence
DWN19	130.9428	-12.5692	Crown Land
DWN21	131.0602	-12.4642	Howard Springs Nature Reserve
DWN22	131.0498	-12.4653	Howard Springs Nature Reserve
DWN23	131.0268	-12.4554	Crown Land
DWN24	130.9663	-12.5820	Crown Land
DWN25	131.0380	-12.4533	Crown Land
DWN26	131.0268	-12.4554	Crown Land
DWN28	131.0852	-12.5650	Crown Land
DWN29	131.0500	-12.6143	Crown Land
DWN30	131.0945	-12.4328	Shoal Bay Coastal Reserve
DWN31	131.1096	-12.4213	Crown Land
DWN34	131.0944	-12.6088	Crown Land
DWN35	131.5725	-12.1144	Crown Land

Table 5. The number of species of small mammals that were captured at each site during previous and current surveys; and the change in the number of species trapped between 2014 and past surveys.

Site	2001	2002	2007	2008	2014	Change in Number of Species
DWN01	-	-	-	2	3	-1
DWN02	-	-	3	-	3	0
DWN03	-	-	3	-	0	-3
DWN04	-	-	-	-	1	-
DWN05	-	-	-	-	3	-
DWN06	-	-	-	-	2	-
DWN07	-	-	-	-	1	-
DWN08	-	-	-	-	1	-
DWN09	-	-	-	-	1	-
DWN10	-	-	-	-	2	-
DWN12	1	-	-	-	0	-1
DWN13	-	-	2	-	2	0
DWN14	-	-	-	1	0	-1
DWN15	-	-	1	-	0	-1
DWN16	1	-	-	-	2	1
DWN17	2	-	-	-	1	-1
DWN18	1	-	-	-	0	-1
DWN19	2	-	-	-	0	-2
DWN21	-	2	-	-	0	-2
DWN22	-	-	3	-	1	-2
DWN23	-	2	-	-	1	-1
DWN24	5	-	-	-	1	-4
DWN25	-	1	-	-	0	-1
DWN26	-	2	-	-	0	-2
DWN28	-	-	3	-	3	0
DWN29	2	-	-	-	1	-1
DWN30	-	-	-	1	0	-1
DWN31	-	1	-	-	0	-1
DWN34	3	-	-	-	0	-3
DWN35	-	-	3	-	1	-2
MEAN	2.1	1.6	2.6	1.3	1.0	-1.3

Table 6. Number of mammals trapped per trap night during previous and current surveys, and the change in the capture rate between 2014 and past surveys.

Site	2001	2002	2007	2008	2014	Change in Captures
DWN01				0.33	0.33	0.00
DWN02			1.89		0.33	-1.56
DWN03			1.33		0.00	-1.33
DWN04					0.25	-
DWN05					0.33	-
DWN06					0.38	-
DWN07					0.33	-
DWN08					1.25	-
DWN09					0.50	-
DWN10					0.38	-
DWN12	0.33				0.00	-0.33
DWN13			0.67		0.38	-0.29
DWN14				0.33	0.00	-0.33
DWN15			0.00		0.00	0.00
DWN16	0.00				0.25	0.25
DWN17	0.33				0.33	0.00
DWN18	0.00				0.00	0.00
DWN19	0.50				0.00	-0.50
DWN21		0.33			0.00	-0.33
DWN22			0.89		0.25	-0.64
DWN23		0.50			0.25	-0.25
DWN24	1.00				0.50	-0.50
DWN25		0.00			0.00	0.00
DWN26		0.83			0.00	-0.83
DWN28			0.78		0.42	-0.36
DWN29	0.33				0.25	-0.08
DWN30				0.00	0.00	0.00
DWN31		0.00			0.00	0.00
DWN34	0.33				0.00	-0.33
DWN35			0.56		0.25	-0.31
MEAN	0.51	0.42	0.98	0.25	0.23	-0.34

East Point Biodiversity Management Action Maps January – March 2015

January Management Actions



Figure 1 January Weed reduction



Figure 2 January Forest maintenance

February Management Actions



Figure 3 February Weed reduction



Figure 4 February Forest maintenance

March Management Actions



Figure 5 March weed reduction



Figure 6 March Forest maintenance

OPEN SECTION

E&I/6

Environment & Infrastructure Committee Meeting – Tuesday, 21 April 2015

10. INFORMATION ITEMS

Nil

11. GENERAL BUSINESS