2016

Standing Committee Meetings – Technical Services

NORTH BURNETT
REGIONAL COUNCIL

MONTO

North Burnett Regional Council

01 June, 2016

DOCUMENT ID 761626

Attendees	**Agenda Item 1**	**Attendees**	
Welcome	**Agenda Item 2**	**Welcome / Housekeeping**	
Apologies	**Agenda Item 3**	**Apologies**	
Declaration	**Agenda Item 4**	**Declaration of Interest**	
Deputations	**Agenda Item 5**	**Deputations**	
Infrastructure	**Agenda Item 6**	**Infrastructure Report**	
	6.1	Technical Services Report	**003-010**
	6.2	Environmental Services Report	**011-017**
	6.3	Gayndah Airport Naming Request	**018-030**
	6.4	Flying Fox Roost Site Assessment – Oakey Creek Gayndah	**031-045**
Confidential	**Agenda Item 7**	**Confidential Reports**	
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General Business	**Agenda Item 8**	**General Business**	
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INFRA 01 - TECHNICAL SERVICES INTERNAL REPORTS 06/16

Responsible Officer: Trevor Harvey – Manager Technical Services
Report prepared by: Trevor Harvey –Manager Technical Services

PART A WATER AND WASTE WATER

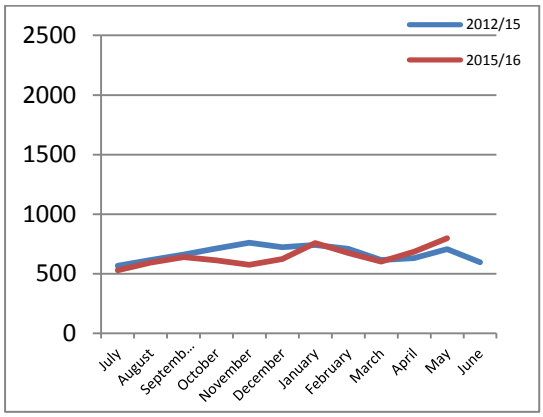
Reporting Period: 16/04/2016 to 15/05/2016

Water Operations:

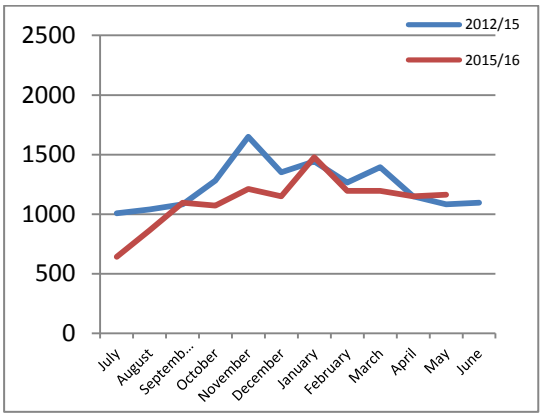
Monthly Statistics

Water usages in all schemes across the Council area were above the seasonal average with usage in four of the schemes being the highest recorded in the financial year. All surface water source storages have ceased to overflow. Close monitoring of consumption is occurring as continuation of the current usage rate may cause some raw water supply issues.

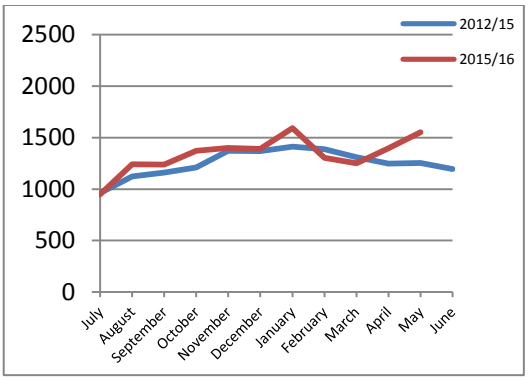
Water Consumption Litres/Connection/Day



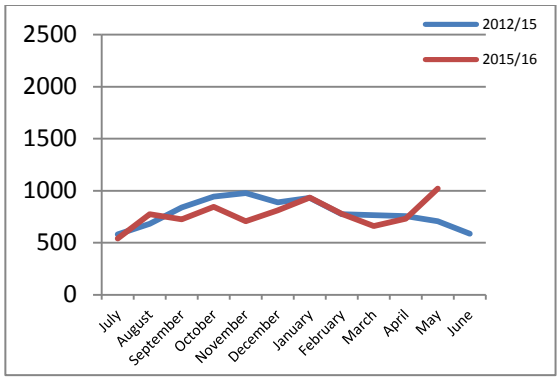
Biggenden



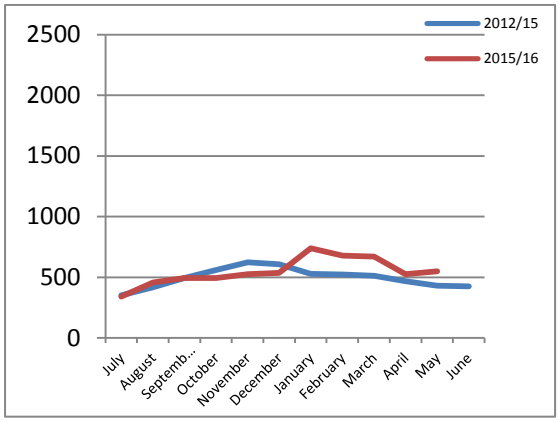
Eidsvold



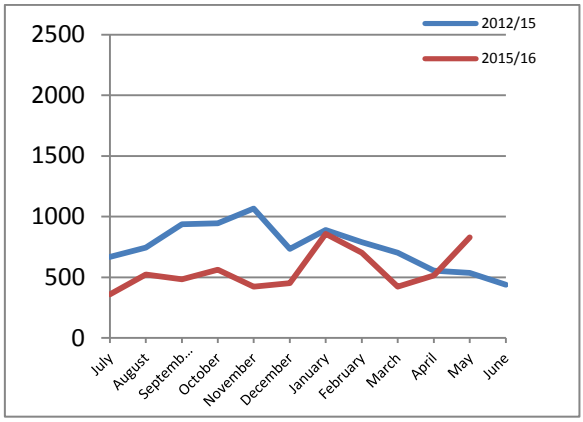
Gayndah



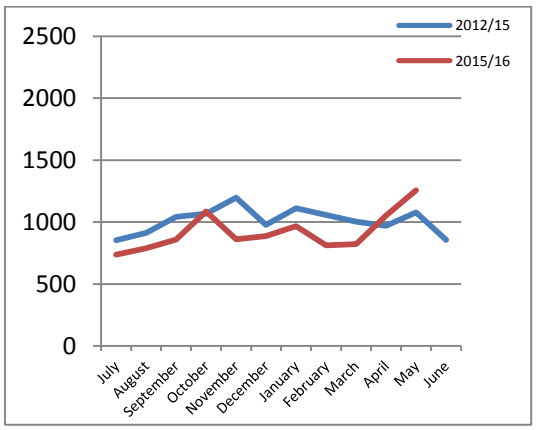
Monto



Mount Perry



Mulgildie



Mundubbera

Water Maintenance:

General

A general decrease in main and service connection breaks were reported during the month which is indicative of the stabilising of the water table fluctuations in the current extended dry spell.

Biggenden

A test bore has been drilled adjacent the existing No2 bore which is failing. A water sample from the test bore has been sent for a complete chemical analysis. Four service connection breaks were repaired.

Eidsvold

Work was of routine nature during the month.

Civil construction for the new WTP has commenced with retaining walls being completed and site levelling almost complete. Some tanks have been delivered to site. Project is currently on plan.

Gayndah

Work was of routine nature during the month. One main break and nine service connection breaks were repaired.

The new in-line analysers were commissioned in the plant room.

Monto

Two main breaks and one service connection break were repaired. Other work was of routine nature.

Mount Perry

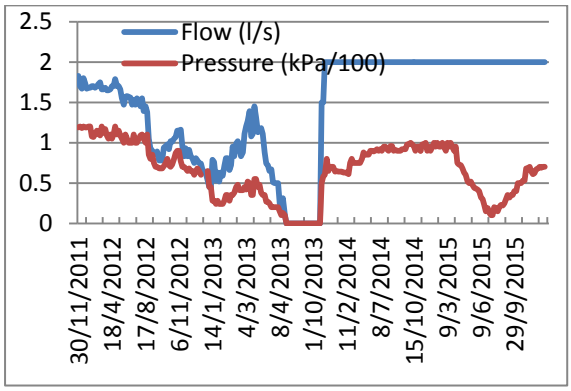
Work was of routine nature during the month.

Mundubbera

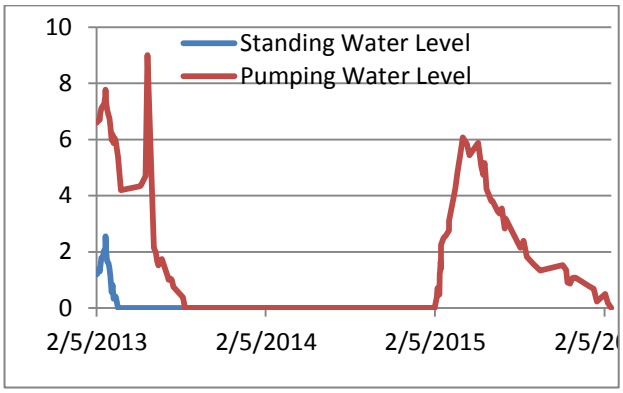
One main and three service connection breaks were repaired.

The Lyons Street mains replacement project was completed. The pipe trenches were only temporarily sealed as these will be renewed as part of the Lyons Street reseal.

Mulgildie



Mulgildie Artesian Bore Production



Mulgildie Artesian Bore Level

Bore characteristics continued to improve during the month with the water level remaining at the top of the bore casing during pumping. Closed bore pressure still remains less than 75% of the base line data measured in 2011.

Work was of routine nature during the month which included valve and hydrant box cleaning and painting.

Waste Water Maintenance

General

Nil.

Biggenden

Work was of routine nature during the month.

Eidsvold

Work was of routine nature during the month.

Gayndah

Work was of routine nature during the month.

Monto

Work was of routine nature during the month.

Mundubbera

One sewer main blockage was cleared. There was no reportable release to the environment.

PART B **BUILDINGS AND FACILITIES**

Reporting Period: 20/04/2016 – 19/05/2016

Prepared by: Melinda Thorburn

Maintenance

- As of 19 May 2016, there are 27 open tasks to be actioned.
- Approximately 30 tasks have been received this month.
- During the month approximately 23 task requests were completed.

CONSTRUCTION

Works in Progress

Eidsvold SES Shed Fit out:

- Internal fit out has now been completed.

Eidsvold Hall Kitchen Upgrade –

- Work has commenced on the kitchen upgrade. Kitchen has been gutted and floor covering removed.

Eidsvold Cricket Building storage enclosure –

- Purchase Order has been issued and we are awaiting advice of a start date.

Biggenden Swimming Pool:

- Awaiting receipt of quotes to repaint the pool.

Mundubbera Swimming Pool:

- New filters and pump have been installed at the pool and are currently undergoing commissioning.
- Significant leaks have been detected at the pool and will need to be addressed as soon as possible in order to not compromise the new equipment.
- Investigation is currently underway to identify the location of the leaks.
- Pool will need to be emptied in order to repair the leaks and due to cost of emptying and replacing the water it is suggested that the pool also be repainted at the same time.
- Quotes are currently being obtained to repair leaks as well as to repaint the pool.

Biggenden Aged Units – Drainage Assessment and repair

- Waiting on Plans to be costed to enable work to be completed as soon as possible.

Biggenden Grandstand replacement

- Work is currently underway on the grandstand replacement and is expected to be completed shortly.

Amenities – Monto Lions Park – New Disabled toilet and refurb of existing toilets

- This project has been awarded and will commence in early June 2016.
- A small toilet block has been hired and installed for use while toilets are unavailable during construction/refurbishment.

Council Facilities – Lock standardisation

- Inspection of water and sewerage and admin facilities has been undertaken by contractor and Council staff to compile list of requirements to enable installation prior to end of financial year.

Monto Hall – Water damage repair and internal repaint

- Water damage has been repaired.
- Internal painting will commence shortly in order to be completed by end of financial year.

Monto Memorial Park fence replacement

- Purchase Order has been placed for the replacement of the fence.

Regional - Playground equipment upgrade

- Replacement of equipment is ongoing.

Regional Council Housing works – 5 year plan

- Work is continuing as per 5 year Housing plan.

Gayndah Hall Floor refurb –

- Upper windows have been freed up and new pull strings installed.
- Perished floor boards have been replaced prior to sanding and polishing.
- Sanding and polishing of the Gayndah Hall floor will commence in early June.

Mt Perry Hall Stumps

- Purchase Order has been issued for the replacement of the damaged concrete stumps under the Mt Perry Hall. Work will commence early June 2016 with the view to having work completed by end of financial year.

Part C Asset Management Report

Reporting Period: 20/04/2016 – 19/05/2016

Prepared by: Trevor Harvey

General

Due to staff availability there was minimal progress on the data cleansing for uploading to Assetic, Rural addressing, GIS uploading and road renaming during the month

Data Collection

Road inspections have continued in the region to provide details on current road surface conditions to assist in the forward planning process for the next reseal program. This program is on track to provide the program for the next financial year.

RMPC

The asset management department has now assumed the responsibility for the RMPC road inspections and work order generation. The reason for this change is to consolidate all road inspections within the one department which will allow skill support for both the main roads and council roads.

Plant Procurement

- **On Order**

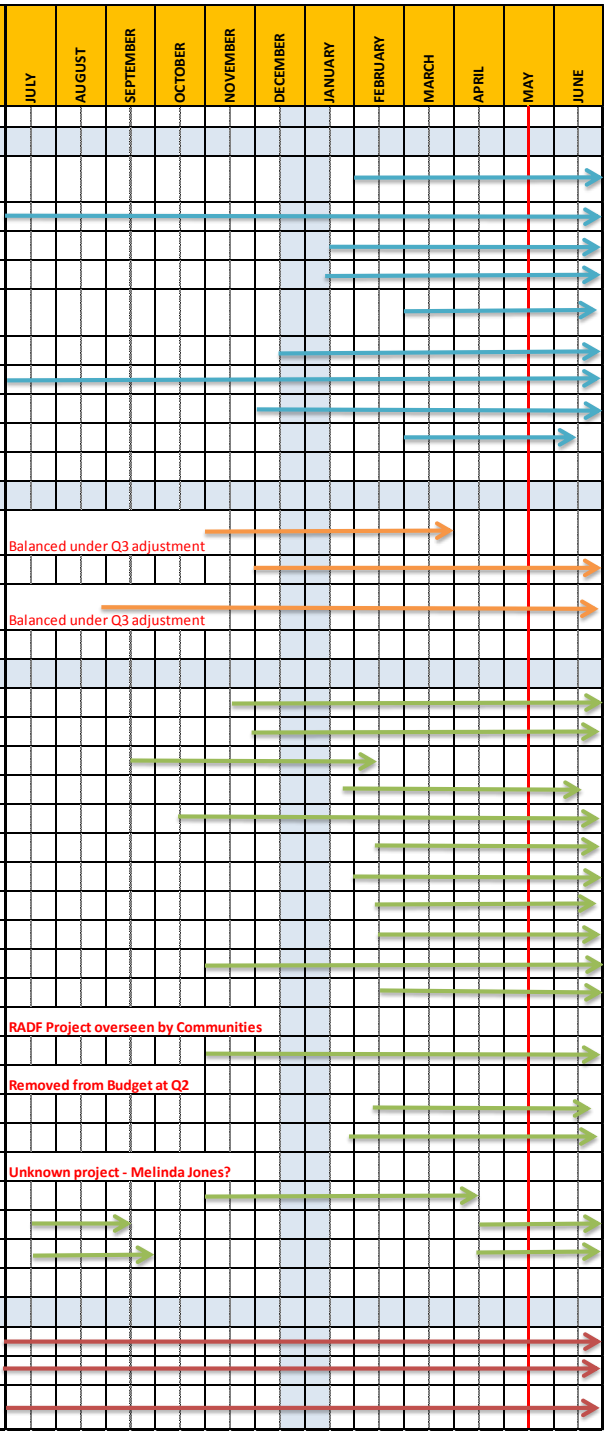
  Zero turn mower for Mt Perry

- **Disposal**

  Nil

CAPITAL BUDGET 2015/2016

Capital Projects	Budget	Committed Expenditure	% Complete	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
Water Infrastructure	**2,966,000**	**2,360,549**													
Biggenden Raw Water Pump Switchboard replacement	45,000	44,288	65%												
Eidsvold WTP replacement	2,100,000	1,783,008	25%												
Gayndah Clarifier Refurbishment	75,000	54,714	40%												
Gayndah Containerised HCl Dosing Facility	99,000	105,000	35%												
Gayndah North pressure supplementation (design)	30,000	18,000	55%												
Gayndah Supernatant sludge separator	100,000	13,275	25%												
Regional Meter, Hydrant, Connections & Mains	430,000	300,670	75%												
Regional Statutory System upgrade for DWQMP	57,000	11,761	25%												
Mulgildie WTP cooling tower replacement	30,000	29,833	65%												
Sewerage Infrastructure	**390,000**	**455,881**													
Gayndah Rising Main Replacement - Oakey Creek	150,000	180,575	100%												
Gayndah STP No2 lagoon modification (yr 1 of 2)	100,000	114,606	95%												
Regional Sewerage main & manhole replacements	140,000	160,700	100%												
Buildings & Other Structures	**1,045,600**	**672,222**													
Biggenden Aged Facility Drainage Repair	15,000	100	45%												
Amenities Lions Park Monto refurbish	95,000	84,602	65%												
Amenities Beiers Park Demolish	10,000	3,544	100%												
Biggenden Caravan Park Caretakers cabin refurb	11,000	9,253	85%												
Council Facilities lock standardisation (yr 1)	70,000	2,362	35%												
Monto hall repair internal water damage	38,000	9,444	15%												
Eidsvold Hall Kitchen upgrade	55,000	52,840	45%												
Gayndah Hall Windows & Floor	30,000	17,431	40%												
Mt Perry Hall Stumps	10,000	4,655	15%												
Council Housing 5 yr plan repairs	90,000	75,130	75%												
Monto Memorial park side fence replacement	10,000	0	10%												
Kenny Russell Memorial Bronzing	60,000	0													
Regional Playground Upgrades	60,000	16,976	60%												
Rubbish Bin Covers (2 per town)	30,000	0	0%												
Eidsvold SES Shed fitout	50,000	45,482	95%												
Eidsvold Cricket Building enclosure	15,600	8,000	35%												
Signage - Paradise Dam & Mingo Crossing	10,000	0	0%												
Biggenden sportground grandstand repair	25,000	24,500	95%												
Swimming Pool Biggenden changeroom upgrade	170,000	87,340	85%												
Swimming Pool Mundubbera Filter replacement	165,000	214,157	95%												
Plant	**1,400,000**	**1,386,833**													
Cars, Utes, Yellow Plant and appliances	1,200,000	1,597,998	100%												
Sale of Plant		-404,065	100%												
Digital radio vehicle communications system including towers (Yr 1 of 3)	200,000	192,900	95%												



INFRA 02

ENVIRONMENTAL SERVICES REPORTS 06.2016

Responsible Officer: *Brendan Pearce – General Manager Engineering & Environmental Services*
Report prepared by: *Katrina Cekanauskas – Administrative Assistant*

1 PURPOSE OF REPORT

The purpose of this report is to provide Council with information in relation to reported activities carried out particularly in the areas of Environmental Health, Trade Waste, Vermin and Vector Control, Waste Management/Collection and Natural Resource Management.

2 INTRODUCTION/BACKGROUND

The attached reports detail statistical information for the months of April and May 2016 in the areas of Food Business, Vector Management, Waste Management Services, Wandering Livestock and Pest and Weed Management.

3 CORPORATE/OPERATIONAL PLAN

In accordance with outcome 4 Increasing the quality of water, land, air and the extent of biodiversity in the region. With particular relevance to sections 4.1 Pest Management, 4.2. Stock Routes, 4.3 Waste Management, 4.4 Environmental Health and 4.6 Natural Resource Management.

4 POLICY IMPLICATIONS

Not applicable.

5 STATUTORY REQUIREMENTS

Environmental Protection Act 1994, Food Act 2006, Waste Reduction and Recycling Act 2011,Public Health Act 2005 and Land Protection (Pest and Stock Route Management) Act 2002.

6 FINANCIAL IMPLICATIONS

Not applicable.

7 RISK MANAGEMENT

Not applicable.

8 CONSULTATION

Reports have been prepared in conjunction with relevant staff.

9 OPTIONS FOR COUNCIL TO CONSIDER

For Councillors information only.

10 OFFICER'S COMMENTS/CONCLUSION

For Council's consideration.

11 ATTACHMENTS

For the months April and May 2016.

- Environmental Health Monthly Summary Report
- Natural Resources Management Report

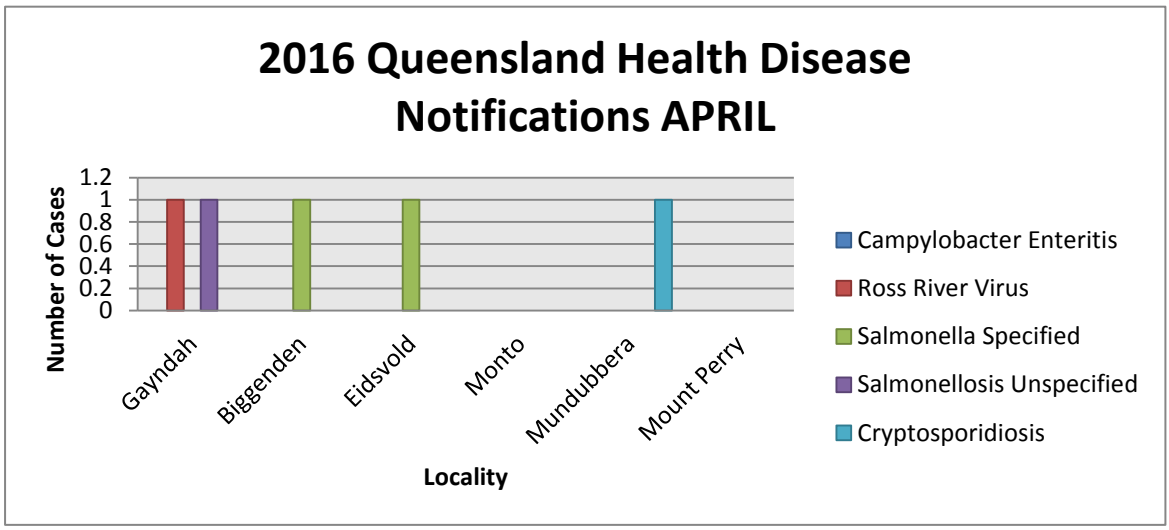
Environmental Health Monthly Summary Report

1.1 Food Business Inspections	Compliant - April
New Food Business	0
Re-inspection	4
Number of complaint inspections	0
Request for Search	0

1.2 Application Assessments -February	
New Application – Mobile Food Business	0
New Application – Temporary Food Business	0
New Application Fixed	0
Amendment	0
Annual Review – Food Business	0

2.0 Public / Community Events - Food Notifications	
Month	**Number of notifications**
April 2016	

3.0 Local Government Weekly Notifiable Disease Report for North Burnett						
2016 April						
	Gayndah	Biggenden	Eidsvold	Monto	Mundubbera	Mount Perry
Campylobacter Enteritis	0	0	0	0	0	0
Ross River Virus	1	0	0	0	0	0
Salmonella Specified	0	1	1	0	0	0
Salmonellosis Unspecified	1	0	0	0	0	0
Cryptosporidiosis	0	0	0	0	1	0



4.0 Vector Management

Ovi Trapping

Ongoing Rapid Surveillance for Vector Presence (RSVP) is a novel system to expedite *Ae. aegypti* presence/absence surveys.

Ovi Trapping is currently being undertaken throughout the North Burnett. Funding has been secured until the end of May.

RM Williams Centre

RM Williams staff report the number of mosquitoes have decreased since the treatment dispenser has been installed.

5.0 Waste Management Services for April 2016

5.1 Kerbside Collection	Units - APR
Domestic	11844
Additional Services	20
Infirmed	116
Commercial and School	4244
Litter Service	728
Not for profit	488
Events	0
Total Services	**17440**

6.0 Waste Education Activities

The Fraser Coast Regional Council and Qmulching Education Trailer was organised to attend the Gayndah and Biggenden Show. North Burnett Regional Council would like to thank Fraser Coast Regional Council and Qmulching for there support. Robbie the Recycler (alias Rachael Duncan EHOC) proved to be a great success at the Biggenden Show.

7.0 Environmental Compliance

No inspections undertaken.

Natural Resource Management Report

21st April to 24th May 2016

Contents

Pest Survey Program 1

Flying-fox Management and Monitoring 1

Coordinated Baiting Program 2

Agricultural Shows Attendance 2

Forward List of Work for Q4 2015/16 2

Customer Service Requests for calendar year to date 3

Pest Survey Program

The current rotation of properties for the Pest Survey Program commenced on the 1st April 2016 for a period of 3 months. To date the program has been running well and property owners have assisted with the inspections. Letters are forwarded to all property owners to thank them for their co operation and to advise if any declared plants and animals were found.

Duration and location of this survey is broken up into Parish localities as follows:

Parish (Locality)	Survey Time
All properties in the North Burnett Regional Council area.	1st July 2015 to 30th June 2016
Aranbanga, Biggenden, Blairmore, Branch Creek, Coominglah, Coominglah Forest, Dundarrah, Dykehead, Gurgeena, Harrami, Hawkwood, Mulgildie, Mundubbera, Old Cooranga, Penwhaupell, Pile Gully, Rawbelle, Riverleigh, Selene, The Limits, Toondahra, Wahoon, Wetheron, Woodmillar, Yarrol	1st April 2016 to 30th June 2016

Flying-fox Management and Monitoring

A workshop on Flying-fox management options and current status of Gayndah's Oakey Creek Roost site was conducted for Councillors on Friday the 13th May.

A Report to Council containing information and management options will be presented for consideration.

During May, Flying-Fox numbers have on their own accord declined from between 250,000-300,000 down to 0 at the Oakey Creek Roost site.

Coordinated Baiting Program

NBRC conducted the advertised coordinated baiting program between the 10th and 13th May. A total of 33 registrations were received and a total of 987 kg of meat was injected with 1080.

MUNDUBBERA	MONTO	EIDSVOLD	BIGGENDEN	PERRY	GAYNDAH
184KGS	115KGS	400KGS	90KGS	0	198KGS

Agricultural Shows Attendance

NBRC's Environmental Services and Communities Teams attended each of the Agricultural Shows across the region.

Other projects and grant funding

There are presently no other NRM projects or grant funding.

Department of Transport and Mains Roads

Funding is currently been sought through the Department of Transport and Mains Roads (TMR). The following opportunities are being considered by TMR:

- the control of declared pests not already managed under existing contracted works within mains roads easements
- mapping of declared pests using technology such as IPad's/Smartphones and associated applications/software.

Forward List of Work for Q4 2015/16

1. Property inspections under the Pest Survey Program –Declared Plants and Animals
2. Clean road inspections throughout the North Burnett Region
3. Inspections and treatment of declared weeds on Council roads
4. Inspections & treatment of declared weeds on state roads
5. Vector Management inspections and dipping
6. Stock route grazing / travel permits
7. Wandering livestock responses
8. Fortnightly / monthly inspections of public and depot wash down facilities
9. Rubber Vine inspections on creek lines
10. Negotiations to secure future funding opportunities for NRM projects/initiatives
11. Procedural and policy development –
    a. Biosecurity Plan / Program
    b. Property Inspection Policy / Procedure
    c. Pre Purchase Property Inspections Policy
    d. Stock Route Grazing / Travelling Policy
    e. Feral Cat Management Policy
12. Standardisation of NBRC's LPO vehicles in terms of signage and safety equipment.
13. Introduction of blood toxicity testing program for LPO's.
14. Updating and improved utilisation of NBRC website for advertising/publishing NRM functions/initiatives.

Customer Service Requests for calendar year to date

Type of Request	Year to Date Total	May 2016 Total
Wandering Livestock reports	39	8
Declared Pest Reports		
a. Council responsible locations	2	0
b. Community guidance/assistance requests	14	1
c. Baiting Enquiries	29	7
Approval to Burn	7	7
Stock Route Grazing/Travel Permits	5	1
Other	3	0

INFRA 03
GAYNDAH AIRPORT NAMING REQUEST

Responsible Officer: *Mark Pitt – CEO*
Report prepared by: *Mark Pitt – CEO*

1 PURPOSE OF REPORT

To provide Council with information regarding a request to name the Gayndah Airport.

2 INTRODUCTION/BACKGROUND

At the May General the following was resolved:

Resolved: That a report be presented to the Technical Services meeting on the request to name the Gayndah Airport in memory of Ted Kirk

The restoration works have been completed on the Gayndah Airfield and are being officially opened on the 11th of June 2016.

The most recent example of naming a facility in Gayndah was the Gayndah Sports oval with the naming of the Peter Dunn Oval to which correspondence and a deputation was presented to the July 2015 General meeting. At the Policy and Planning meeting of 4 November 2015 the following was adopted:

500-11-2015 *Renaming the Gayndah Sports Reserve*

Cr JF Dowling moved and Cr WJ Bowen seconded:
1. That Council endorse the renaming of the main sports oval at the reserve to "Peter Dunn Oval";
2. That following consultation with local sporting groups the appropriate signage is erected; and
3. That a community renaming event be undertaken by the Mayor, Councillors and relevant community sporting leaders. ***CARRIED 7/0***

The renaming ceremony was held in conjunction with the 2016 Australia Day activities in Gayndah.

3 CORPORATE PLAN

1.5 Aviation Infrastructure

4 POLICY IMPLICATIONS

Street Naming - Policy No. 222 – closest current policy relevant to the issue and request.

5 STATUTORY REQUIREMENTS

Not applicable

6 FINANCIAL IMPLICATIONS

Cost associated with operation and management of the facility

7 RISK MANAGEMENT

Possible acquisition of a building requiring maintenance and upgrading – safety assessment and financial risk.

8 CONSULTATION

Gayndah RSL Sub-Branch request

9 OPTIONS FOR COUNCIL TO CONSIDER

Consider this report and note the information
Consider this report and resolve to accept or decline the request for naming of the Gayndah Airport

10 OFFICER'S COMMENTS/CONCLUSION

Gayndah Shire Council named the administration building in Gayndah in honour of Ted Kirk for his service on Council for 33 years from 1961 to 1994. The Gayndah RSL Sub-Branch has requested that the airport be named "Gayndah Airport – Ted Kirk Field".

It is believed that calling the Gayndah Airport 'Ted Kirk Field' would not diminish the name of the airport, as all documents such as ERSA (En Route Supplement Australia) would only refer to 'Gayndah Airport'.

It is also believed that by naming the airport it assist for any future or proposed air park. Supports believe that pilots greatly admire those who have 'gone before' and it may be possible to make a display of Ted's wartime photos in the old terminal building for example.

Council's direction is sought.

11 ATTACHMENTS

Correspondence dated 11 May 2016 – Doc Id 759188
Street Naming – Policy 222

RECOMMENDATION

That North Burnett Regional Council *supports / declines* the request to adopt the following name "Gayndah Airport – Ted Kirk Field".
Or
That North Burnett Regional Council supports in principle the naming of the Gayndah Airport and conducts a community consultation process.

09-May-16

RECEIVED (records)
File No: 6/23
11 MAY 2016
To:
Doc ID:
Retention Ref: 2018.M.

Mr Mark Pitt
Chief Executive Officer
North Burnett Regional Council

Dear Mark

The late Ted Kirk OAM was Gayndah's last air warrior of WW2. Ted was a fighter pilot and flew the Hawker Typhoon aircraft on ground attack and anti-shipping sorties with devastating effect. A summary of Ted's wartime activities is enclosed.

Ted served on the Gayndah Shire Council during the 1970s. Whilst in this role, Ted was instrumental in implementing improvements to the airport. This included installation of Pilot Activated Lighting, making it possible for the Royal Flying Doctor and others to use the airport at night.

The Gayndah RSL wish to honour Ted's memory by naming the Gayndah airport:

Gayndah Airport
'Ted Kirk Field'

The Sub Branch is cognisant of the fact that the town already has an administration centre named after Ted when there are many within our community who are equally as deserving, but the airport is more specific to Ted's service to our country and we feel it is more than fitting to have him remembered and honored in this way.

If this were to be approved by Council the Sub Branch would envisage co-financing a sign in keeping with other NBRC signage but with the inclusion of the RSL Logo along with the NBRC Logo.

The sub branch would provide photos and copies of documents that could be displayed within the Airport building to testify to the sometimes heroic and reckless exploits of this great pilot.

Craig Fothergill

GAYNDAH RSL SUB-BRANCH INC
PO BOX 330 GAYNDAH 4625
Ph: Secretary 07 4161 1148
Mobile: 0429401134
EMAIL: rsl.gayndah@gmail.com

Ted's War

Story of Ted Kirk from Sergeant to Pilot Officer during World War II as recounted to Peter Raffels

Ted came from a rural Queensland background and after leaving school, worked in a bank for 12 months. When the Japanese attacked Pearl Harbour, Ted, not yet 18 but with the permission of his parents, volunteered for Pilot training in the R.A.A.F. Ted did his basic training at Kingaroy followed by initial flying training on Tiger Moths at Narromine with further training on Wirraways.

Ted was posted to England where he flew Miles Masters, Harvards and Hurricanes. Ted then went to the Middle East; training again in an O.T.U. (Operational Training Unit) at Ismalia on Spitfire MK V. Ted loved the Spitfire MK V and says that it was the most beautifully harmonised aircraft and perfect for aerobatics. Ted achieved very high scores in air gunnery and was assessed as AA (Above Average) which is endorsed in his flying log book.

On returning to England, Ted was posted to a Tiger Moth unit at Worcester to 'keep his hand in;' where he was able to indulge his passion for aerobatics. In due course, an A.O.C's (Air Officer Commanding) inspection came up and the C.O. (Commanding Officer) of the unit told Ted that the high ranking officer who was to conduct the inspection was very keen to do aerobatics and would Ted take him 'playing' for the day to get him out of their hair! No sooner said than done and a good time was had by both of them, leaving the unit in peace. Following the aerobatics session, the A.O.C. told Ted how very much he had enjoyed the day and asked if there was anything that he could do for him. Now before going to Worcester, Ted had been billeted in an hotel in Brighton where he had often watched Typhoons returning low level from sorties in France. Ted decided there and then that he really wanted to fly the Typhoon, so he asked the A.O.C. if he could get him posted to a Typhoon Squadron. Shortly after that, Ted was posted to a Typhoon O.T.U. (Operational Training Unit) at Charmey Down. When Ted arrived, it was a cold day and all the instructors were huddled around the coke stove in the dispersal hut which they were disinclined to leave. Ted was told to 'have a look around the Typhoon at the end of the line. If you want to know anything else about it, come and see me. If you are happy with it, just take it for a spin'! Ted said that initially he was rather overawed by the size of the aircraft in comparison to the Spitfire but he taxied out and took off. The sheer power of the Typhoon was really something and Ted was at 1,000 feet before he thought about retracting the undercarriage, but as he says, "After I had flown around for a bit I got to like it"!

The Typhoon was a formidable ground attack aircraft. Ted flew the version armed with 60 pound rockets. The standard load was 8 rockets but they could carry 12, plus 4, 20mm Hispano cannon. The warhead on a 60 pound rocket is, in effect, a 6 inch shell, so an attack by just one Typhoon was devastating. Ted was an AA shot with rockets and could put all of them in a 25 yard circle! More destructive power than a broadside from a 6 inch Naval Cruiser.

Following O.T.U. Ted was posted to 198 Squadron which was then in Gilze Rijen in Holland. 198 Squadron had done great service against German armour in Normandy and had lost more aircraft in the process than any other Typhoon Squadron. 198 Squadron was now tasked with attacking ground targets and also anti-shipping strikes. Ted says that the

shipping strikes were the most daunting. "When you fire your rockets and you see them all streaking away from you, that's fine, but when a ship fires a whole salvo of 20 or so rockets at you, that's a different story!" Regarding flack, "you see these little red balls come floating lazily towards you before they (hopefully!) whip past and you know that between that one and the next red ball there are 5 more you can't see!" On flack avoidance, "of course, you have to hold the aircraft dead steady until you release your rockets, but then you fly exactly how you were taught not to. You put the rudder in one corner and swing the stick to the opposite corner of the cockpit. The aircraft is now facing in one direction but going in another. Hopefully the gunners place their rounds in the direction in which the aircraft is pointing"!

Ted's First Sortie:

From the Operations Record Book: "On 20 March, the Squadron was expecting to move to their new location at B.91 (Kluis). This was deferred to 21 March to enable the Squadron to carry out an attack as part of the Wing on the German Headquarters at Hilversum. This was a joint operation with 183 Squadron of dive bombing Typhoons. At 13.35 hrs, 12 aircraft of 198 Squadron and 12 aircraft of 183 Squadron took off, led by Wg.Cdr. J.C. Button D.F.C. to attack the target. At least 4 salvos of rockets (Ted's was one of those) were seen to be direct hits and after being bombed by 183 Squadron, the target was seen to be completely destroyed. Another congratulatory message was received from the A.O.C., 84 Group on the result of this show. Ted's log book entry states, 'Scored direct hit, moderate flack. 12 R/p salvo. Later confirmed, building destroyed. Casualties included 1 Colonel, 200 Huns and the Officer's Mess destroyed."

Ted's Personal Account: "This operation was on the third day that I was on the Squadron and it was my first operation. I flew as number 4 to Wg.Cdr. Button and we carried a double deck of 12 rockets and for somebody not having flown Typhoons for very long, that was a heavy load and you could feel it in the flight. Anyway, we attacked this headquarters and peeled off one after the other. Seeing as it was my first operation, I wanted to make a good impression, so I ignored the flack and stayed steady on the sight and let go my salvo. I managed to get a direct hit. Out of the 24 aircraft, there were only 4 direct hits recorded. The others were near misses but they did a lot of damage too. Later we heard that the headquarters was completely destroyed and the casualties included a Colonel and something like 200Germans including a lot fo Officers and the Officers' Mess was also destroyed. So that was my introduction to the flying Typhoons on Active Service."

Ted recounts that "whilst we were in Gilz Rijen, living in a 2 storey brick building, every morning on the dot of 8 'O' clock, 'Doodle Bugs' came puttering over just above the roof heading for London. A little further on, there was a zone called the 'Diver Belt' where girls operated the anti aircraft guns. You would hear the bang, bang, bang and then boom. Very few of them got past. One afternoon, a V2 rocked apparently went astray and landed just off the corner of our billet. The ceiling fell in on my head and there was dust everywhere. It virtually wrecked the building, but nobody got seriously hurt; some got a bit of flying glass. We would sometimes see box formations of American Flying Fortresses heading into Germany and a few hours later, the same formations coming back with many empty gaps in the boxes. Each Fortress had a crew of 10 men."

"On 18 March '45, I was detailed to fly a Sqn.Ldr. Doctor into an airstrip being constructed at Njimagen in the Squadron's old Auster MK2. There were bull dozers and all sorts of

machinery all over it, but we managed to find a little clear space to weave in amongst them and the Doctor went off to do whatever he had to do. When the Doctor came back, I made a bad error of judgment by taking off from a parking bay. The throttle friction nut was not working, so I asked the Doctor to hold it fully forward for the take-off. After take-off, I realised that I did not have enough power to turn before a row of trees, so I side-slipped through them and got away with it. When I looked down afterwards, the Doc had both hands on the throttle and all the whites were showing on his knuckles. I was very pleased he did that! The Doc said 'good flying, son. Good flying!"

"I wasn't very happy about shipping! But we did a couple of strikes against shipping. One fairly big boat was seen to be burning and beached".

"Then there was the Headquarters near Desberg. We attacked that and I was unsuccessful that day; my rockets fell short of the target but we did a lot of cannon strafing. Being a headquarters it was well protected, so we had a lot of flack and I got quite a few holes in my aircraft including one in the leading edge of the main plane which is where the tank is located. As I flew it on the way back, the fuel was coming out of the tank and flowing like a spray over the top of the wing. It was only a matter of 2 metres from the manifold which was spitting fire. I decided it was too risky, so I pulled up to get a little bit of height to get out. When I went to jettison my canopy, it had been hit and it wouldn't jettison. I tried to manually open it but I couldn't manually open it either. I was getting a bit frantic by then, so I decided to take it as far as it would go before it blew up! I flew it but it never did anything. When I got back to the strip, I didn't do the usual thing, a beat up, a chandelle and come in and land. I went straight in and put it on the ground and yelled for the fellows to knock the top off so I could get out. That was rather shaky, but anyway, I survived it".

<u>The Crossing fo the Rhine</u>

"This was on 24/3/45. I flew No4 in Typhoon D. We knocked out flack guns when we saw the twinkle of fie which gave away the camouflaged positions. There was intense flack. We saw paratroops landing and gliders towed. Three behind each DC3. The gliders landed in fields and they packed them in so close together. Some planes and gliders were shot down whilst still in the air. I saw a DC3 towing three gliders, hit in the port wing which caught on fire. The pilot held the aircraft steady until the gliders released; then the wing burned through and the aircraft spun in and exploded. There were no parachutes. After the landing, it was interesting to see all the pontoon bridges across the Rhine that had passed our airstrip on transports several days before".

<u>7/4/45</u> "Wg.Cdr. Button came to me and said, 'There's transport in a wood not far away. You come with me. I'll take some bombs and you bring some rockets and we'll have a go at this transport'. So we went out and he got up high and screamed down and released his bombs, pulled up out fo the dive and said, 'Where did they land?' and I said, 'About a kilometre away from the wood.' He said 'Oh Hell, let's get out of here, go home'. He flew straight home, I didn't do anything!"

"Another job I did when I was on the Squadron which was quite interesting. A pick-up man. The definition of a pick-up man is when they have buck jumping and they always have one man who runs around and he can lift the other rider off his horse. They called me a pick-up man because I used to fly the C/O's Auster and I used to fly that and pick up fellows who had been shot down and bring them home and do all sorts of errands. That was quite

interesting too. Sometimes the Dutch Underground would assist in the location of those chaps and give us the description of places to land".

"I only have one notation in my log book of where there were Messerschmitt 109s and Fokker-Wulf 190s in the Nimagen area while we were in the air, but we never encountered an enemy aircraft and I think the reason for that was that most of our operations were flown virtually at tree top level where there was no radar and no warning to them, so we never had to tangle with anyone."

"The Typhoon was underrated. The glamour aircraft was the Spitfire. The Typhoon did a lot of useful work over Europe. I heard that the casualty rate was higher on Typhoons than any other single engine aircraft."

"If we weren't on duty, we used to go and have a look around and we had a truck at our disposal with a big canopy over the back and quite a few of us got in the back and the driver took off and we'd gone quite a distance when looking out through the back I saw German soldiers beside the road, lying on their packs, still with their rifles. They were armed and they were all just lying around as though they couldn't care less about anything. We tried to tell the driver, we tried to knock on the cab, but he didn't take any notice, just kept going. Germans had had orders to surrender. In that town, there was a Polish P.O.W. camp. The Germans released them and they took charge of the surrender. They had all the Germans filing in and dropping their weapons in a shed. So we looked at the weapons and we managed to get a souvenir or two, swords and things like that. Also, we went to another shed which was full of motorbikes, dispatch riders' bikes, but among all those BMWs or whatever they were, there was one BSA, an English bike, painted in camouflage colours, a 500cc so we decided that would be good property so we put it in the truck and took it home, back to the camp. When we got back to the camp there were great celebrations; the war had been declared over. There were fellows running around shooting Very pistols into the air and lighting bonfires. That night there was a big celebration. They built a bonfire just like an Indian tepee with big long slabs of timber. It was a big bonfire, but some idiot threw a Jerry can of 100 octane into the middle of the fire. It swelled and started bulging and everyone ran away. Nothing happened, so they all crept back again. Everybody was standing ready to take off. Wg.Cdr. Button came up and he always had a habit of standing with his hands behind his back and his legs well apart and he was on edge, ready to go too. A seam broke on the Jerry can and a burst of fire came out just like a flame thrower and it roared. While that was happening, I got a Coffman starter cartridge that they used to start the Typhoon aircraft which was like a big shot-gun cartridge full of cordite. I opened the top of it and put it right under Wg. Cdr. Button, between his feet and lit it. Well the burning cordite flew up all over him. I think he thought the Jerry can had blown up and he just leapt into the air and took off into the darkness and I never saw him again that night".

"On 8 June, 198 Squadron was part of a Wing formation of a big number of aircraft. It was actually a fly-past for Marshal Zhukov, General Eisenhower and Field Marshal Montgomery. We were something like two hours in the formation and we flew most of that time in cloud and that's very stressful. Close formation in cloud is not very enjoyable. All you could see was the wing in front and a tail wheel above you. Unfortunately, one fellow must have pulled up or a disturbance in the air lifted him and his propeller chewed the tail off the one above him and they were both killed. Two good mates of mine. I hope Zhukov, Eisenhower and Montgomery enjoyed it. We didn't very much".

"After the war finished, instead of coming back to Australia, I was posted to 451 R.A.A.F. Squadron at Wunsdorf. Whilst at Wunsdorf, we met up with a bunch of German fighter pilots. Most of them spoke good English and we used to sit around and chat with them over a few beers. There was no malice. We talked about our different aircraft and flying. They were just like us really. They reckoned that they could have won if they had had the fuel. The Squadron flew from there to the occupation of Berlin. We had to fly along a narrow corridor above the Russian sector and they were rather nasty because if you strayed outside that corridor they fired some shots. Whether they were warning shots or not we did not know. We had Spitfire MK18's with the 5 bladed prop and the Gryphon engine. The Gryphon really spoiled the Spitfire as far as handling was concerned, on the ground in particular, but they were very fast and not so manoeuvrable as the Merlin Spitfires. Anyway, on takeoff from Wunsdorf I blew a tyre and I was warned that that had been observed. When I got to Berlin I was given the option of trying to land it or doing a belly landing. I said I would attempt to land it on one wheel (otherwise I would have had nothing to fly whilst in Berlin). I did that, landed it on one wheel and held off as long as I could on one wheel. The other wheel did cause a ground loop at the end of the run but it was not bad enough to do any damage".

"An interesting thing I saw in Berlin. It was so cold that all the transport drivers had a big row of trucks and when they went to start them in the morning they lit a fire underneath the radiators, a big blazing fire and most of those were petrol trucks too. I didn't see any of them get burned".

"Berlin was rather a holiday in a way but it was terrible to see the destruction. The Berlin 'wall' was operating. One time we wanted to see the Chancellery where Hitler was supposed to have ended his days. We had an awful job to persuade the Russian guards on the Brandenburg Gate to let us through. They did finally let us through but we were a bit nervous to know if they would let us back again. Anyway, we had a look at the Chancellery which was mostly damaged but still standing".

"You were not supposed to fraternize with the Germans, but we use to trade cigarettes for eggs and things like that with the farmers outside. That went very well until one day one of the ladies spotted our wings and the uniform. She screamed out 'Fligen'. They had come from Hanover and Hanover was absolutely flattened, so we could understand their anger. We didn't get any eggs that day!"

After his service in Berlin, Ted returned to country Queensland, where he resigned from the R.A.A.F., married his wife Grace, reared a son and three daughters and developed a very successful cattle enterprise. Ted and Grace now have 13 Grandchildren and 8 Great Grandchildren. Ted kept up flying, as a PPL, with a Cessna 182 which he used for everything from checking fences and mustering cattle.

General Policy

Policy Title: **Naming of Streets**
Policy No: 222

Directorate: Engineering & Environmental Services
Responsible Officer: Manager – Technical Services

Adopted Date: Policy & Planning Standing Committee Meeting – 06/10/2015
Review Date: 06/10/2017

VERSION	MEETING APPROVED	MEETING DATE	HISTORY
1	Policy & Strategy Meeting	02/08/2011	Bi-Annual Review
2	Policy and Planning	06/10/2015	Bi-Annual Review

Authorities: *Local Government Act 2009*

INTRODUCTION:

Council is the authority responsible for the naming and renaming of roads, streets, parks, bridges and other places within the North Burnett Regional Council area and within these guidelines.

OBJECTIVES:

The objective of this policy is to detail Council's criteria in relation to the naming of streets and roads with the North Burnett Regional Council area in accordance with the *Local Government Act 2009, section 901* and the relevant Local Law.

PRINCIPLES:

Council's naming authority refers to any road under the control of Council including public gazetted roads or a road that is to be gazetted to Council by way of a subdivision of land and excludes Crown public roads and any roads under the control of any State Government authority.

Some existing road names within the North Burnett Regional Local Government Area do not comply with this policy. Generally, these will only be changed if there are compelling reasons (e.g. confusion with a similar name). The names of existing roads are recorded in Council's Road Register as at the date of this policy.

SCOPE:

1. Uniqueness

- Name duplication within the same locality (Suburb) should be avoided;
- Name duplication within the same postcode area should be avoided;
- Name duplication within the local government area should be avoided;
- Road names should not be duplicated, even if the street type is different (e.g. there should be no other road named Arthur, even if called Arthur Court or Arthur Place);
- Roads crossing into an adjoining Local Authority Area or State Development Area should have a single unique name.

2. Sources

Preferred sources of names include:

- Indigenous names of local fauna, flora and features;
- Early local settlers, pioneers, explorers, inventors or other local eminent persons;
- War / casualty lists;
- Theme based naming (eg ships, bushrangers);
- Local landmarks or site specific features;
- Thematic names such as flora, fauna.

Names should be appropriate to the physical, historical or cultural character of the area. Large subdivisions with multiple streets should use an overall theme for naming streets. The origin of each name should be clearly stated and subsequently recorded. The Council gives preference to names, which reflect the historical significance of the site.

It should be noted that some sites already have designated themes. Existing themes should be respected and continued wherever possible. For example:

Biggenden	Royal family members (in the older part of Biggenden) and significant people in the history of the area (in the newer part of Biggenden). (Listed in the approved names register)
Eidsvold	Streets and Roads named after pioneering families, explorers and historical figures
Gayndah	Streets and Roads named after pioneering families and historical figures
Monto	Naming of streets to the east of the railway line after scientists and streets to the west of the railway line after explorers.
Mount Perry	Street naming was selected from the list of Shire Chairmen and Mayors. When that list was exhausted the naming progressed to the list from the Australia Day Citizens Awards. All roads are named after properties.
Mundubbera	Pioneering families, explorers, historical figures or the Royality

(Listed in the approved names register)

SCOPE (continued):

The local indigenous community group should be consulted when choosing indigenous names unless an agreed list has already been supplied to Council. The English meaning of the name will be supplied for reference purposes.

The use of a specific persons names may be used in recognition of the individual/ family. The individual/family name will only be used if several of the following are met:

- The evidence supplied shows history of the individual / family within the region;
- The evidence demonstrates that the individual / family made significant contributions to the community; or
- Was of national prominence.

Applications for individual / family names to be considered for inclusion in Councils approved names register should be made in writing to the CEO and include supporting documentation to meet the above requirements.

Evidence can include things like newspaper clippings, public notices, funeral notices, articles from industry newsletters.

3. Propriety

Names that are able to be characterised into one of the following will be avoided:

- Offensive or likely to give offence;
- Inappropriate sounding when pronounced;
- Considered as a commercial or company name; and
- Deemed to be incongruous – out of place;

4. Communication

- Names are to be easily read, spelt and pronounced in order to assist emergency services, service providers and the public.
- Unduly long names and names composed of more than one word should be avoided;
- Surnames / Family names are to be used except where it is necessary to identify an individual to avoid ambiguity by using their given name. The use of given names is to be generally avoided;
- Relationship between the length and name of road in order to assist with mapping constraints short roads should have short names.
- Whilst names should only have one word, it is recognised that some will require more that one word because of their geographic relationship e.g. Gladstone Monto Road; and
- Roads with double destination names are to be progressively renamed.

SCOPE (continued):

5. Spelling

- Where it is intended that a road should have the same name as a place or feature with an approved geographical name, then particular care should be taken to ensure that the correct spelling is adopted.
- Place names shown on Natural Resources & Mines topographic maps are approved names or in exceptional circumstances where the name has been changed subsequent to the publication of the map. The Queensland State Government gazetted “Place Names” register should be referred to in other instances.
- Where names have been changed or corrupted by long established local usage, it is not usually advisable to attempt to restore the original form, i.e. spelling which is sanctioned by general usage should be adopted.
- Generally road names proposed or approved should not contain abbreviations. For example the "Mount" in "Mount Perry Road" must not be abbreviated to Mt Perry Road. There is however, one exception - "ST" (Capitalised) should always be used in place of "Saint".
- Street types to be abbreviated as listed in the Australian Standards AS4590-2006.

6. Form

- The apostrophe mark ' must be omitted in the possessive case e.g. "Smith's Road" should be "Smiths Road"; and
- The use of hyphens should be avoided.

7. Road Type

Proposals for road names are to include an appropriate road type suffix. The road type selected should be representative of the physical form of the road to assist with motorists and pedestrians.

- Crescent – geometrically a crescent or half moon, rejoining the road from which it starts;
- Esplanade – a wide, open and level area often along a water front or leading to a specific feature;
- Cul-de-sac – use of types such as Place, Close and Court that have connotations of no through roads are to be used. There maybe exceptions where changes to the design have occurred since the original name was approved;
- Lane – should only be used on short narrow roads;
- Terrace – should be used where the road acts like a terrace; and
- Entrance – should only be used on short connection roads which form an “entrance” to a subdivision off a main collector road;

The following is a list of preferred road types to be used:

Avenue	Drive	Street
Boulevard	Esplanade	Terrace
Close	Lane	Way
Court	Place	
Crescent	Road	

SCOPE (continued):

Alternatives listed in Australian Standards AS 1742.5-1997 maybe used but are not preferred and Council at its discretion may not approve the use of them.

8. Private Developments

Property Developers who wish to name the newly created roads in their development should first refer to Councils unreserved names within Councils "approved street & place names list" for appropriate names in the first instance. If there are not enough names of the theme available, or there are none suitable then the Developer must give consideration to the following:

- The proposed name must comply with the provisions of this policy;

- For all proposed new roads, the Developer shall obtain written approval from Council for the names. This will normally form part of the information request, such that conditions can be set to specify the requirements of each road in the development. Road names shall be approved prior to applying for Survey Plan sealing, the approved road/street name is to be shown on the survey plan. An application for road names must provide at least three (3) alternatives for each road.

- The developer is required to supply the road sign and maintain the street sign until Council accepts maintenance of the road as a public road.

- Provide written documentation on the rational behind the theme being proposed;

- For developments that create new driveways/accesses that are not to be made public (i.e. dedicated to crown under Council control) such as those developments created under the Body Corporate and Community Management Act 1997 then the naming of these driveways is not mandatory. However, if there are internal roads that the Developer wishes to name the provisions of this policy will apply to avoid confusion resulting from duplication of public roads/streets and private driveway/access ways.

- The positioning of the sign is critical to avoid unnecessary confusion to the public. Council will advise the developer of the appropriate location.

INFRA 04 06.2016

FLYING FOX ROOST SITE ASSESSMENT – OAKEY CREEK GAYNDAH

Responsible Officer: Brendan Pearce, General Manager Engineering and Environmental Services
Mike Moller, Acting Manager Environmental Services
Report prepared by: Tom Hayes, Natural Resource Management Officer

1 PURPOSE OF REPORT

To inform Council of the current situation relating to both the recent influx and ongoing management of flying-foxes at the Oakey Creek (Gayndah) Roost Site.

This report (and associated attachment – Doc ID: 759786) is to be considered in conjunction with the report to Council (Doc ID: 740002) tabling *Flying-fox Roost Management Options: Gayndah and Mundubbera* (Doc ID 742497).

2 INTRODUCTION/BACKGROUND

During late April and early May the population of flying-foxes at the Oakey Creek Roost Site increased significantly and a revised assessment of the site was undertaken by Ecosure on Wednesday 4 May 2016. The attached report summarises the outcomes of the site assessment in terms of:

- The current flying-fox population and reproductive status;
- The suitability and durability of the current habitat to sustain the colony;
- Opportunities for vegetation management to increase buffers between the roost and areas occupied by humans and
- Reducing areas of potential conflict with nearby residents and businesses.

3 CORPORATE/OPERATIONAL PLAN

<u>Economic Development</u>
3.5 Land use
Natural Resources are protected and prudently used to provide for the communities present and future needs
3.5.4 Identify and incorporate in NBRC's new Planning Scheme

<u>Environment</u>
4.6 Natural Resource Management
Protecting areas of high ecological significance. Areas managed effectively.
4.6.2 Undertake NRM projects and strategic planning for sensitive sites within the region

4.6.4 Lobby for Federal and State Government Grants with regard to NRM projects, Pest Management initiatives and strategies that protect and preserve the diversity of flora, fauna and aquatic eco systems

4 POLICY IMPLICATIONS

This report to Council provides Council with information only.

Decisions on how Council manages its co-existence with flying-foxes are the subject of other reports to Council.

All other relevant NBRC policies are adhered to where applicable.

5 STATUTORY REQUIREMENTS

All relevant Standards and Codes are applied where required.

Nature Conservation Act (1992)

Department of Environment and Heritage Protection's "Code of Practice" for the "Ecologically Sustainable Management of Flying-Fox Roosts"

Department of Environment and Heritage Protection's "Flying-Fox Roost Management Guideline"

Environmental Protection Act (1994)

6 FINANCIAL IMPLICATIONS

This report to Council provides information only and therefore does not have any financial implications.

7 RISK MANAGEMENT

Risk management is an integral part of the planning and implementation of NRM Services as delivered by the NRM Stream.

Legally flying-foxes (like other native animals) are protected from harm or interference.

8 CONSULTATION

A workshop with Council was conducted on Friday the 13th May regarding the attached report and information contained.

No consultation has occurred outside of this Council workshop regarding the contents of the report.

Flying-foxes and their options for management have had extensive public and Council consultation to date.

9 OPTIONS FOR COUNCIL TO CONSIDER

Options to consider:

a.) Adopt the report and attachment as received for the information they contain.

b.) Not accept the report and attachment.

10 OFFICER'S COMMENTS/CONCLUSION

At this point in time there are no flying-foxes present at the Oakey Creek Roost Site.

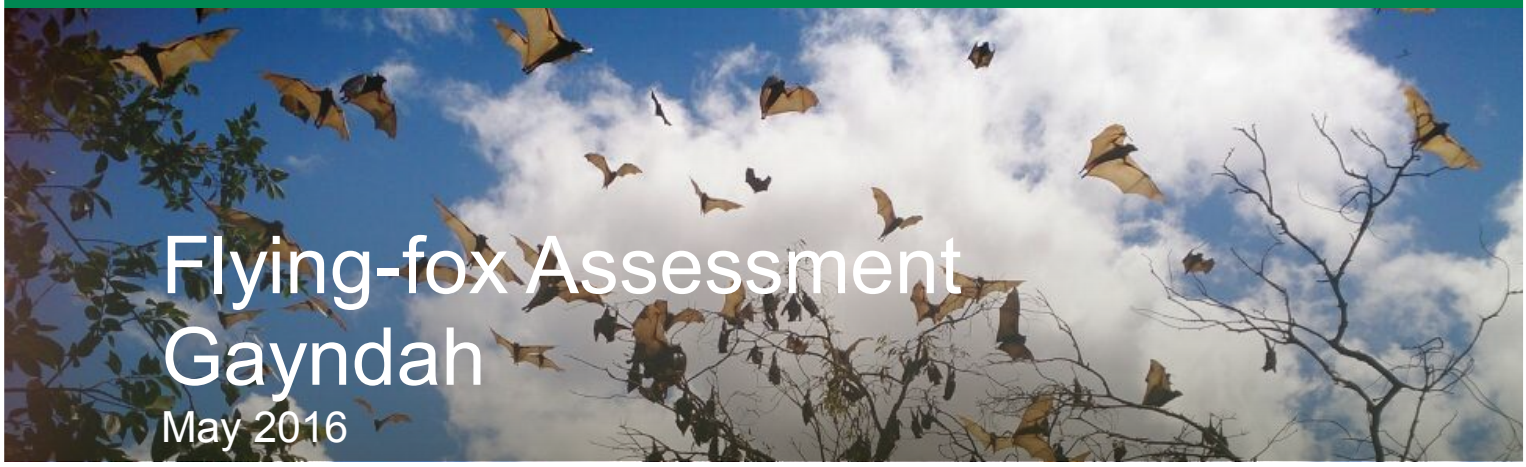
11 ATTACHMENTS

Flying Fox Assessment Gayndah (May 2016) – Doc ID: 759786

RECOMMENDATION

It is recommended that the report and attachment be adopted as received.

ecosure



Flying-fox Assessment Gayndah

May 2016

Background

North Burnett Regional Council (NBRC) has been managing community concerns towards seasonal flying-fox roosts in the towns of Gayndah and Mundubbera for a number of years. Three species of flying-fox have been identified within the NBRC area:

- grey-headed flying-fox (GHFF) (*Pteropus poliocephalus*)
- black flying-fox (BFF) (*P. alecto*)
- little red flying-fox (LRFF) (*P. scapulatus*).

Flying-foxes are a critical component of ecological processes, particularly as long distance pollinators and seed dispersers (Southerton et al. 2004; McConkey et al 2012; DoE 2016). All three species of flying-fox found in the NBRC area are protected in Queensland under the *Nature Conservation Act 1992* (NC Act).

A *Flying-fox Management Roost Options* report (Ecosure 2015) for four sites in North Burnett (including the focus of this report: Oakey Creek), was provided to Council in December 2015. This report recommended that Oakey Creek be designated as a roost, and should be managed without active dispersal as it is located in a lower human/flying-fox conflict area than other previous or potential roost sites. Due to the lack of alternative nearby suitable habitat that is low conflict, it is likely that active dispersal may move flying-foxes into unsuitable high conflict areas, increasing the risks and costs to the community (Ecosure 2015).

In recent weeks, the population of flying-foxes (particularly LRFF) at the Oakey Creek roost has increased, and a revised assessment of the site was undertaken. Council is seeking advice regarding:

- the current flying-fox population and reproductive status
- the suitability and durability of the current habitat to sustain the colony
- opportunities for vegetation management to increase buffers between the roost and areas occupied by humans

- reducing areas of potential conflict with nearby residents and businesses.

The following is a brief summary of the site assessment of the Oakey Creek flying-fox roost on Wednesday May 4, 2016.

Oakey Creek roost assessment

Roost count

It was estimated that between 245,000 to 325,000 LRFFs were present during the roost assessment. 3000 BFFs were also present at the roost, accounting for 1% of the total roost count. Approximately 10% of LRFF appeared to be heavily pregnant, and two under wing pups were observed.

Due to the 'flighty' behaviour exhibited by flying-foxes when the roost was approached during the static count, a fly-out count was undertaken at dusk to confirm roost numbers.

Habitat suitability

Flying-foxes have been roosting in vegetation dominated by *Eucalyptus* spp. and *Casuarina* spp. Endangered remnant vegetation (12.3.10/12.3.3) exists approximately 100 m north-west along the creek line. In order to evaluate the site's suitability for sustaining the current flying-fox roost, a basic habitat assessment was undertaken.

Without causing too much disturbance to the colony, the following plant species could be identified: *Eucalyptus tereticornis* (Queensland blue gum)*, Corymbia citriodora* (spotted gum) and a number of weeds including Cadadgi, Chinese elm, leopard tree, white cedar and non-native palms.

Impacts to vegetation, particularly casuarina and white cedar, included defoliation and broken branches throughout most of the roost extent. This damage is caused by the large numbers of flying-foxes, and particularly the clumping nature of LRFFs that weigh down branches until they break. Figure 1 shows the presence of LRFFs along the creek evident by the clumped red-brown colour. Figure 3 illustrates changes to the vegetation structure in the last 12 months,

Figure 1 Oakey Creek roost with little red flying-foxes clustering together shown by red-brown colouring. Photo taken from Winifred Cobbo Street (southern orientation)

notably defoliation and reduced density of the canopy and understorey. The increase in flying-fox numbers has resulted in an increase in the roost area. Figure 2 map shows changes to the roost extent since the previous assessment 12 months ago.

A primary concern for NBRC is that flying-foxes may continue to expand and/or shift their roost up the creek to vegetation behind residential dwellings on Mick Lutvey Street.

Figure 2: Oakey Creek Roost

North Burnett Regional Council

Flying-fox management plan

Proximity to nearest resident

Previous roost extent

Current roost extent

ecosure

Job number: GW174
Revision: 1
Author: JC
Date: 10/05/2016

0 12.5 25 50
Metres

GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
Units: Meter

Data Sources: © State of Queensland (Department of Natural Resources and Mines), 2012 and 2015; © Ecosure Pty Ltd, 2015; © Copyright Commonwealth of Australia (Geoscience Australia) 2012 The Commonwealth gives no warranty regarding the ccuracy, completeness, currency or suitability for any particular purpose; Image Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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PR1718_New_flyinging_fox_extents
Scale at A4- 1:2,513

May 2015 May 2016

Figure 3 Images illustrate changes to vegetation structure, particularly in canopy cover and understorey

Previously, flying-foxes were not recorded upstream or downstream of the golf course, with the powerline easement fragmenting the vegetation and creating a buffer (Ecosure 2015). In recent times, flying-foxes have spread east and westward along the creek-line, past the amenity building on the golf course, and subsequently 'leap-frogged' the powerline buffer to now reside closer to residential dwellings. Flying-foxes were also observed occupying a cadagi and a leopard tree on the southern side of the 7th fairway that runs along the creek (Figure 4).

Figure 4 Increased extent of flying-fox occupation (into leopard tree and passed amenities building

With the condition of the vegetation on site continuing to deteriorate, LRFFs will either leave the site once it is no longer suitable, or continue to shift their roost up the creek if appropriate buffering or management is not implemented. LRFF are a nomadic species, and considering the current condition of the vegetation, it is likely that a proportion of the flying-foxes will move to other areas away from Oakey Creek. However, those flying-foxes that give birth are likely to remain while they rear their young.

Management options

As per the *Flying-fox Roost Management Options* report (Ecosure 2015), management of the roost may involve either mitigation or dispersal, or both. Mitigation aims to reduce amenity impacts to residents while allowing flying-foxes to remain at the roost, whereas dispersal aims to non-lethally disperse the population from the site to more suitable location(s).

Containment Plan

Increases to the flying-fox population at Oakey Creek in the last few weeks has resulted in some flying-foxes landing in trees at nearby homes on Mick Lutvey Street and near the Big Orange. Residents have been attempting to prevent flying-foxes from roosting in their gardens by creating noise.

Council has delineated permissible actions, through consultation with the Queensland Department of Environment and Heritage Protection which governs flying-fox management, for residents living in close proximity to the roost in a Containment Plan. The Containment Plan does not endorse activities leading to dispersal, rather its intention is to allow residents to prevent splintering groups of flying-foxes landing in trees on their property, but only using acceptable means such as clapping, raised voices and intermittent banging of pots and pans. These activities are only permitted on landowners' properties and can continue no longer than one hour after sunrise.

Recommendations

Mitigation

Buffers

Buffers were previously recommended at either end of the management area (Ecosure 2015). However, the colony has increased and has expanded past the intended natural buffer created by the powerline easement on the western end of the roost. Buffers could still be created at both ends of the roost to help confine flying-foxes to their current extent. This will help maintain distance between roosting flying-foxes and residents living on both Mick Lutvey and Winifred Cobbo Streets.

This strategy may be combined with trialing/installing deterrents in the buffer zone (e.g. canopy-mounted sprinklers) and/or other mitigation strategies such as double-glazing windows, covering outdoor areas, etc. in nearby conflict residential dwellings. Such measures are further detailed in Section 5.2 of the NBRC Regional Flying-fox Management Plan (Ecosure 2016). These measures should be made readily available to the community.

Minimise potential for close interaction

Manage (i.e. remove plant buds prior to fruiting or flowering) or remove foraging species from town and nearby residents. In the long-term, Council should also consider replacing favoured

foraging tree species around populated areas of the town with plants that are less attractive to flying-foxes.

Education

Educating residents, Council staff and tourists on the actual health risks, mitigation measures, and what to do if they come into contact with a flying-fox. This could include:

- educational signage near the roost
- pamphlets or brochures for distribution to residents and guests
- community information days/evenings
- school visits by ranger or wildlife
- website page managed by Council with current information on flying-fox management activities and links to Queensland Health, Biosecurity Qld, RSPCA, etc.

The ability to see flying-foxes in and out of a roost can also be a major tourist attraction, and should be promoted and encouraged as part of an education program. Many councils and organisations in Queensland participate in public awareness programs, including Batty Boat Cruises (Wildlife Preservation Society of Qld 2013) and the Australasian Bat Night which holds involves over 100 events in March and April throughout Australia and New Zealand (Australian Bat Society 2013).

Dispersal

If dispersal is to be considered, it is important to recognise that even if it is successful, significant year-round foraging opportunities still exist, and flying-foxes will almost certainly continue to visit the town to forage. As such, mitigation measures should still be considered regardless of the decision to disperse.

Costs and risks associated with management options are highly variable and unpredictable (Attachment 1). For example, dispersal often requires investments upward of $100,000, with one in excess of $3M. A summary by Roberts and Eby (2013) provides costs for previous dispersals in Australia (Attachment 2).

Ecosure has assisted various local government clients since 2010 with flying-fox management including numerous dispersal programs. On all occasions dispersal was initially successful, and flying-foxes moved away from the roost for a period between two days and three weeks. However, follow up dispersal efforts have been required with re-colonisation attempts at all but two sites (which involved removing significant vegetation). Attempts to recolonise (sometimes regularly for decades) can be expected with any dispersal not accompanied by significant habitat modification.

It is important to note that there is a range of constraints associated with dispersing this particular roost:

- Flying-foxes are likely to show a high level of fidelity to this roost given the length of time it has been established. This makes management considerably more difficult,

time consuming, and costly (and less likely to succeed in the long-run) compared with a newly established roost.

- Flying-foxes are highly mobile animals with a large network of roosts within their range, which they move between in response to resource availability. As such, potentially tens or hundreds of thousands of individuals are likely to know and occasionally use this roost. This means that it may take a number of years before every animal that is aware of the roost has experienced a dispersal event.
- There is little to no suitable roost habitat in the local area where flying-foxes may establish an alternative roost, and they are likely to move into town which is less desirable.

Given the range of issues and uncertainties with dispersal, and additional constraints associated with this site, it is recommended that Council manage the roost in-situ. That is, leave the roost in its current location, but limit its impact. If dispersal is required, a detailed dispersal plan would be required to manage the risks as much as possible.

If flying-foxes move to a less desirable location of their own accord site-specific management options will be required.

A habitat restoration plan for the Oakey Creek site should be developed and implemented on LRFF departure. This should include planting options and consider the feasibility of providing artificial roost structures.

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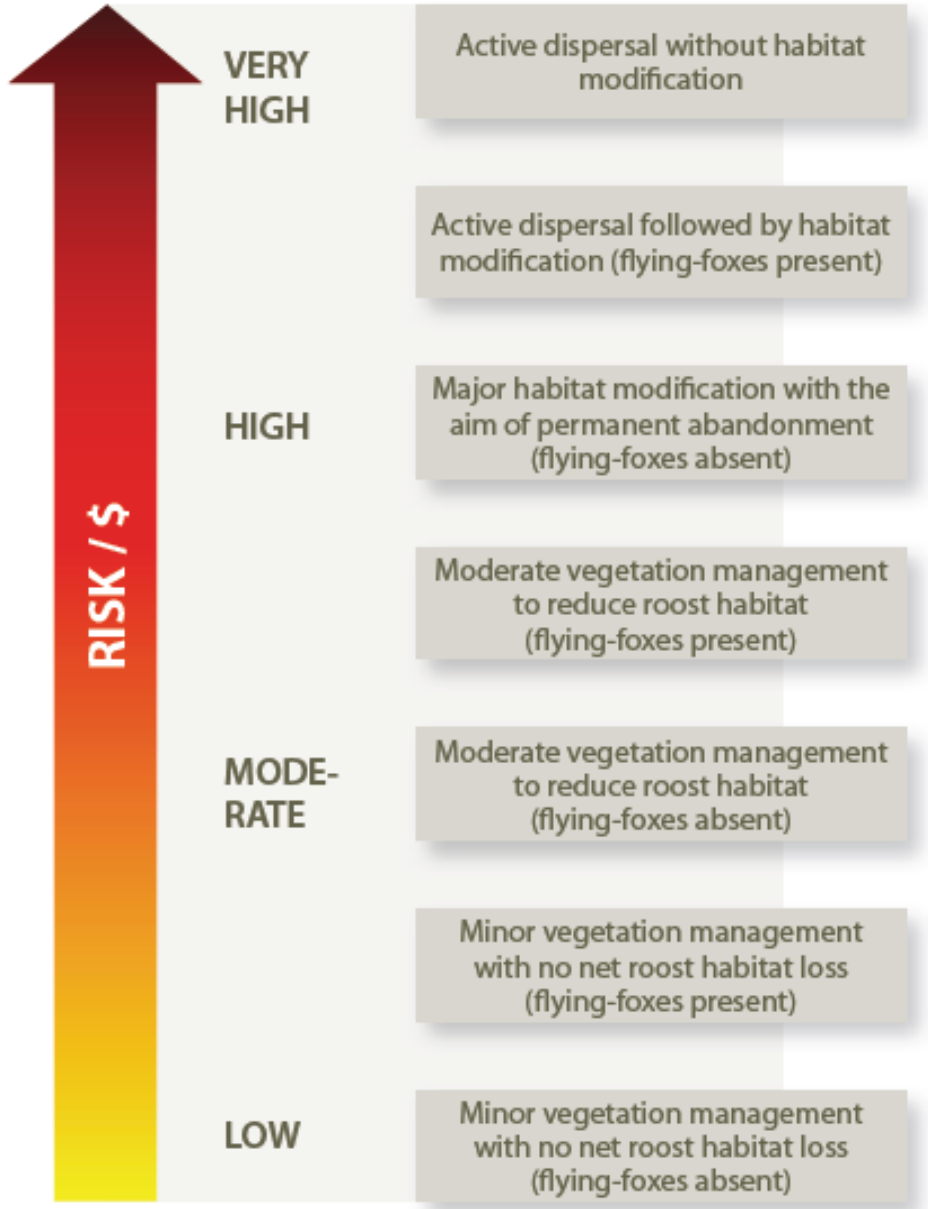
Attachment 1 Roost management risk evaluation



Roost management options - risk evaluation

Attachment 2
Summary of previous dispersal attempts[1]

Location	Species	FF population estimate at time of dispersal	Method	Did the animals leave the local area?	Did the local population reduce in size?	How far did they move?	Were new roosts formed (number of new roosts if known)?	Number of separate actions	Cost (if known)	Was conflict resolved at the original site?	Was conflict resolved for the community?
Barcaldine, Qld	R	>50,000	VN	no	no	≈2 km	yes (1)	trees in township felled		yes	no
Batchelor, NT	B	200	BNS	no	no	<400 m	yes (1)	2		yes	yes
Boyne Island, Qld	BR	25,000	LNS	no	no	<500 m	yes (2)	3		yes	no
Bundall, Qld[2]	GB	1580	V	unknown (uk)	no	uk, but 7 roosts were within 5 km	no	1	$250,000	yes	yes
Charters Towers, Qld	RB	variable	HLNPOW	no	no	200 m	no (returned to original site)	repeated since 2000	>$500,000	no	no
Dallis Park, NSW	BG	28,000	V	no	yes	300 m	yes (1)	2		yes	no
Duaringa, Qld	R	>30,000	VNFO	no	no	400 m	yes	1	$150,000	yes	uk
Gayndah, Qld	RB	200,000	VN	no	no	600 m	yes	3 actions, repeated		yes	no
Maclean, NSW	BGR	20,000	NS	no	no	350 m	yes (7)	>23	>$400,000 and ongoing	no	o

1 Source: Roberts and Eby 2013, *Review of past flying-fox dispersal actions between 1990-2013.*

2 Bundall information amended from Roberts and Eby (2013) based on Ecosure's direct involvement and understanding of roost management activities and outcomes.

Location	Species	FF population estimate at time of dispersal	Method	Did the animals leave the local area?	Did the local population reduce in size?	How far did they move?	Were new roosts formed (number of new roosts if known)?	Number of separate actions	Cost (if known)	Was conflict resolved at the original site?	Was conflict resolved for the community?
Mataranka, NT	BR	>200,000	BHLNOSW	no	no	<300 m	uk	>9		no	no
North Eton, Qld	B	4800	VNFB	uk	no	<1.5 km initially	yes (≈4 majority temporary)	2	45,000	yes	yes (conflict at one site)
Royal Botanic Gardens, Melbourne, Vic	G	30,000	NS	no	no	6.5 km	yes (2)	6 mths	$3 million	yes	yes, ongoing management required
Royal Botanic Gardens, Sydney, NSW	G	3,000	LNPOW	no	no	4 km	no	ongoing daily actions for 12 mths	>$1 million and ongoing	yes	yes
Singleton, NSW	GR	500	LNUW	no	no	<900 m	no (returned to original site	>3	$117,000 and ongoing	no	no
Townsville, Qld	BR	35,000	BNS	no	no	400 m	no (returned to original site)	5		no	no
Warwick, Qld	GRB (dispersal targeted R)	200,000	NLBP	no	no	≈1 km	no (site known to be previously occupied by GB)	5 days	$28,000	yes	uk (complaints persisted until migration)
Young, NSW	L	<5000	VN	no	no	<600 m	yes (1)	uk		yes	no

* G = grey-headed flying-fox; B = black flying-fox; R = little red flying-fox
# B = “birdfrite”; F = fog; H = helicopter; L = lights; N = noise; P = physical deterrent; O = odour; S = smoke; U = ultrasonic sound; V = extensive vegetation removal; W = water

Revision History

Revision No.	Revision date	Details	Prepared by	Reviewed by	Approved by
00	12/05/2016	Flying-fox Assessment - Gayndah	Emily Hatfield, Ecologist	Grant Brearley, Senior Ecologist	Jess Bracks, Principal Wildlife Biologist

Distribution List

Copy #	Date	Type	Issued to	Name
1	12/05/2016	Electronic	North Burnett Regional Council	Sue Paul
2	12/05/2016	Electronic	Ecosure	Administration

Citation: Ecosure (2016), Flying-fox Assessment – Gayndah, Report to North Burnett Regional Council, Publication Location - Burleigh Heads

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