



SCENIC RIM REGIONAL COUNCIL

Corporate & Community Services Committee

Report

Meeting held in the Council Chambers

82 Brisbane Street

Beaudesert

Tuesday, 23 June 2015

Commenced at 9.57 am

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Be addressed to the
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SCENIC RIM REGIONAL COUNCIL
CORPORATE & COMMUNITY SERVICES COMMITTEE
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CORPORATE & COMMUNITY SERVICES COMMITTEE

REPORT

CHIEF EXECUTIVE OFFICER

I advise that the Committee met on **Tuesday, 23 June 2015**. Councillors present:

Cr N J Waistell, Chairperson
Cr J C Brent, Mayor
Cr N O'Carroll
Cr V A West, Deputy Mayor
Cr J J Sanders
Cr R J Stanfield
Cr D A McInnes

ATTENDANCE

Executive Officers

C R Barke, Chief Executive Officer
P A Murphy, Director Infrastructure Services
A M Magner, Director Regional Services
K Stidworthy, Chief Finance Officer

APOLOGIES

Nil

DECLARATIONS OF INTEREST BY MEMBERS

Crs Sanders and O'Carroll declared an interest in Item 3.3 as they are members of the Board of Beaucaire Inc. The Councillors informed the Committee that they would remain in the meeting room and take part in discussions and voting on the item.

The following Officers attended the meeting and joined discussions on the items listed.

R Deans, Manager Health Building & Environment (Item 3.1)
G Windley, Manager Community & Culture (Items 3.2 - 3.4)
T Koczanowski, Regional Librarian (Item 3.2)
K Forrest, Coordinator Community Development (Item 3.3)
H Dunne, Manager Property & Operations (Items 4.4 and 4.5)
C Gray, Manager Works (Items 4.7 and 4.8)

Reception of Deputations by Appointment / Visitors

Nil

CORPORATE & COMMUNITY SERVICES COMMITTEE

REPORT

Please note: The Committee resolved to go into closed session in accordance with the provisions of s.275 of the Local Government Regulation 2012 to discuss the items of business indicated as closed in the Committee Report.

At the conclusion of these items, the Committee resolved to resume in open session. The Committee's recommendation on each item, discussed in closed session, is as detailed at the end of each item in the Report.

1. EXECUTIVE**1.1 Appointment of Legal Panel of Providers [Closed s.275(1)(e)]****Executive Officer: Chief Executive Officer****File Reference: 21/01/001**

Council resolved into closed session in accordance with the provisions of Section 275(1) of the Local Government Regulation 2012 and Council's Meetings and Other Forums Policy relating to closed session meetings to discuss this and other closed items.

Moved Cr Brent
Seconded Cr West

CARRIED

Following discussion in closed session of Item 4.9, Council resumed in open session for the proposal of Committee recommendations.

Moved Cr Stanfield
Seconded Cr West

CARRIED

AT THE ORDINARY MEETING OF COUNCIL HELD ON 30 JUNE 2015, it was moved Cr Waistell, seconded Cr McInnes, that recommendation number 5 be amended to read as follows:

- "5. The Planning and Environment Law Panel be comprised of Thomson Geer, Corrs Chambers Westgarth, Gadens Lawyers, MacDonnells Law, McInnes Wilson Lawyer and Norton Rose Fullbright for a period of two (2) years with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years;"**

CARRIED

Chief Executive Officer's Recommendation**That:**

1. The Administrative Law Panel be comprised of Corrs Chambers Westgarth, MacDonnells Law, King and Company Solicitors and Thomson Geer for a period of two (2) years, with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years;
2. The Commercial Law Panel be comprised of Corrs Chambers Westgarth, MacDonnells Law, Gadens Lawyers and Thomson Geer for a period of two (2) years with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years;

3. The General Litigation Panel be comprised of Corrs Chambers Westgarth, Gadens Lawyers and King and Company Solicitors for a period of two (2) years with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years;
4. The Industrial Relations Law Panel be comprised of Corrs Chambers Westgarth and Aitken Legal for a period of two (2) years with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years;
5. The Planning and Environment Law Panel be comprised of Thomson Geer, Corrs Chambers Westgarth, Gadens Lawyers, MacDonnells Law and McInnes Wilson Lawyers for a period of two (2) years with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years;
6. The Property Law Panel be comprised of MacDonnells Law, Thomson Geer, Corrs Chambers Westgarth and Gadens Lawyers for a period of two (2) years with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years; and
7. The Regulatory Law Panel be comprised of Thomson Geer, MacDonnells Law and Corrs Chambers Westgarth for a period of two (2) years with authority provided to the Chief Executive Officer to extend these agreements for a period of up to four (4) years.

Committee Recommendation

That the Chief Executive Officer's recommendation be adopted.

Moved: Cr Stanfield

Seconded: Cr McInnes

Carried

Attachments

Nil.

2. CHIEF FINANCE OFFICER**2.1 Queensland Urban Utilities Corporate Plan 2015-20 [Closed s.275(1)(h)]****Executive Officer: Chief Executive Officer****File Reference: 32/02/001**

Council resolved into closed session in accordance with the provisions of Section 275(1) of the Local Government Regulation 2012 and Council's Meetings and Other Forums Policy relating to closed session meetings to discuss this and other closed items.

Moved Cr Brent
Seconded Cr West

CARRIED

Following discussion in closed session of Item 4.9, Council resumed in open session for the proposal of Committee recommendations.

Moved Cr Stanfield
Seconded Cr West

CARRIED

Chief Finance Officer's Recommendation

That Council endorse the Queensland Urban Utilities Corporate Plan 2015-20.

Committee Recommendation

That the Chief Finance Officer's recommendation be adopted.

Moved: Cr Stanfield
Seconded: Cr McInnes

Carried

Attachments

Nil.

3. REGIONAL SERVICES**3.1 Flying-Fox Strategy Report****Executive Officer: Director Regional Services****File Reference: 11/14/001**

Director's Recommendation

That Council endorse the release of the draft Scenic Rim Regional Council Flying-Fox Strategy for public comment.

Committee Recommendation

That the Director Regional Services' recommendation be adopted.

Moved: Cr Brent
Seconded: Cr West

Carried

Attachments

1. Draft Scenic Rim Regional Council Flying-Fox Strategy.

Attachment 1 - Draft Scenic Rim Regional Council Flying-Fox Strategy





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1. PURPOSE OF THE STRATEGY

THE PURPOSE OF THIS STRATEGY IS TO PROVIDE DIRECTION FOR THE MANAGEMENT OF FLYING-FOXES WITHIN THE SCENIC RIM.

The Strategy will achieve the following key objectives:

- Address and manage the concerns of residents and/or community groups experiencing lifestyle impacts associated with the close proximity of large and/or problematic flying-fox roosts within the Scenic Rim Urban Flying-fox Management Area (Figure 1) and/or on Council managed lands
- Develop flying-fox management strategies consistent with legislative obligations
- Identify and prevent, where possible, future community/flying-fox conflicts, whilst conserving and co-existing with flying-fox populations within the Scenic Rim Region

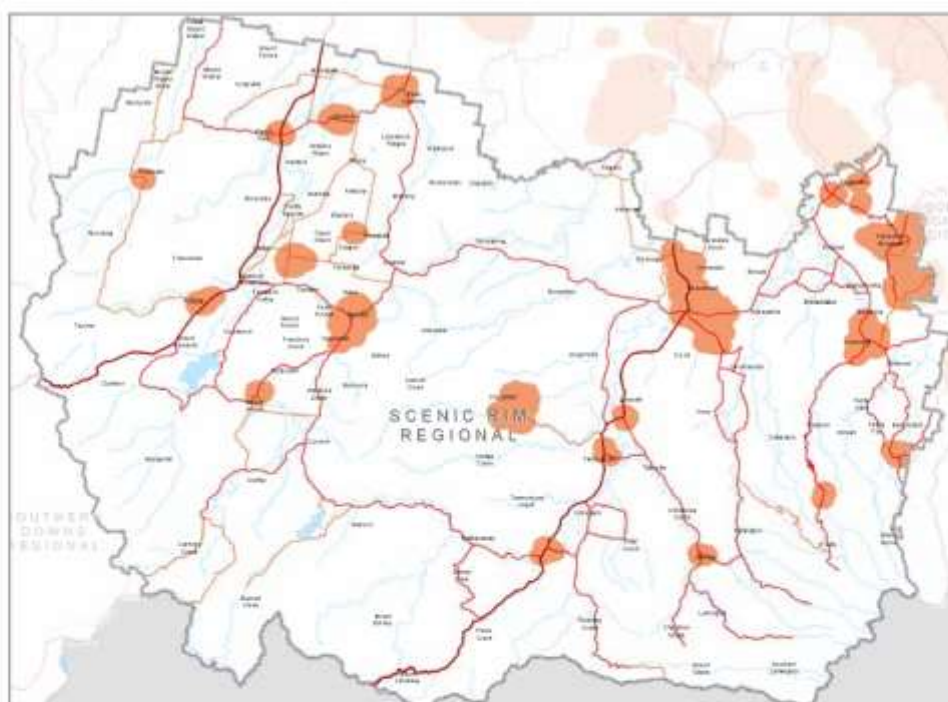


FIGURE 1: SCENIC RIM REGIONAL COUNCIL URBAN FLYING-FOX MANAGEMENT AREA.

The Queensland State Government defines the Urban Flying-fox Management Area as areas designated within Council's planning scheme as having a residential or commercial purpose including a 1km buffer.

2. FLYING-FOX ECOLOGY AND BIOLOGY

The Australian mainland is home to four species of flying-fox (Pteropus species), three of which inhabit Southeast Queensland. Flying-foxes (often incorrectly referred to as fruit bats) are complex, highly social and mobile native bats. They make a significant contribution to environmental health and the economy through their roles as essential pollinators and seed dispersers of native forests. In turn, these forests provide valuable timber, act as carbon sinks and stabilise our river systems and water catchments. Flying-foxes forage at night and congregate during the day in large groups (often numbering in the thousands or tens of thousands) commonly called roosts or camps.

2.1 SOUTHEAST QUEENSLAND SPECIES

BLACK FLYING-FOX (PTEROPUS ALECTO)

Mainly roost in wet and dry eucalypt forests, mangroves, melaleuca swamps and casuarinas. They typically form continuously occupied roosts, often with grey-headed flying-foxes. They feed on nectar, flowers and fruits of native trees and on cultivated fruits such as bananas, pawpaws, mangoes, lychees when native food is sparse.

GREY-HEADED FLYING-FOX (PTEROPUS POLIOCEPHALUS)

This species has declined by more than 30% from 1989 to 1999 causing it to be listed nationally as 'vulnerable' under the Environmental Protection and Biodiversity Conservation Act 1999. They move in response to the patterns of flowering eucalypts and paperbarks but will also forage on fruits of native trees and on cultivated fruits when native food is sparse.

LITTLE RED FLYING-FOX (PTEROPUS SCAPULATUS)

A nomadic species feeding preferentially on nectar. They move seasonally in response to the patterns of flowering eucalypts and paperbarks. They form only temporary roosts, frequently sharing roosts with black and grey-headed flying-foxes.



Black Flying-Fox (Pteropus Alecto)



Grey-headed Flying-Fox (Pteropus Poliocephalus)



Little Red Flying-Fox (Pteropus Scapulatus)

2.2 DIET

Australian native trees have evolved with flying-foxes as the main pollinators. Flying-foxes carry seeds and pollinate plants across thousands of kilometres playing a major role in ensuring the ongoing survival of Australian rainforests and eucalypt forests.

Due to their ability to carry large fruit and move it over considerable distances, flying-foxes are also responsible for maintaining genetic diversity amongst remnant patches of forests. The nocturnal feeding habits and extensive feeding ranges of flying-foxes enables them to pollinate tree species which produce most of their nectar at night and are thus less easily serviced by day-feeding birds and bees. A big misconception surrounding the pollination of native trees is that honey bees are primarily responsible; however the honey bee was only introduced into Australia with European settlement.

Flying-foxes will preferentially feed on pollen, nectar, flowers and fruit of native plants but will feed on introduced plant species when native species are scarce. Native flowering trees which flying-foxes will forage on include eucalypts, bloodwoods, ironbarks, paperbarks, grevilles, bottlebrushes and banksias. Native fruit trees which flying-foxes will feed on include figs, palms, lillypillies and quandongs; introduced fruit trees include cocos palms, mangoes, lychees, pawpaw, banana, guava and mulberry trees.

Flying-foxes visiting backyards during the night to feed will leave once the food source (e.g. flowering/ fruiting trees) has been exhausted; this is considered normal foraging behaviour. Single flying-foxes remaining in backyards during the day may indicate an injured animal or a dropped baby incapable of flight and as such a wildlife carer experienced in bat handling may need to be contacted (see Appendix A).



2.3 ROOSTS

A flying-fox roost is a tree or other place where flying-foxes congregate during the daytime to rest, breed and rear young. Roosts can often consist of a mix of flying-fox species. There are four broad categories of roost:

- Continuously occupied - a roost that has been utilised by flying-foxes continuously for at least 12 months
- Irregularly occupied - a roost that has been utilised by flying-foxes intermittently (e.g. Little Red Flying-fox roosts at times of flowering)
- Seasonally occupied - a roost that has been utilised by flying-foxes on a seasonal basis (e.g. winter or summer roost)
- Temporarily occupied roost - a roost which is deemed to only be occupied on a temporary basis, such as a little red flying-fox roost where the animals are expected to move on once local flowering ceases

Vegetation clearing in eastern Australia since European settlement has resulted in a substantial reduction of flying-fox foraging and roosting habitat. Consequently, destruction of flying-fox habitat frequently causes the animals to establish roosts in urban areas. This can cause conflicts between humans and flying-foxes and may give the false impression that flying-fox numbers are increasing. Some roosts are located in threatened ecological communities and appropriate site-specific management options must consider this. The specific factors influencing why flying-foxes set up roosts in certain places rather than others is poorly understood.

Roosts are vital to the conservation of flying-foxes as they provide access to food, sites for mating, and raising young as well as stopover sites for nomadic/ migratory animals. It is critical that the network of roosts used by flying-foxes is maintained across the landscape, allowing the animals to move throughout their range in response to food availability.

Flying-foxes are only considered to be territorial during the mating season and territory is generally only a branch or two within a roost. Therefore,

FLYING-FOXES ARE COMPLEX,
HIGHLY SOCIAL AND MOBILE
NATIVE BATS. THEY MAKE A
SIGNIFICANT CONTRIBUTION
TO THE ENVIRONMENT AND
ECONOMY THROUGH THEIR
ROLES AS ESSENTIAL
POLLINATORS AND SEED
DISPERSERS OF NATIVE
FORESTS.



individual flying-foxes may have a large home range and frequent multiple roosts over as many days with limited or no territorial concerns. Individual roosts must therefore be managed from the perspective that they are an integral part of a larger network of roosts.

Flying-foxes are known to have strong fidelity to roost sites and are known to regularly return to the same roost site annually (and in some cases the same tree branch) when food resources are locally available. The high roost fidelity of flying-foxes can create difficulties in the management of roost sites and dispersal efforts may, in some circumstances, prove challenging and resource intensive. This is typically due to the fact that whilst the number of flying-foxes utilising a particular roost on a day-to-day basis may be the same, the actual individuals making up those numbers can significantly change. Additionally, while the average number of flying-foxes within a roost is 10,000 (for example) the actual number of individuals who utilise the roost on a regular basis could be 20-50,000.

Roost dispersal attempts may therefore need to be conducted until such time as all individuals have been 'notified'. In much the same way that humans travel around the country staying at hotels and eating at favourite restaurants, flying-foxes will travel across the landscape stopping at 'favourite' roost and foraging locations. Individuals who have just flown hundreds of kilometres to reach a roost location will not disperse easily and consideration needs to be given to recovery times.

2.3.1 KNOWN ROOST LOCATIONS IN THE SCENIC RIM REGION

There are currently 11 known locations within the Scenic Rim Regional Council area where flying-foxes have or are presently roosting (Figure 2). The occupancy status of these roosts varies (Table 1).

FIGURE 2: KNOWN LOCATIONS OF ACTIVE AND NON-ACTIVE FLYING-FOX ROOSTS WITHIN THE SCENIC RIM REGIONAL COUNCIL AREA.



TABLE 1: OCCUPANCY STATUS OF 11 KNOWN FLYING-FOX ROOSTS WITHIN THE SCENIC RIM REGIONAL COUNCIL AREA

FLYING-FOX ROOST	OCCUPANCY STATUS	FLYING-FOX SPECIES OCCUPYING ROOST (CURRENTLY OR PREVIOUSLY)		
		Black	Grey-headed	Little Red
Beaudeert	Temporary	Yes	Yes	Yes
Booniah	Decommissioned* (June 2014)	Yes	Yes	Yes
Canungra (Beechmont Rd)	Continuous	Yes	Yes	No
Canungra (Township)	Irregular	Yes	Yes	No
Finders Peak	Continuous	Yes	Yes	No
Hillview	Irregular	Yes	Yes	No
Koorabyn	Irregular	Yes	Yes	No
Peak Crossing	Irregular	Yes	Yes	Yes
Mount French	Irregular	Yes	Yes	No
Rathdowney	Irregular	Yes	Yes	No
Tamborine National Park	Continuous	Yes	Yes	No

*Decommissioned roost - roost vegetation removed to prevent roosting by flying-foxes.

2.4 MOVEMENT

Flying-foxes can easily fly 50km from a roost each night searching for food and can travel hundreds of kilometres over several nights, moving between roosts depending upon the availability of food resources. Individual flying-foxes have been tracked moving > 1,000km in 7-10 days. While each species of flying-fox is capable of large movements, little red flying-foxes are the most nomadic (followed by grey-headed flying-foxes) and can arrive in large numbers overnight in response to local flowering. Current research data indicates that black flying-foxes tend to move more locally than little red and grey-headed flying-foxes.

Their high mobility and frequency of roost changes means that each night flying-foxes leave their respective roosts and spread out across the landscape in a weblike effect. This means that even if a roost location is not in an urban area flying-foxes are highly likely to visit urban areas during the night to feed if suitable food resources are available. Furthermore, flying-foxes may travel great distances from roosts returning to the same food tree each night until flowering/fruiting finishes.

2.5 LIFE CYCLE

Flying-foxes have a low reproduction rate and become sexually mature at 2-3 years. They have a six month pregnancy, females give birth to a single young (pup) per year and suckle that pup for up to six months (Table 2). Unlike many other mammalian species flying-foxes do not have a period of lactational anoestrous and females can become pregnant whilst still suckling their current pup. It is physically impossible for flying-foxes to breed at "plague proportions" and a local increase in numbers is likely to be an influx of animals to the area in response to a local flowering event.

Females will carry their young while foraging until the pup becomes too heavy (typically around 4-5 weeks of age), at which time the pup is left in the roost overnight. The female may return throughout the night to suckle her young. Older pups are placed in crèches overnight where they interact with each other, learning valuable social skills. Young are cared for over a period of four to six months after which they are considered independent. In urban environments, life-threatening hazards to flying-foxes include goannas, snakes, crows, powerful owls and eagles, as well as introduced hazards such as humans, dogs, cats, powerlines, barbed-wire fences and backyard fruit tree netting. Provided these can be avoided successfully, a flying-fox may reach 8-10 years of age; captive animals have been known to live for 25-30 years.



TABLE 2: APPROXIMATE BREEDING CYCLES OF FLYING-FOXES IN SOUTHEAST QUEENSLAND.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BFF	Crèche	Lactation	Peak Conception	Peak Conception	Mid-pregnancy	Mid-pregnancy	Mid-pregnancy	Final Trimester	Final Trimester	Birth	Birth	Crèche
GHFF	Crèche	Lactation	Peak Conception	Peak Conception	Mid-pregnancy	Mid-pregnancy	Mid-pregnancy	Final Trimester	Final Trimester	Birth	Birth	Crèche
LRFF	Mid-pregnancy	Mid-pregnancy	Final Trimester	Final Trimester	Birth	Crèche	Crèche	Lactation	Lactation	Peak Conception	Peak Conception	Mid-pregnancy

■ Peak Conception
 ■ Mid-pregnancy
 ■ Final Trimester
 ■ Birth
 ■ Lactation
 ■ Crèche

Note: BFF = Black Flying-fox, GHFF = Grey-headed Flying-fox, LRFF = Little Red Flying-fox

In order to safely manage a flying-fox roost, roost management activities need to consider the ecology and biology of flying-foxes and the important time periods in the breeding cycles of the black flying-fox, grey-headed flying-fox and little red flying-fox. Restricting management actions in the periods of final trimester are considered paramount due to the high risk of abortion associated with stress from dispersal efforts. Additionally, management actions should also be restricted during the crèche period when young pups are incapable of flight.



3. IMPACTS OF FLYING-FOXES AND THEIR ROOSTS

The occurrence of a flying-fox roost can result in many different impacts on the local community. These impacts range from direct nuisance including noise and odour through to stress from the perceived health impacts from misleading information (Table 3).

TABLE 3: POTENTIAL FLYING-FOX ROOST IMPACTS ON THE LOCAL COMMUNITY.

POTENTIAL IMPACT	COMMENT
Business Patronage	The noise, odour and perceived health risks of a roost may deter some patrons from visiting nearby businesses.
Fruit Crop Damage	Flying-foxes can cause damage to commercial fruit crops, especially in drought years when auctypt blossoms are scarce. Damage isn't considered directly associated with an individual roost as multiple roosts may be within flying distance. Rats, possums and birds are also known to damage fruit crops.
Health Risks	Although the health risks are surprisingly low, local residents' perception of health risks associated with flying-foxes can increase stress levels creating potential health concerns.
Noise	Nearby residents may suffer disturbed sleep due to roost noise which may (at times) be in excess of the recommended background levels for daytime noise as specified in Australian Standards AS 1055.2-1997.
Odour	The odour associated with roosts is typically that of the flying-foxes and not their faeces. All animals (including humans) have distinct body odours. Many Scenic Rim houses are "Queenslander" styles that rely on passive cooling to ventilate the home. Most residents gain relief by shutting up their homes and running the air conditioner.
Property Damage	Flying-fox faecal material can frequently land on houses and cars of nearby residents and may damage paint work if not removed in a timely manner.
Public Usage of Parks	When flying-fox roosts occur in public parks these areas may no longer be accessible by the public due to health and safety concerns. Some people may choose not to visit parks due to the noise, odour and/or perceived health risks of the roost.
Vegetation Damage at Roost Sites	Continual heavy usage of roosts due to a reduction in the availability of suitable roost habitat can result in damage to trees and reduces the opportunity for vegetation to recover from the effects of roosting flying-foxes.
Vegetation Management by Council	Flying-fox roosts may increase the maintenance requirements of roost vegetation especially in any associated parks where damaged vegetation may need to be removed for public safety.
Vegetation Management by Residents	Some residents may incur additional costs by undertaking vegetation management practices to limit roosting ability on private properties.
Veterinary Costs	Many horse owners feel that due to the close proximity of a roost there is an increased need to vaccinate their horse(s) against Herpes virus thus incurring veterinary fees. The need for this is the same whether or not there is a roost nearby because all horses in southeast Queensland are within flying distance of multiple flying-fox roosts.
Water Tank Contamination	Contamination of water tanks is not exclusive to flying-foxes. Queensland Health recommends all water tanks have filters to eliminate faecal contamination by mammals, birds, reptiles (goekes) and frogs.

3.1 HUMAN HEALTH AND FLYING-FOXES

Several viruses capable of causing diseases in humans and animals have been linked to flying-foxes in recent years. Of these, Australian bat lyssavirus and Hendra virus are the most notable. Research by Biosecurity Queensland and others have shown that some species of bats act as a natural reservoir of infection for these viruses. Therefore, only people who are trained and protected by rabies vaccination (for ABLV) and using suitable equipment should handle bats including flying-foxes.

3.1.1 AUSTRALIAN BAT LYSSAVIRUS (ABLV)

Australian bat lyssavirus is a virus that can be transmitted via the saliva of infected bats (including flying-foxes) when they bite or scratch humans. Infection with ABLV causes a rabies-like disease in humans that is usually fatal. However, since discovery in 1996 there have only been three documented cases of ABLV infection in humans. In May 2013, two horses were confirmed as being infected with ABLV. These were the first known cases of ABLV in an animal other than a bat. Experience with other closely related viruses, including classical rabies virus, suggests that contact or exposure to bat faeces, urine or blood does not pose a risk of exposure to ABLV, nor does living, playing or walking near flying-fox roosting areas.

There are three simple steps to avoid ABLV disease:

- Only people trained and vaccinated against rabies should handle bats.
- Bat bites or scratches should be washed thoroughly with soapy water for at least five (5) minutes and an antiseptic with anti-virus action such as povidone-iodine, iodine tincture, aqueous iodine solution or alcohol (ethanol) applied after washing.
- Medical advice (see Appendix A) should be sought as soon as possible following a bite or scratch to discuss the possibility of post-exposure vaccine injections to protect against the potential on-set of infection.

The rabies vaccine is used to protect against ABLV infection. However, even if you have been previously vaccinated, you should seek medical advice immediately after any potential exposure to ABLV (bite, scratch or mucous membrane exposure) as further vaccinations will be required.

3.1.2 HENDRA VIRUS

Australian flying-foxes are considered to be the

natural reservoir of Hendra virus which is transmitted to humans via close contact with the body fluids of infected horses. Only seven people have been confirmed to have contracted Hendra virus following high levels of exposure to infected horses. Four of these people died, the most recent in 2009. The seven confirmed human cases all became infected following high level exposures to respiratory secretions and/or blood of an infected horse without the use of appropriate personal protective equipment (PPE). Other people have reported similar contact with infected horses but have remained well and their blood tests have shown no evidence of infection.

While the exact route of infection is unknown, it is believed that horses contract Hendra virus from flying-fox urine, saliva or birth products. Two dogs are confirmed as having been infected with Hendra virus, transmission is believed to have occurred following exposure to body fluids of deceased Hendra infected horses. There is no evidence that the virus can be passed directly from flying-foxes to humans, from dogs to humans, from the environment to humans, from humans to horses or that the virus is airborne. Testing of flying-fox carers who have had frequent close contact with flying-foxes has shown no evidence of exposure to the virus. There is also no evidence of human to human transmission. People who have had contact with a person with Hendra virus infection, including health care workers and family members, have been tested and shown no evidence of the virus.

There is no known specific treatment for Hendra virus infection. Three people have recovered from infections with general medical support. Experimental treatment with a type of antibody that may prevent infection may be offered to people who have had high level exposure to the body fluids of an infected horse.

A vaccine for horses against Hendra virus is available

and is currently the best way to prevent disease transmission to humans. Unwell horses should be isolated and children, dogs, cats and other horses should be kept away from the sick horse(s) to prevent further disease spread. Appropriate personal protective equipment which prevents contamination of the skin, eyes, nose and mouth of people by the horse's body fluids should be worn if close contact with the sick horse is considered essential.

Hendra virus is a notifiable disease and as such suspected cases of infection in horses should be notified urgently to Biosecurity Queensland on 13 25 23 (during business hours) or 1800 675 888 (24-hour Emergency Animal Disease Watch Hotline). Also see Biosecurity Queensland (<http://www.biosecurity.qld.gov.au/>) and Workplace Health & Safety Queensland (<http://www.deir.qld.gov.au/workplace/index.htm>) for more information about protecting horses and humans where vaccination may not be an option.

3.1.3 OTHER PATHOGENS

Other zoonotic pathogens which may be of concern to the community are histoplasmosis, leptospirosis and salmonella. However, to date there have been no documented cases of these diseases infecting humans as a direct result of contact with flying-foxes and/or their biological excretions such as faeces and urine. Many other wildlife and domesticated animals including household pets are considered a greater potential source of human infection.

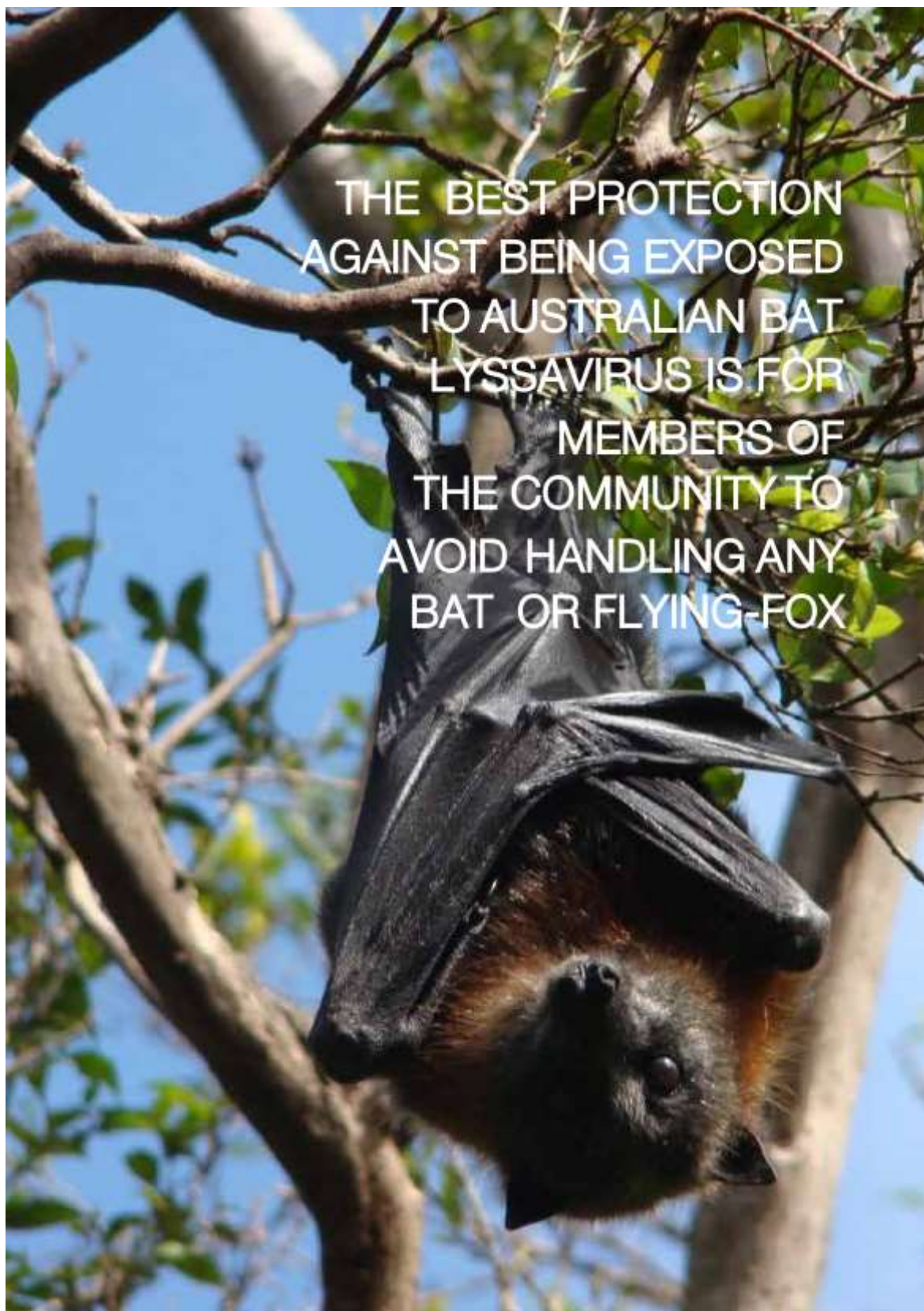
Histoplasmosis is a very rare lung infection. Bats, dogs, cats, cattle, horses, rats and other animals can be infected and can excrete the organism in their faeces. People who have contact with bat caves and/or bats, for work or recreation, should avoid exposure to dust in environments likely to be contaminated with bat faeces. It is advisable to wet down potentially contaminated areas with water before cleaning. People working in these areas should also use protective equipment such as face masks, gloves and overalls.

Leptospirosis is a bacterial disease transmitted via the urine of infected animals. In very rare cases,

leptospirosis can be fatal to humans. Although rodents and cattle are the main carriers of this disease, flying-foxes may also be infected. Leptospirosis occurs most commonly in people who are exposed to the bacteria during their work, for example farmers, veterinarians and meat workers. The most effective way to avoid getting leptospirosis from bats is to prevent bat urine from coming into contact with broken skin or your eyes, nose or mouth.

Salmonella and other bacteria that cause gastroenteritis may be found in animal faeces. Most cases of salmonella infection in Queensland are caused by eating undercooked or raw food (typically chicken) contaminated with salmonella bacteria. The infection may also be acquired from close physical contact with animals such as dogs, poultry and cattle. It is assumed that some native animals including flying-foxes may also carry the bacteria.

Flying-foxes can defecate whilst flying, splattering objects beneath their flight path with faeces which are typically easily removed with water and do not pose a serious health hazard. Faecal contamination of rainwater tanks may occur from a range of animals including possums, rats, birds, reptiles (geckos) and flying-foxes. It is advisable that a "first flush" device be installed on all drinking water tanks. It is also a good hygiene practice to keep rainwater tanks covered, and at regular intervals chlorinate the tank and, drain and clean both the tank and the roof area used for rainwater collection. Normal swimming pool maintenance practices (cleaning, filtration and chlorination) should remove any contamination associated with animal faeces. It is important to note that the potential health risks posed by flying-fox faeces are no greater than any other animal, such as possums, rats, birds and reptiles.



4. LEGISLATIVE FRAMEWORK

4.1 FEDERAL AND STATE GOVERNMENT APPROVALS REQUIRED

Depending upon the individual circumstances concerning each roost, various Federal and/or State Government approvals may be required prior to undertaking roost management activities (Table 4).

TABLE 4: POTENTIAL APPROVALS REQUIRED PRIOR TO COMMENCEMENT OF MANAGEMENT ACTIONS AT A FLYING-FOX ROOST.

ACT	COMMENT
Environmental Protection and Biodiversity Act 1999	Presence of grey-headed flying-foxes.
Nature Conservation Act 1992	As of right authority.
Vegetation Management Act 1999	Vegetation mapping for each roost may need to be reviewed prior to any actions.
Environmental Protection Act 1994 - Environmental nuisance (noise)	Some actions may generate high levels of noise in an urban area.

4.2 FEDERAL LEGISLATION

4.2.1 ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION (EPBC) ACT 1999

The Department of the Environment has a regulatory responsibility for the protection of federally listed species through administration of the above Act. The grey-headed flying-fox is listed as 'vulnerable' under the EPBC Act 1999, which affords protection to the species and its critical habitat. Grey-headed flying-foxes often roost within the Scenic Rim Region and therefore, guidance from the Commonwealth Government may be required.

Proponents of actions that may have a significant impact on the grey-headed flying-fox must submit a referral to the Department of the Environment. An action includes a project, development, undertaking, activity, or series of activities and would include any proposal to undertake dispersal actions at a subject roost containing grey-headed flying-foxes. If an approval is required, the State and the Commonwealth Governments will liaise to determine what assessment process is appropriate. The most likely outcome of the EPBC Act 1999 referral is that it will be assessed as a controlled action which will require preparation of a detailed species impact statement addressing a

number of criteria as set out by the Commonwealth Environment Minister.

Significant impact criteria are:

- Leads to a long-term decrease in the size of an important population of a species
- Reduces the area of occupancy of an important population
- Fragments an existing important population into two or more populations
- Adversely affects habitat critical to the survival of a species
- Disrupts the breeding cycle of an important population
- Modifies, destroys, removes, isolates or decreases the availability or quality of habitat to the extent that the species is likely to decline
- Results in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat
- Introduces disease that may cause the species to decline, introduces stress upon individuals that affects their immunity to serious disease, thereby increasing the likelihood of transferring the disease to other species
- Interferes substantially with the recovery of the species

4.2.1.1 DRAFT EPBC ACT POLICY STATEMENT DECEMBER 2014

The Department of the Environment recently released a Draft EPBC Act Policy Statement: Camp management guidelines for Grey-headed and Spectacled flying-fox. This policy statement outlines different levels of management actions which may or may not be undertaken at roosts (camps) of these two vulnerably listed flying-fox species. Even though still in draft form and currently open for public comment, Council will ensure any roost management plans are in accordance with this new EPBC Act Policy Statement.

Minor or routine roost management actions which may not require approval under the EPBC Act 1999 include:

- Mowing of grass and similar grounds-keeping actions
- Application of mulch or removal of leaf litter or other material on the ground
- Weed removal, minor trimming of understorey vegetation or the planting of vegetation
- Removal of tree limbs or a small proportion of the whole trees in a roost if they are significantly damaged and pose a health and safety risk, as determined by a qualified and experienced arborist
- Minor habitat augmentation for the benefit of the roosting animals
- Installation of signage or similar-scale infrastructure
- Passive recreation (i.e. low noise recreation)

4.2.2 DRAFT NATIONAL RECOVERY PLAN FOR THE GREY-HEADED FLYING-FOX

The Draft National Recovery Plan for the grey-headed flying-fox (DECCW, 2009) outlines objectives for the recovery of this species. These objectives are to reduce the impact of threatening processes (such as loss of habitat, negative public attitudes and conflict with humans), to arrest decline throughout their range; to conserve their functional roles in seed dispersal and pollination of native plants; and to improve the comprehensiveness and reliability of information available to guide recovery.

The draft recovery plan identifies roosting habitat critical to the survival of the grey-headed flying-fox as satisfying at least one of the following:

- Roost used either continuously or seasonally in more than 50% of years
- Has been used as a roost at least once in 19 years (beginning in 1995) and is known to have contained more than 10,000 individuals, unless such habitat has been used only as a temporary refuge, and the use has been of limited duration (i.e. in the order of days rather than weeks or months)
- Has been used as a roost at least once in 10 years (beginning in 1995) and is known to have contained more than 2,500 individuals including reproductive females during the final stages of pregnancy, during lactation, or during the period of conception (which is September to May)

4.3 STATE LEGISLATION

4.3.1 NATURE CONSERVATION ACT 1992

All three flying-fox species living within the Scenic Rim are protected under the Nature Conservation Act 1992 and any interference or management of a roost is regulated under the associated Nature Conservation (Wildlife) Regulation 2006. Local governments are now authorised 'as of right' under the Nature Conservation Act 1992 to manage, including disperse, flying-fox roosts in defined urban flying-fox management areas (UFFMA; Figure 1). The 'as of right' authority only applies to management activities that are in accordance with the Queensland Government's ecologically sustainable management of flying-fox roost code of practice. Importantly, the exercise of this authority would remain subject to all other relevant legislation such as the EPBC Act 1999 and Vegetation Management Act 1999.

4.3.2 VEGETATION MANAGEMENT ACT 1999

Vegetation mapping for each subject roost will be reviewed prior to any clearing or development works being undertaken. Clearing that requires approval (i.e. a development permit) can only occur for certain 'relevant purposes' such as:

- A project declared to be a significant project under section 26 of the State Development and Public Works Organisation Act 1971
- Necessary to control non-native plants or declared pests
- To ensure public safety

COUNCIL WILL BE RESPONSIVE TO HEALTH CONCERNS AND THE SOCIAL AND ECONOMIC NEEDS OF THE COMMUNITY, WHILE BALANCING ENVIRONMENTAL DUE DILLIGENCE FOR THE PROTECTION OF FLYING-FOXES AND THE ESSENTIAL ECOSYSTEM SERVICES THEY PROVIDE.



- For establishing a necessary fence, firebreak, road or vehicular track, or for constructing necessary built infrastructure, and the clearing for the relevant infrastructure cannot reasonably be avoided or minimised
- A natural and ordinary consequence of other assessable development for which a development approval as defined under the Sustainable Planning Act 2009 was given, or a development application as defined under the Planning Act was made, before 16 May 2003
- For fodder harvesting, thinning, clearing of encroachment or for an extractive industry

4.3.3 ANIMAL CARE AND PROTECTION ACT 2001

The Animal Care and Protection Act 2001 promotes the responsible care and use of animals. It also protects animals from unjustifiable, unnecessary or unreasonable pain.

4.3.4 ENVIRONMENTAL PROTECTION ACT 1994

The Environmental Protection Act 1994 protects Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (ecologically sustainable development). Some flying-fox roost management actions may generate high levels of noise; these are covered by the Act as a potential environmental nuisance (noise).

4.4 LOCAL GOVERNMENT LEGISLATION

4.4.1 LOCAL LAW NO. 3 (COMMUNITY AND ENVIRONMENTAL MANAGEMENT) 2011

All management actions undertaken by Council will be in accordance with Local Law No. 3 (Community and Environmental Management) 2011 and its corresponding Subordinate Local Law. Council's management actions will take into consideration noise standards (Part 6, Section 21). When undertaking such actions Council will do its utmost to minimise the likelihood of community safety hazards (Part 5, Section 17(c) dead animal on premises).

4.4.2 LOCAL LAW NO. 4 (LOCAL GOVERNMENT CONTROLLED AREAS, FACILITIES AND ROADS) 2011

Council will enact Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011 and its corresponding Subordinate Local Law particularly in relation to Part 2 Section 8 (power of closure of local government controlled areas) when Council deems it appropriate to do so.

Damaging or interfering with vegetation or native fauna is prohibited in all parks and reserves within local government areas as per Schedule 1 of Subordinate Local Law No. 4. Therefore, members of the community wishing to undertake activities which may be considered prohibitive under Local Law No. 4 must ensure all appropriate approvals are obtained prior to undertaking the activity.

5. STATEMENT OF MANAGEMENT INTENT: FLYING-FOXES

Scenic Rim Regional Council recognises flying-foxes are ecologically important and contribute significantly to sustaining the region's unique biodiversity. Council aims to address and manage the concerns of the community whilst conserving and co-existing with flying-foxes by increasing community understanding and appreciation of the essential ecological role of flying-foxes and the need for conservation efforts. Council is authorised under the Nature Conservation Act 1992, to manage flying-fox roosts in the Urban Flying-fox Management Area (Figure 1) and on Council lands.

Individual flying-fox roosts will be assessed by designated Council staff to evaluate whether a Council roost management response is required based on the likelihood of management action success and the risk of transferring the roost impacts to a more problematic site.

Council will be responsive to health concerns and the social and economic needs of the community, while balancing environmental due diligence for the protection of flying-foxes and the essential ecosystem services they provide.

Council acknowledges the high risk of transferring flying-fox roost impacts during management actions and therefore where there is conflict between sensitive receptors and flying-foxes within an UFFMA, Council will undertake a detailed risk assessment prior to any relocation/dispersal. An assessment will consider sensitive receptors including residences, schools, hospitals and aged care facilities and also potential that relocation will make the problem worse.

Due to the high risk of transferring flying-fox roost impacts to urban areas, Council will not support the relocation/dispersal of flying-fox roosts outside the Urban Flying-fox Management Area and will actively discourage roost relocation/dispersal.

The primary responsibility for the management of roosts on private property both within and outside the Urban Flying-fox Management Area remains that of the landholder. Private landholders may seek appropriate permission from the Queensland Department of Environment and Heritage Protection (EHP) to implement measures to reduce the impact of flying-foxes on their land.

Council may assist landholders with roost relocation/dispersal if an overriding public benefit can be demonstrated.

Council will develop site specific Roost Management Plans prior to the commencement of any management action. These site specific plans will provide the details, technical information and actions on how to manage each individual roost.

Council will only use non-lethal management actions to minimise adverse impacts of flying-fox roosts on residents and the broader community.

All management actions will comply with legislative requirements including Council policy and objectives; and the Queensland Government's Flying-fox Roost Management Guideline and their Code of Practice: Ecologically sustainable management of flying-fox roosts.

6. COUNCIL MANAGEMENT OF FLYING-FOX ROOSTS

Managing flying-foxes and their roosts is challenging and potentially resource intensive. The high roost fidelity of flying-foxes can create difficulties in the management of roost sites and trying to disperse flying-foxes from an established roost may, in some circumstances, result in a worse situation. Past roost dispersals have typically been very expensive and the animals formed new roosts in highly sensitive areas such as schools, hospitals, aged care facilities and local backyards. Council's main objective when undertaking flying-fox roost management is to ensure that roost impacts are not exacerbated and/or transferred to a more problematic location. Therefore, management actions will be restricted during the final trimester of pregnancy and during the cr ching period when young pups are incapable of flight.

There are five main types of flying-fox roost management actions Council may choose to undertake:

- Community education and/or consultation
- Management of existing roosts in their current location
- Management of individual roosts with the intention of dispersing or decommissioning the roost
- Management of the roost in response to new and/or temporary roosts
- Management of the roost in response to extreme weather events such as severe thunderstorms and heat waves. Council will develop site specific Roost Management Plans prior to undertaking management actions

6.1 COMMUNITY EDUCATION AND/OR CONSULTATION

Council may conduct community education and/or consultation where community/flying-fox conflicts occur or are likely to occur with the hope of reducing many of the community's concerns about the proximity of flying-foxes. The activities of both humans and flying-foxes can sometimes cause conflict between both groups. Primary concerns include roost noise, odour, flying-fox faeces, flying-foxes feeding in backyard trees and

orchards, human health and disease concerns.

Council aims to provide important information to the community about flying-fox ecology and biology. Education will enable members of the community to make informed decisions to limit their own potential sources of flying-fox conflict, such as deciding whether or not to purchase a new property in the proximity of a known roost and which trees to plant in their backyards to restrict flying-fox visitation.

Council may take into consideration the proximity of a flying-fox roost when deciding to approve development applications in order to discourage development that will cause or increase community/flying-fox conflict. Management of flying-fox roosts is most effective when Councils and the community work together to limit areas of potential conflict.

6.1.1 COMMUNITY CONSULTATION

Community attitudes regarding a specific roost may be assessed through a consultative process. This process may run concurrently with an environmental assessment process and may involve public meetings, written submissions on draft proposals and consultation/ notification of the local Aboriginal community. Community consultation may not be necessary if Council decides not to proceed with management actions. Instead, Council may choose to continue with targeted consultation through a working group consisting of representatives from key stakeholder groups. Representatives may include members of Council, affected community members, Department of Environment and Heritage Protection, flying-fox researchers, wildlife rescue groups such as RSPCA Queensland, wildlife welfare representatives, Department of Agriculture, Fisheries and Forestry and Queensland Health. This working group may have input into the management strategy of a specific roost and the development of a project brief for specialist consultants engaged to conduct the environmental assessment, prepare the EPBC Act 1999 referral and if required, prepare a species impact statement and monitoring strategy.

6.2 MANAGEMENT OF EXISTING ROOSTS IN THEIR CURRENT LOCATION

Council's main objective when undertaking flying-fox roost management is to ensure that roost impacts are not exacerbated and/or transferred to a more problematic location such as closer to sensitive receivers. Where there is a high risk of transferring roost impacts to a more problematic site, Council may decide that the best management option is to ensure the flying-fox roost in question remains in its current location. In such cases, Council may undertake management actions to help mitigate roost impacts on neighbouring residents whilst ensuring Council maintains control over the roost site and reduces the risk of impact transference to other parts of the community.

Management actions may include:

- Undertaking minor vegetation removal to create buffer zones between the roost and nearby residences
- Planting and promoting the growth of non-roost tree/shrub species as vegetation buffers
- Re-generating vegetation communities to extend known roost sites away from residential areas
- 'Nudging' flying-foxes into other parts of the roost and away from sensitive receivers
- Periodical monitoring of the roost, its impacts and a review of management options as required
- Providing some financial assistance to affected residents and community groups dealing with the impacts of flying-foxes

6.3 DISPERSAL OF INDIVIDUAL ROOSTS

Where Council considers that there are more appropriate roost locations for the bats within the region, Council will undertake actions to relocate/disperse the roost. Because flying-foxes play a critical role in forest regeneration through pollination and seed dispersal, Council will only use non-lethal methods to disperse flying-foxes in the hope they will relocate to a more suitable location.

Management options may include:

- Community consultation at both the current and potential "new" roost locations
- Locating alternative non-suitable roost locations and undertaking vegetation management to prevent roost formation, as required

- Dispersing the roost and maintaining the current vegetation
- Dispersing the roost and modifying the current vegetation
- Decommissioning the roost through the removal of all roost vegetation
- Post-decommission vegetation management to prevent re-establishment of suitable roost trees
- Where a feasible alternative "new" roost location exists, Council may offer some financial assistance to encourage acceptance of the "new" roost

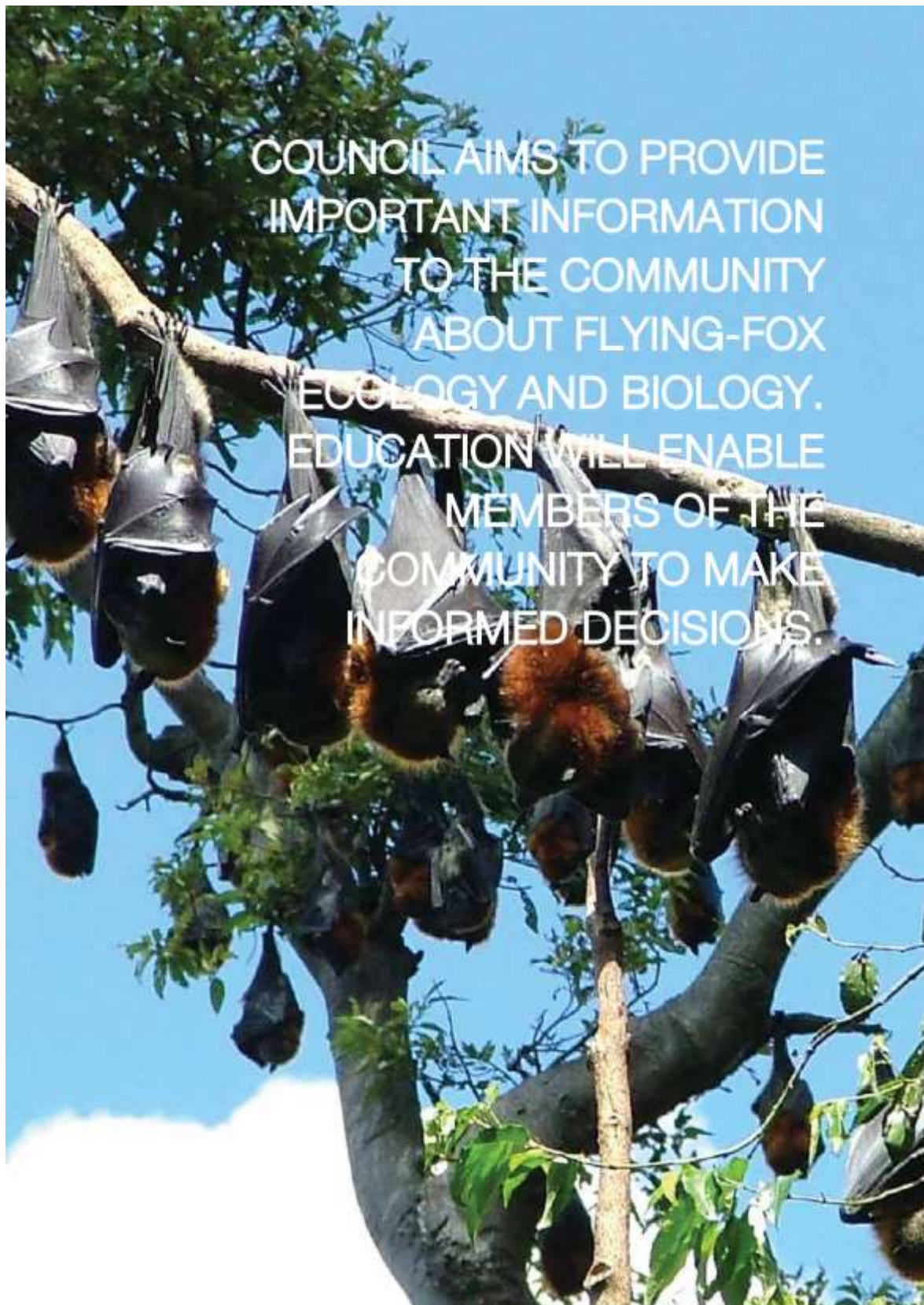
Council will engage experienced contractors, when required, to assist Council staff with flying-fox roost management activities. An independent specialist in flying-fox behaviour (Flying-fox Advocate) will monitor roost management activities to ensure animal welfare standards are maintained.

Dispersal actions will:

- Only commence after advice from a person knowledgeable about flying-fox behaviour and with 48h notice to the Department of Environment and Heritage Protection
- Only occur in the early evening and/or early morning, with dispersals carried out in the early evening to commence immediately prior to dusk 'flyout' at a roost and continue for no longer than 2 hours. And for dispersals carried out in the early morning to commence when flying-foxes start returning to a roost from foraging activities, and continue for no longer than 3 hours
- Disturbance activities conducted at roosts containing grey-headed flying-foxes will be limited to a maximum of 3 hours in any 12 hour period
- Be limited to the non-lethal deterrence methods of smoke, noise, light, foggers, BirdFrite and 'scarecrow' type devices only
- May include some vegetation modification to render the site unattractive for roosting flying-foxes, but this will only be done when the vegetation is free of flying-foxes

6.3.1 FLYING-FOX ROOST PRE- AND POST-DISPERSAL MONITORING

Adaptive management involving monitoring of roosts to determine some measure of species presence, abundance and breeding status correlated with the number of public complaints may be undertaken pre-



and post- implementation of management actions, for a minimum of 12 months to allow for potential seasonality changes. Monitoring frequency and intensity may be increased directly pre- and post-dispersal action at both the original roost and other roosts.

When flying-foxes return to a dispersed roost to find it is no longer suitable, displaced flying-foxes may temporarily relocate to nearby trees including those in neighbouring backyards. If this occurs, residents should be urged to leave the animals alone as they require rest to be able to fly off again in the evening. It is anticipated that the flying-foxes will move on to more suitable locations within a day or two. A council officer will assess the situation if the same individual flying-fox remains in a backyard for more than two days post-dispersal activities.

Continual monitoring within 2km of a roost undergoing active dispersal will occur to ensure flying-foxes do not roost in 'unsuitable' areas within the Scenic Rim Urban Flying-fox Management Area. If roosting is identified within the Scenic Rim Urban Flying-fox Management Area and on Council lands and further dispersal activities are deemed appropriate, Council contingency procedures will be implemented.

6.3.2 CONTINGENCIES PROCEDURES

Council has contingency procedures in place should flying-fox roost management actions result in undesirable outcomes (Table 7). These contingency procedures will comply with the Queensland Government's Ecologically Sustainable Management of Flying-fox Roosts Code of Practice.

TABLE 7: CONTINGENCY PROCEDURES FOR UNDESIRABLE OUTCOMES FOLLOWING FLYING-FOX ROOST MANAGEMENT ACTIONS.

SITUATION	CONTINGENCY
Flying-foxes unexpectedly roost outside of current roost boundaries, potentially creating community conflict.	Management action which caused the move will cease immediately and Council consider whether 'nudging' of flying-foxes back into the main roost area is required or whether the animals will return of their own accord once management action has ceased.
Flying-foxes do not leave the roost, regardless of disturbance.	May need to increase duration of action and/or possible full removal of vegetation.
Flying-foxes only abandon the roost temporarily.	May need to increase duration of action and/or possible full removal of vegetation.
Flying-foxes occupy sites other than those identified, creating community conflict.	Council will consider whether community education is appropriate or whether follow up dispersal action is required.
Disturbance adversely impacts on the welfare of the flying-foxes occupying the roost (e.g. exhausted animals dying or coming to ground in neighbouring backyards).	All management activities will cease immediately and Council will reconsider methods utilised, timing and duration of actions.
Unauthorised community actions may be countering Council actions.	Council will endeavour to ensure all unauthorised community actions cease immediately. Police intervention may be requested.

Follow up dispersals will only be undertaken by Council if flying-foxes establish in a more problematic site within the Scenic Rim Urban Flying-fox Management Area. New "follow up" dispersals must be approved by the Project Manager with advice from the Environmental Policy and Services Team, the Flying-Fox Advocate and notice to the Department of Environment and Heritage Protection.

6.4 RESPONSE TO NEW AND/OR TEMPORARY ROOSTS

Newly and/or temporarily established flying-fox roosts (< 1 month old) within the Urban Flying-fox Management Area and on Council lands may be assessed by designated Council staff to evaluate whether a Council roost management response is required. Council's main objective when undertaking flying-fox roost management is to ensure that roost impacts are not exacerbated and/or transferred to a more problematic location. Council is

very conscious that past roost dispersals have typically been very expensive and the animals formed new roosts in highly sensitive areas. All Council management decisions will consider the likelihood of success and the risk of transferring roost impacts to a more problematic site.

Management actions will be based on the classification of the 'new' roost as either:

- A new roost which Council deems to be in a suitable location. In such cases, Council's first course of action will be to protect the roost and actively discourage roost relocation/dispersal. A Roost Management Plan will be developed to ensure the roost remains in its current location and does not move to a more problematic location and/or closer to sensitive receivers
- A new roost which Council deems to be in an unsuitable location and requires immediate relocation/dispersal
- A new roost which is likely to only be a temporary roost and one which the flying-foxes are likely to abandon once local flowering (generally eucalypt trees) has ceased. This type of roost usually only remains for a few weeks to several months and is typically formed by Little Red Flying-foxes. This flying-fox species can literally turn up overnight in the tens of thousands and consequently may impact heavily on nearby residents and/or community groups
- Depending upon the specific location of a temporary roost and its proximity to sensitive receivers, Council may choose to either:
 - Leave the roost in its current location and allow the flying-foxes to naturally disperse when local flowering ceases (Council may offer temporary financial assistance to affected landholders), or
 - Council may decide there is an overriding public benefit to relocating/dispersing the roost and take action to disperse the roost

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6.5 RESPONSE TO EXTREME WEATHER EVENTS

Another key component to flying-fox roost management is Council's response measures to potentially fatal extreme weather events. Council will monitor flying-fox roosts and assess whether assistance is required (and at what level) should extreme weather conditions such as severe thunderstorms occur or when the maximum daytime temperature does (or is predicted to) meet or exceed 38°C. Council response measures aim to reduce/prevent mass die-offs of flying-foxes and thereby reduce the likelihood of human/pet exposure to injured and/or dying flying-foxes as well as minimise any subsequent Council expenses relating to the removal and disposal of multiple dead animals in accordance with Local Law No. 3 (Community and Environmental Management) 2011, Community Safety Hazards (Part 5, Section 17(c)).

6.5.1 SEVERE THUNDERSTORMS

Severe thunderstorms, especially those with high winds and hail, can damage trees and injure flying-foxes. When previous severe storm cells have passed over flying-fox roosts many of the animals were injured by hail rendering them incapable of flight. Injured flying-foxes were found in residential properties neighbouring roost sites, thus increasing the potential for human/pet interaction with flying-foxes.

Females incapable of flight are often either unable to return to their young and/or forage for themselves which subsequently causes them to stop lactating; in such cases both the young and the mother die of starvation. Many animals may require euthanasia and orphaned young need to be brought into care as many can suffer pneumonia. This influx of injured and/or

orphaned flying-foxes can cause extreme financial and emotional stress for local wildlife carers.

Early monitoring of flying-fox roosts following a severe thunderstorm will alert wildlife care groups to the need for urgent medical intervention and potentially reduce the number of dead animals in the vicinity of the roost and the number of sick and/or orphaned young brought into care. Vegetation removal/maintenance may also be required post-storm depending upon the extent and severity of the storm.

6.5.2 HEAT WAVES

Higher than normal daytime temperatures can expose flying-fox colonies to heat stress, resulting in large numbers of distressed and/or dead/dying animals. A previous heat stress event occurring in January 2014 resulted in tens of thousands of dead flying-foxes across Southeast Queensland including the Scenic Rim Region. Council staff spent many hours removing and disposing of these dead and decaying flying-foxes from parks and other public areas.

The presence and smell of these dead animals caused considerable distress within the local community. Additionally, hundreds of flying-foxes, primarily orphaned young, needed to be taken into care placing enormous financial and emotional stress of local wildlife carers. Early intervention through the application of light water spraying may alleviate symptoms of heat stress and prevent a similar situation.

When maximum daytime temperatures are predicted to meet or exceed 38°C, trained Council staff will monitor roosts for signs of heat stressed flying-foxes such as clustering or clumping of animals along tree trunks and in the understorey. Response measures will be implemented when deemed appropriate.

7. IMPLEMENTATION OF FLYING-FOX ROOST MANAGEMENT

Implementation of Council's flying-fox roost management actions will take one of two forms:

Calculated actions requiring the development of site specific Roost Management Plans to 'manage' or 'disperse' the roost, or

Immediate 'response' actions to newly and/or temporarily established roosts or extreme weather events.

7.1 DEVELOPMENT OF ROOST MANAGEMENT PLANS

Roost Management Plans are detailed plans for the management of specific roosts and only relate to the 'Management of the Roost in its Current Location' and the 'Dispersal of the Roost'. Prior to commencement of any management actions (except those relating to extreme weather events and new or temporary roosts), Roost Management Plans will be developed for individual flying-fox roosts within the Scenic Rim Regional Council Urban Flying-fox Management Area and on Council lands.

The details of these plans may include:

- Site location and history
- Flora/fauna assessment results
- Environmental health assessment results
- Ongoing roost maintenance
- Ongoing mitigation strategies
- Proposed activities and associated timeframes (daytime/night-time works)
- Early intervention dispersal methods and strategies
- Alternative roost sites and sensitive receivers
- Dispersal strategy (if recommended):
 - Activity participants
 - Impacts
 - Animal welfare considerations

- Human health considerations
- Flying-fox monitoring
- Risk matrix
- Reporting and communications strategy

7.2 RESPONDING TO NEW AND/OR TEMPORARY ROOSTS AND EXTREME WEATHER EVENTS

Council acknowledges that a timely response is very important when responding to the establishment of new and/or temporary flying-fox roosts (< 1 month old) which are in unsuitable locations, and when responding to extreme weather events such as thunderstorms and heat waves. Council recognises the need to expedite response times and has developed procedures which are not site specific and are designed to be readily adapted as the need arises.

7.2.1 NEW AND/OR TEMPORARY ROOSTS

Designated Council staff may evaluate whether a Council roost management response is required for a newly and/or temporarily established flying-fox roost which is within the Urban Flying-fox Management Area and on Council land. Council will determine whether the new and/or temporary roost is either in a 'suitable' or 'unsuitable' location and take the appropriate management action(s).

The 'suitability' of a roost location will be based upon:

- The proximity of the roost to sensitive receivers such as residences, schools, hospitals and aged care facilities. A roost site may be deemed 'suitable' where the minimum separation distance between a new and/or temporary flying-fox roost and sensitive receivers exceeds 300m
- The risk of transferring the negative impacts of the roost closer to higher rated sensitive receivers and/

- or closer to more sensitive receivers than those at the current location
- The species of flying-fox utilising the roost. Little red flying-foxes typically only form temporary roosts and will naturally disperse during cooler months and/or once local flowering ceases. Black and grey-headed flying-foxes are more likely to form roost fidelity if they reproduce at the site

When Council deems a new and/or temporary roost to be 'suitably' located, a site specific Roost Management Plan may be developed and Council may actively protect the roost, discouraging relocation/dispersal. Council may also decide to undertake immediate management actions such as vegetation modification to provide buffer areas and 'nudge' the flying-foxes into other parts of the roost away from sensitive receivers. In the case of temporary roosts, the roost may be regularly monitored and reassessed should the animals fail to move-on of their own accord within acceptable timeframes.

Council does acknowledge that urgent action may be required to prevent the flying-foxes from establishing roost fidelity at a new 'unsuitable' location as this may impede any future relocation/dispersal attempts. Where relocation/dispersal is deemed appropriate, Council will undertake immediate action following the completion of the appropriate risk management assessments.

Relocation/dispersal actions will:

- Only commence after advice from a person knowledgeable about flying-fox behaviour and with 48h notice to the Department of Environment and Heritage Protection
- Only occur in the early evening and/or early morning, with dispersals carried out in the early evening to commence immediately prior to dusk 'flyout' at a roost and continue for no longer than 2 hours. And for dispersals carried out in the early morning to commence when flying-foxes start returning to a roost from foraging activities, and continue for no longer than 3 hours
- Disturbance activities conducted at roosts containing grey-headed flying-foxes will be limited

to a maximum of 3 hours in any 12 hour period

- Be limited to the non-lethal deterrence methods of smoke, noise, light, foggers, BirdFrite and 'scarecrow' type devices only
- May include some vegetation modification to render the site unattractive for roosting flying-foxes, but this will only be done when the vegetation is free of flying-foxes

Council will endeavour to support the community in the appropriate management of new and/or temporary flying-fox roosts where they adversely impact on nearby residents and community groups. However, Council will not support the relocation/dispersal of flying-fox roosts outside of the Urban Flying-fox Management Area, as Council is very conscious of not transferring roost impacts to urban areas and closer to sensitive receivers. The primary responsibility for the management of roosts on private property both within and outside the Urban Flying-fox Management Area remains that of the landholder. Council may choose to assist the landholder regardless of the above if an overriding public benefit can be demonstrated.

7.2.2 EXTREME WEATHER EVENTS

Flying-fox roosts can be severely impacted by extreme weather events. Animals may require urgent medical intervention to potentially reduce the number of dead animals in the vicinity of the roost and the number of sick and/or orphaned young needing to be brought into care. Early monitoring of flying-fox roosts following severe thunderstorms and when maximum daytime temperatures are predicted to meet or exceed 38°C will alert government agencies and wildlife care groups to the need to provide immediate assistance to injured and/or debilitated animals in order to prevent mass fatalities.

Trained Council staff will monitor flying-fox roosts, in response to extreme weather events, for signs of injured and/or heat stressed flying-foxes such as clustering or clumping of animals along tree trunks and in the understorey. When deemed appropriate, Council will immediately implement response measures including:

- Contacting the Department of Environment and Heritage Protection (EHP)
- Contacting the RSPCA
- Contacting local wildlife care groups
- Arranging for the local Fire Brigade or Rural Fire Service to send a water truck to the roost (where accessible) and spray the roost as per guidelines (see Appendix B)
- Trained Council staff may assist EHP, the RSPCA and/or local wildlife carers with the recovery of animals requiring more intense re-hydration and/or with the removal of carcasses

7.3 ROLES AND RESPONSIBILITIES

Prior to the commencement of any flying-fox roost management action, the roles and responsibilities of personnel involved will be known by all involved (Table B). Roost management actions will be coordinated by a Project Manager with support from the Environmental Policy and Services Section. Site supervisors will be appointed as required and dependent upon the activity, these may include staff members from the Pest and Animal Management section. A Flying-fox Advocate will be appointed as an observer to ensure the ethical treatment of flying-foxes.

TABLE B: THE ROLES AND RESPONSIBILITIES OF PERSONNEL INVOLVED IN FLYING-FOX ROOST MANAGEMENT ACTIONS.

POSITION/SECTION	RESPONSIBILITY
CEO	Ensure Council resolution is carried out.
Director Regional Services	Delegated by the CEO to ensure Council resolution is achieved.
Project Manager	Coordinate, plan and oversee on-ground activities including engaging contractors for vegetation modification and dispersals; Develop roost management plans as necessary and coordinate applications and approvals necessary to undertake actions.
Environmental Policy and Services Section	Develop specific roost management plans. Support on-ground activities and assist in obtaining relevant permits and approvals. The provision of ecological advice about flying-foxes and their roosts. Undergo rabies vaccinations and training to increase capability in flying-fox management.
Pest and Animal Management Section	(If required) provide on-ground support and leadership for dispersals and flying-fox rescues. Senior staff to coordinate staff and equipment and supervise operations for on-ground dispersals as applicable. Undergo rabies vaccinations and training to increase capability in flying-fox management.
Site Supervisor	The staff member supervising the work site, may change depending on the activity.
Flying-Fox Advocate	Ensure the humane and ethical treatment of flying-foxes. Stop or delay management activities regarding flying-fox welfare. Provide technical advice on the ecology and behaviour of flying-foxes. Assist in any rescue activities.
Vegetation Contractors	Contractor will be utilised for the removal of the vegetation.
Ground Maintenance Staff	May be required to provide some on-ground assistance.
Additional Staff	Additional contracting staff may be recruited if necessary. Staff to be appropriately trained in flying-fox management actions.

8. UNDERSTANDING THE IMPACTS OF ROOST MANAGEMENT ACTIONS

Managing flying-foxes and their roosts is challenging. Some management actions utilised by Council when managing a flying-fox roost may adversely impact residents, the broader community, Council and flying-foxes. Management actions will consider flying-fox ecology and biology to ensure actions are conducted at appropriate times of the year, otherwise these impacts could be exacerbated and/or transfer to more problematic locations and potentially cause flying-fox fatalities.

8.1 IMPACTS OF COMMUNITY EDUCATION AND/OR CONSULTATION

Impacts of Council's community education and/or consultation actions include:

- Acceptance of flying-foxes and willingness to co-exist, resulting in a decrease in complaints to Council
- Community takes positive, proactive steps to reduce their own potential for conflict with flying-foxes such as choosing to plant non-flying-fox attracting trees
- Council will incur costs during on the development of and implementation of education and/or consultation programmes depending upon the roost location and the number of residents and/or community groups affected
- Additional Council staff time and resources may be required for evaluating documents, preparing media releases and conducting community education/consultations
- Affected residents and/or community groups continue to suffer from the negative impacts of living, working or undertaking recreational activities within close proximity to a flying-fox roost

8.2 IMPACTS OF MANAGING EXISTING ROOSTS IN THEIR CURRENT LOCATION

Impacts of Council's management of the roost in its current location include:

- Buffer zones between roost and sensitive receivers are established, providing welcomed relief for neighbouring residents and/or community groups
- Flying-foxes successfully 'nudged' away from sensitive receivers, providing welcomed relief for neighbouring residents and/or community groups
- Council incurs expenses to undertake vegetation modifications such as vegetation/re-generation of the roost and minor tree removal to establish buffer zones
- Additional Council staff time and resources may be required to 'nudge' flying-foxes away from sensitive receivers and report on actions
- Buffer zones between roost and sensitive receivers are established, but the roost continues to impact on neighbouring residents and/or community groups
- Flying-foxes are 'nudged' away from sensitive receivers, but the roost continues to impact on neighbouring residents and/or community groups
- Affected residents and/or community groups may feel that problems are exacerbated whilst there are still flying-foxes using the roost and the creation of buffer zones and/or 'nudging' activities are being carried out
- Certain management actions may lead to the roost dispersing and Council losing all ability to mitigate the impacts

8.3 IMPACTS OF DISPERSING INDIVIDUAL ROOSTS

Impacts of Council's roost dispersal actions include:

Dispersal action itself:

- Both flying-foxes and residents in the vicinity of the roost would be affected by dispersal actions

for the duration of dispersal attempts (e.g. several hours per day prior to dawn and/or on dusk) and potentially for an extended or ongoing period depending upon the success or failure of these actions

- Flying-foxes and nearby residents will be subject to a series of uncomfortable and distressing situations during dispersal actions which may have implications upon the health and wellbeing of individuals
- Flying-foxes may have to spend additional time searching for new roost locations and expend more energy than they would otherwise have done
- A reduction in energy available to an individual flying-fox as a result of dispersal actions may inhibit an individual's ability to find food, mate and reproduce during the period of exposure to dispersal actions
- Exhausted and/or tired flying-foxes may seek refuge in undesirable locations such as schools and backyards, thus increasing the likelihood of residents and/or their pets interacting with flying-foxes
- Female flying-foxes may abort their pregnancy, mothers may drop their young or dependant young unable to fly could get separated from their mothers and die of starvation
- Aborted fetuses and dropped young may occur within the vicinity of the roost (i.e. not within the roost itself) such as in residential backyards, along footpaths and in school grounds increasing the risk of human/pet interaction with flying-foxes

Financial impact to Council:

- Dispersal actions can be extremely expensive and potentially resource intensive
- Additional Council staff time and resources may be required for evaluating documents, preparing media releases, conducting community consultations, assisting with implementing the dispersal, and reporting on actions

Roost successfully relocated:

- Affected residents and/or community groups gain welcomed relief from the impacts of the flying-foxes
- Council may face a suite of new requests from other residents and/or community groups to disperse other flying-fox roosts

- Alternative roost sites may afford less shelter than the dispersed roost site, increasing the exposure of flying-foxes to extreme weather events which could result in increased mortality

Roost moves to unsuitable location:

- Previously unaffected residents and/or community groups may now face ongoing disturbance from a new or expanded roost established in an unsuitable location
- Council may receive an increase in the number of flying-fox complaints
- Council may face legal action from previously unaffected residents and/or community groups which may be impacted upon by the new roost
- Council may lose all ability to mitigate roost impacts
- Additional Council staff time and resources may be required for conducting community education/ consultations at the new location and/or assisting with implementing follow-up dispersals, and reporting on actions
- Flying-foxes relocated to a more problematic location could now be subjected to additional disturbance and stress
- Unsuitable roost sites may afford less shelter for the flying-foxes than their preferred sites, increasing the exposure of flying-foxes to predation and extreme weather events which could result in increased mortality

Roost remains despite dispersal action:

- Affected residents and/or community groups will continue to suffer from the negative impacts of living, working or undertaking recreational activities within close proximity to a flying-fox roost, along with the added disruption caused by dispersal activities
- Council may receive an increase in the number of flying-fox complaints
- Affected parties may attempt their own potentially harmful and illegal solutions (of roost disturbance), unless other management actions are taken to alleviate their concerns

8.4 IMPACTS OF RESPONDING TO NEW AND/OR TEMPORARY ROOSTS

Impacts of Council's response actions to new or

temporary roosts include:

- Both flying-foxes and residents in the vicinity of the roost would be affected by dispersal actions for the duration of dispersal attempts (e.g. several hours per day prior to dawn and/or on dusk) and potentially for an extended or ongoing period depending upon the success or failure of these actions
- Dispersal actions can be extremely expensive and potentially resource intensive
- Additional Council staff time and resources may be required for evaluating documents, preparing media releases, conducting community consultations, assisting with implementing the dispersal, and reporting on actions
- Flying-foxes and nearby residents will be subject to a series of uncomfortable and distressing situations during dispersal actions which may have implications upon the health and wellbeing of individuals
- Exhausted and/or tired flying-foxes may seek refuge in undesirable locations such as schools and backyards, thus increasing the likelihood of residents and/or their pets interacting with flying-foxes
- If the roost is successfully relocated/dispersed, the affected residents and/or community groups will gain welcomed relief from the impacts of the flying-foxes
- Unsuccessful relocation/dispersal of the roost may fail to alleviate the negative impacts of the roost on the current residents and/or may result in previously unaffected residents and/or community groups now being subjected to ongoing disturbance from a new or expanded roost and the previously affected
- Council may receive an increase in the number of flying-foxes complaints and a suite of new requests from other residents and/or community groups to disperse other flying-fox roosts
- Council may face legal action from previously unaffected residents and/or community groups which may be impacted upon by the new roost
- Flying-foxes may remain within the vicinity of the roost whilst local flowering continues, relocating to a more problematic location and may now be subjected to additional disturbance and stress

8.5 IMPACTS OF RESPONDING TO EXTREME WEATHER EVENTS

Impacts of Council's response actions to extreme weather events include:

- Reduction in the number of flying-foxes dying from extreme weather events
- Reduction in the likelihood of human/pet interactions with flying-foxes following extreme weather events
- Reduced costs incurred by Council to remove and dispose of dead/decaying flying-fox bodies
- Decrease in the number of complaints to Council about the smell of dead flying-foxes
- Council incurs costs to undertake vegetation clean-up post-thunderstorm or to deploy a water truck to spray a heat stressed flying-fox roost



FAILURE TO CONSIDER
FLYING-FOX ECOLOGY AND
BIOLOGY COULD RESULT IN
INCREASED RISK OF
EXPOSURE TO
NEIGHBOURING RESIDENTS
AND THE BROADER
COMMUNITY.





9. UNDERSTANDING THE RISKS OF ROOST MANAGEMENT ACTIONS

Managing flying-foxes and their roosts is never simple. Undertaking certain management actions, such as 'nudging', 'buffering' and/or dispersing of flying-fox roosts, presents several challenges for managing operational risks as well as ongoing risks to the public (Table 9). In addition, activities need to be sympathetic to flying-fox ecology and biology to ensure minimal disturbance and stress to animals. Failure to consider flying-fox ecology and biology could result in increased exposure risks to neighbouring residents and/or the broader community. Council will do its utmost to ensure that management actions do not place staff at undue risk, cause the transfer of risks associated with flying-fox roosts to additional residences and/or community groups.

9.1 WORKPLACE HEALTH AND SAFETY RISKS

When undertaking roost management actions it is imperative that all personnel adhere to good workplace health and safety practices and understand the risks associated with working closely with flying-foxes and their roosts. As such, all staff involved in roost management activities will have access to this plan, specific roost management plans and risk assessments before and during any activity. All contractors and Council staff will undergo an induction before undertaking any activity related to this plan or specific roost management plans.

Only staff, contractors and volunteers trained and rabies vaccinated may handle live flying-foxes. All other personnel must not handle a live flying-fox or place themselves in a position that is likely to result in a bite or scratch from a flying-fox. All bites and scratches from a flying-fox must be reported to the Project Manager or Site Supervisor immediately. All potential exposures to Australian bat lyssavirus require immediate first-aid measures and medical advice must be sought as soon as possible, even for vaccinated personnel (refer section 3.1 Human Health and Flying-foxes).

Personnel conducting vegetation modifications associated with flying-fox roosts, where the vegetation is potentially covered in dried faeces, should wear appropriate personal protective equipment (such as a face mask) to prevent inhalation of aerosolised dried faeces resulting from the vegetation modification process.



TABLE 9: RISKS ASSOCIATED WITH VARIOUS FLYING-FOX ROOST MANAGEMENT ACTIONS.

RISK	COMMENT	MANAGEMENT
Health Risks	Operational staff may be required to work in close proximity to flying-foxes when undertaking management actions.	All operational staff working in close proximity to flying-foxes are to be rabies vaccinated and trained in roost management.
	The general public and their pets could be at risk of flying-fox exposure. Stressed and/or exhausted flying-foxes may come to ground and/or females may abort or drop young, thus increasing the potential for human/pet exposure to flying-foxes.	Adjacent areas will be closed to the public during operations, where possible and signage erected. Vegetation modification will primarily occur at night after flyout thus greatly reducing any human/flying-fox interactions. Suitably qualified flying-fox carers will be appointed for any roost dispersal actions.
Managing Outcomes	There is a significant risk that the outcomes of any dispersal or vegetation modification could result in increased impacts upon the wider community.	Prior to roost dispersal, it may be necessary to undertake vegetation modifications at alternate locations to reduce vegetation attractiveness to the flying-foxes currently being dispersed. Follow up dispersals may need to be undertaken.
Liability	Actions undertaken by Council in dealing with a flying-fox roost may expose Council to an increased risk of litigation.	All required State and Federal Government approvals will be obtained prior to undertaking any management actions.
Increased Impacts	Rushed or poor management responses could exacerbate flying-fox problems and cause increased levels of conflict between flying-foxes and residents/community groups.	Dispersal actions will be planned including staff training, equipment and rabies vaccinations. Vegetation modification will be staged to ensure no operations are rushed.
Transference of Impacts	Rarely have flying-foxes relocated more than 5km from the original decommissioned roost. There is a real risk of transferring the problem to another area which may be more problematic than the original roost.	Ongoing monitoring of roost and surround high risk "new roost" locations will be undertaken. Vegetation modification of the likely "new roost" sites may need to occur prior to the commencement of dispersal actions. Follow up dispersals may also be necessary.
Loss of Control	The current location may enable control over the impacts of the flying-foxes. Certain management actions may lead to the roost dispersing and Council losing ability to mitigate the impacts.	Follow up dispersal actions may be necessary.
Risk of Mortality	Flying-fox mortality may potentially occur when undertaking roost decommission. Other animals may also be affected, such as possums, gliders, birds and reptiles.	Vegetation modification will occur outside of key flying-fox breeding events and at night (after flyout) and only in trees where no animals are present. Personnel capable of rescuing flying-foxes will be on site during activities. If mortality is observed, operations will cease immediately and EHP will be notified.

10. ASSESSING ROOST MANAGEMENT OPTIONS: LIKELIHOOD OF SUCCESS

When considering whether or not to undertake flying-fox roost management actions Council will take into consideration previous management actions which have been unsuccessful. It is also worth remembering that many flying-foxes will spend time roosting and foraging within urban environments where the loud noises, bright lights and pungent smells (such as vehicle exhaust) of human habitation are frequently present. They readily adapt to their surrounding environment and easily become habituated especially when food resources are limited. This can provide challenges for the management of flying-foxes.

Cost-effective, reliable techniques for relocating flying-fox roosts have not yet been developed. The result of relocation attempts such as the use of loud noises, lights or hosing with water have generally been that the animals have not deserted the roost, or, if forced to desert the roost, have not relocated to the pre-selected "new" location(s). Instead, they have relocated to less desirable locations, for example, they have scattered throughout a town or joined nearby roosts in other towns, compounding problems at those sites. The stress caused to the animals has sometimes resulted in fatalities, with pregnant females and dependent young being particularly vulnerable.

10.1 INEFFECTIVE MEANS OF MANAGING FLYING-FOX ROOSTS

Unauthorised attempts to disturb flying-fox colonies are not only illegal but also ineffective. Queensland's native wildlife, including flying-foxes, are protected by the Nature Conservation Act 1992. Examples of ineffective means of controlling flying-foxes include the use of shooting, noise deterrents, bright or flashing lights and pungent odours.

Past reductions of local flying-fox numbers by means

of shooting or poisoning (illegal) have historically been used across Australia. While a small number of flying-foxes can be removed by shooting, this does not deter other bats from returning later. Orchards are most affected by bats when native food-resources are extremely scarce and cultivated fruit provides the only alternative to starvation. Furthermore, findings of the Animal Welfare Advisory Committee concluded that shooting flying-foxes was inhumane.

The installation of high-frequency emitting bat-repellents has repeatedly been trialled with high hopes of success. Flying-foxes do not use echolocation or ultrasound. Their hearing range is similar to that of humans, making high-frequency sound inaudible to them. Therefore, sounds that can potentially detract flying-foxes have an equally offensive effect on humans and meet with very limited popularity in the community.

Strobe, bright or flashing light sources installed in trees are unsuccessful as deterrents. While flying-foxes may be disturbed initially, hunger and desensitisation to the light causes the effect to be short lived and may eventually serve to attract the bats. Driven by desperation, flying-foxes will become accustomed to most novel stimuli in a matter of days or weeks.

Due to flying-foxes' highly developed sense of smell, strong and unpleasant odours would seem the most likely detractor of flying-foxes. Pungent kerosene, fish paste and snake faeces have been placed in fruit trees with limited success. Wild animals are accustomed to the smell of predator faeces (such as python faeces) and are able to quickly determine the freshness and therefore the likely proximity of the predator. This means that to deter flying-foxes from roosting or foraging in specific trees the predator faeces (such as

python faeces) must be re-applied on an almost daily basis. While odour detraction may warrant further investigation, hungry bats are likely to habituate to it if no food/roost alternatives exist.

10.2 PREVIOUS DISPERSAL ATTEMPTS

While dispersal attempts at the Boonah flying-fox roost resulted in a successful outcome, previous dispersal attempts at a range of flying-fox roosts across eastern and southern Australia have shown that the success rate is very low. Success is measured in terms of both a satisfactory resolution of the original conflict and uptake of suitable alternative roosting locations.

New roosts are often formed which are problematic for other residents, businesses and/or community groups (e.g. Maclean NSW, Charters Towers QLD). In most cases flying-foxes often roosted within 500 metres of the original roost at which dispersal actions were undertaken. Nor did the bats roost within the 'pre-determined' alternative roost sites, join pre-existing roosts or move to locations acceptable to the broader community.

10.3 ALTERNATIVE ROOSTING LOCATIONS

Council may investigate potential alternate roost sites prior to determining the course of management actions to be undertaken. It is impossible to predict

where dispersed flying-foxes will relocate to, but it is hoped the flying-foxes will join existing colonies in more suitable locations. Understanding where dispersed flying-foxes may end up will greatly impact on management options as displaced animals may choose to roost in less suitable locations such as the grounds of nearby schools, hospitals or aged care facilities. Council may choose to manage the roost in its current location instead of risking flying-foxes roosting in a more problematic location.

Key criteria for assessing possible alternative roost locations include:

- Vegetation type, height and patch size
- Canopy cover of a similar density to current roost
- Proximity to water, food resources and < 2km from original site
- Ideally the site would be located away from sensitive receivers such as schools, hospitals and aged care facilities
- Extent to which vegetation may impede views or visual amenity
- Willingness for landholder to sell/allow vegetation rehabilitation
- Opportunities for multiple uses for the site such as recreation/education



DEFINITIONS /GLOSSARY

COUNCIL LANDS - are lands that Council has a responsibility to manage such as parks reserves, roads reserves and trustee lands. It does not include public lands subject to the operations of the State, such as National Parks, Main Roads, and SEQ Water lands.

FLYING-FOX ADVOCATE - means a person able to demonstrate experience of, or a methodology for:

- Classifying flying-fox species
- Assessing flying-fox population numbers in particular roosts
- Identifying flying-fox breeding cycles including evidence of breeding and rearing activity in particular roosts
- Recognising signs of distress in, or harm to, flying-foxes
- Management Actions - are non-lethal actions utilised by Council to manage flying-fox roosts and may include preventing flying-foxes from making use of a site or part of a site by destroying and/or modify vegetation at that site

ROOST OR FLYING-FOX ROOST - means a tree or other place where flying-foxes congregate during the daytime to rest and to breeding or rear their young.

CONTINUOUSLY OCCUPIED ROOST - a roost that has been utilised by flying-foxes for continuously for at least 12 months.

IRREGULARLY OCCUPIED ROOST - a roost that has been utilised by flying-foxes intermittently (e.g. at times of local flowering).

NEW ROOST - a roost that has been recently established (< 1 month).

SEASONALLY OCCUPIED ROOST - a roost that has been utilised by flying-foxes on a seasonal basis (e.g. winter or summer roost).

TEMPORARILY OCCUPIED ROOST - a roost which is deemed to only be occupied on a temporary basis, such as a little red flying-fox roost where the animals are expected to move on once local flowering ceases.

SENSITIVE RECEIVERS - are areas within the Urban Flying-fox Management Area which Council deems to be sensitive to flying-fox activity such as schools, hospitals, playgrounds, aged care facilities and urban residential areas.

URBAN FLYING-FOX MANAGEMENT AREA (UFFMA) - the Queensland State Government defines the UFFMA as areas designated within Council's planning scheme as having a residential or commercial purpose including a 1 km buffer.

ATTACHMENT A: MEDICAL HELP AND ASSISTANCE

A.1 HUMAN HEALTH

For further information, contact a local doctor or nearest public health unit (Table A1) or the 13HEALTH information line (13 432584).

TABLE A1: QUEENSLAND HEALTH NEARBY PUBLIC HEALTH UNITS.

NEARBY PUBLIC HEALTH UNITS	TELEPHONE	FACSIMILE
Metro South Public Health Unit (Brisbane South Office) Level 1, 39 Kessels Road, Coopers Plains (PO Box 333, Archerfield Qld 4108)	(07) 3176 4000	(07) 3176 4045
Gold Coast Level 1, 14 Edgewater Court, Robina (PO Box 4256, Robina Town Centre Qld 4230)	(07) 5668 3700	(07) 5662 2703
West Moreton (Goodna) 81 Queens Street, Goodna (PO Box 189, Goodna Qld 4300)	(07) 3818 4700	(07) 3818 4701

A.2 ANIMAL HEALTH

If a flying-fox has come into contact with a domestic pet (i.e. dog or cat) then Biosecurity Queensland (dafq.qld.gov.au or 13 25 23) or a local veterinarian should be contacted. Where flying-foxes are found to be injured or killed, Department of Environment and Heritage Protection (ehp.qld.gov.au or 1300 130 372) and RSPCA Qld (1300 ANIMAL (1300 264 625)) should be notified immediately.

Local volunteer wildlife care organisations should be contacted if sick, injured or orphaned flying-foxes (or other bats) are found. It is very important that all bats, including flying-foxes, are only handled by trained personnel.

Local volunteer wildlife care organisations:

- Australian Bat Clinic and Wildlife Trauma Centre: 07 5563 0333
- Bat Conservation and Rescue Queensland: Rescue Hotline 0488 228 134
- Bats Qld: Gold Coast Rescue Hotline 0447 222 889

ATTACHMENT B: FLYING-FOX ROOST HEAT STRESS GUIDELINES

Previous heat stress events have typically occurred during December and January but unpredictable temperatures can occur at any time.

Factors contributing to the severity of heat stress events include:

- High daytime temperatures of 40oC or above
- Number of animals occupying the roost
- Number of lactating females
- Number and age of juveniles
- Animals' access to adequate understorey vegetation, where it is often cooler
- Condition of animals prior to event (i.e. access to adequate food sources, temperatures in the month preceding)
- Accessibility of the roost (to humans and water trucks) and what resources are available to assist animals
- Guidelines for water spraying heat stressed flying-fox roosts include:
 - The use of tepid water since cool water can cause shock
 - Only use water pressure hoses to hose vegetation and never the animals directly
 - 25mm canvas hoses of the end of live reels with three-way directors with approximately 800kpa pressure are recommended
 - In the absence of wind to drift the mist, water can be shot over the top of the canopy and allowed to drip down (similar technique to attacking a pole fire)
 - When prevailing winds can push the water some distance, short lengths of 38mm canvas and fog nozzles at 230/L with three-way directors have the greatest impact
 - No need to saturate an area as it is more effective to wet a larger area a little than to just wet one area well





FLYING-FOX MANAGEMENT STRATEGY



3.2 Libraries Strategic Plan 2015 - 2019

Executive Officer: Director Regional Services

File Reference: 04/12/008

Director's Recommendation

That Council adopt the Libraries Strategic Plan 2015-2019 for implementation.

Committee Recommendation

That the Director Regional Services' recommendation be adopted.

Moved: Cr Brent

Seconded: Cr West

Carried

Attachments

1. Scenic Rim Regional Libraries Strategic Plan 2015-2019.

Attachment 1 - Scenic Rim Regional Libraries Strategic Plan 2015-2019

**SCENIC RIM
REGIONAL LIBRARIES
STRATEGIC PLAN
// 2015 - 2019**





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WHO WE ARE

REGION

The Scenic Rim Region is located about one hour's drive south of Brisbane and west of the Gold Coast. The region is home to the country towns of Beaudesert, Boonah, Canungra, Kalbar, Kooralbyn, Rathdowney, Tamborine Mountain, Harrisville, Peak Crossing and Aratula.

The region covers 4,238 square kilometres and is home to about 38,399 people (2013).

Projections to the year 2036 show that the Scenic Rim's population is expected to increase substantially by 43,586 persons, or an average annual rate of 3.4%, to a level of approximately 81,985 persons.

COMMUNITY

Residents enjoy the relaxed, hospitable lifestyle afforded by small country towns and villages with the addition of wonderful scenery and great outdoors as well as a mix of traditional and alternative forms of rural business and industry.

Supported by a thriving economy, a farming industry and a vibrant arts community, the Scenic Rim has a strong community spirit.





CHANGING FACE OF LIBRARIES

Libraries have traditionally been storehouses and managers of content with a system of rules, penalties and procedures sufficient to adequately protect, manage and circulate that content. Library staff were trained to know where everything was and to be able to retrieve information quickly and efficiently to fulfil the needs of the "information age".

With the changes created by the advent of Google and the vast amounts of information online, those skills are becoming less and less relevant. What people come into public libraries for is recreational reading, materials that support lifelong learning and assistance in accessing the online world. With a far more mobile population, those rules become barriers, especially for children and the underprivileged. Library users now expect different services in smaller timeframes.

These expectations relate to the availability and equality of access to the online world, and assistance in the use of the various applications, accessing government information, writing resumes and general job seeking, developing digital literacy in addition to supporting the development of literacy and numeracy in children.

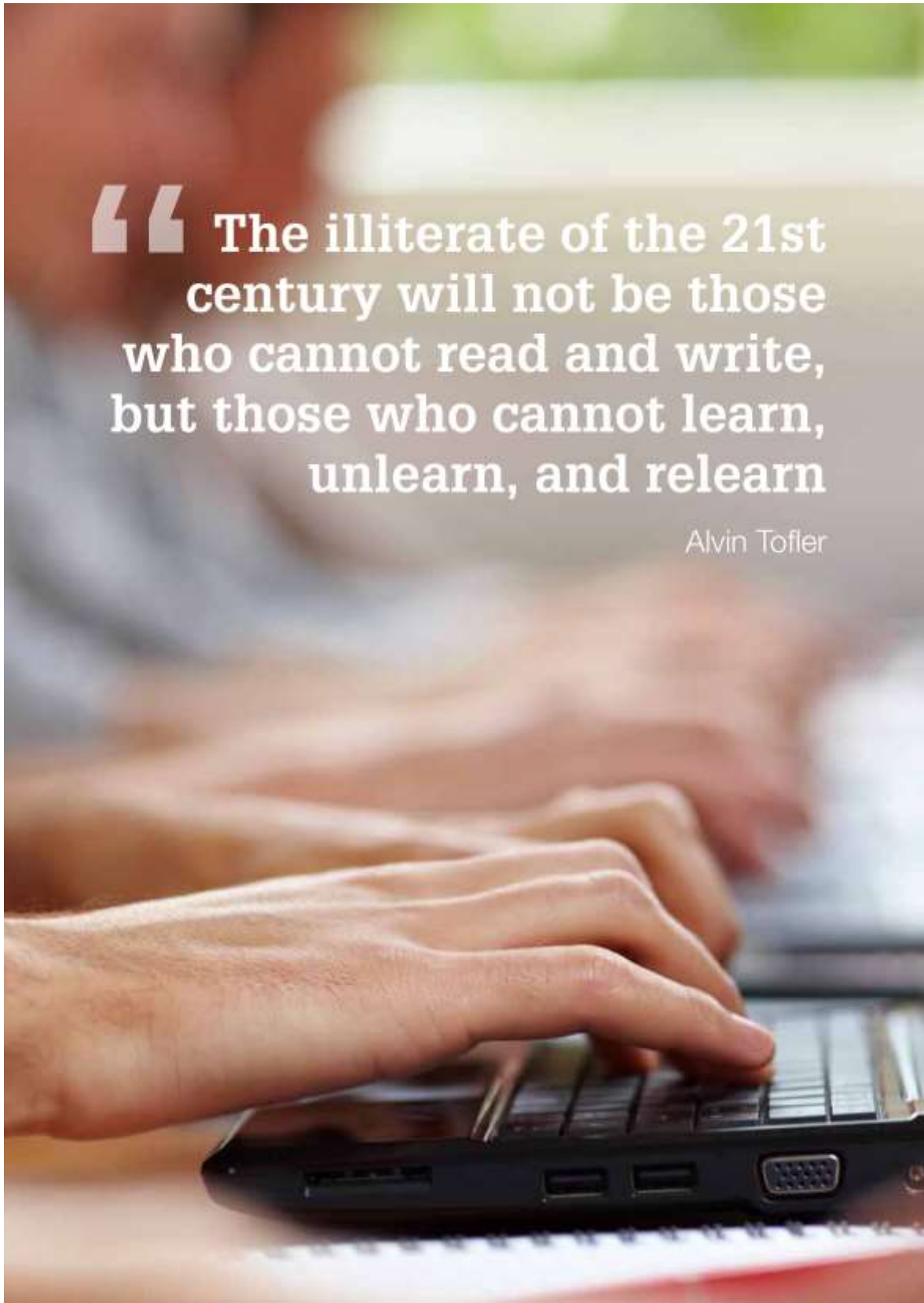
Such services are in great demand and provide enormous support to the community at large. In a report commissioned by the State Library of Queensland, SGS Economics & Planning found that for every dollar spent on libraries in Queensland, between \$2.30 and \$4.10 (depending on which methodology was used) was returned to the community.



What is literacy in the 21st century?

The capacity to participate
fully in a rapidly
changing environment

Brasher & Tighe, 2013



“ The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn

Alvin Tofler

LIBRARIES AS PART OF THE COMMUNITY

In a report published by the State Library of Victoria (Brasher & Tighe, 2013), a strategic foresight and design agency looked at what public libraries might look like in 2030. As the community's local source of communal information, content and literacies, public libraries were expected to play a pivotal role when dealing with the emergence of five identified prominent social trends - creativity, collaboration, brain health, dynamic learning and community connection.

PROMINENT FUTURE SOCIAL TRENDS

CREATIVE SCENARIO			COMMUNITY SCENARIO	
Creativity	Collaboration	Brain Health	Dynamic Learning	Community Connection
The desire to unlock, express, develop and record creative interests	The willingness to partner, cooperate and share with others	The need for lifelong mental engagement, stimulation and care	The need to continually learn new knowledge and skills to participate fully in a rapidly changing environment	The desire for stable and trusted relationships with people and places of common interest

(Brasher & Tighe, 2013) p5

The authors envisaged a scenario where libraries range on a continuum from a creative focus to a community focus, and where a user's experience has moved from a passive product-based interaction to an active service-based one.





Communal content and literacy will remain public libraries' core proposition in 2030, though the nature of these services will broaden significantly in line with changing community wants and needs. In 2030 public libraries will continue to provide communal access to physical and digital collections, but they will support this role with a hybrid of broader content and literacy functions.

To satisfy their communities' emerging creative needs, Creative libraries will provide the programs, facilities and assistance that enable the community to achieve their creative goals.

These might include studios for rehearsing, recording and editing content; workshops to facilitate individual and group artistic development; and formal business spaces for collaborative telecommuting.

To meet their communities' emerging dynamic learning needs, Community libraries will provide the programs, facilities and assistance that support 21st-century literacies. These services might include community learning programs, training and workshops; communal meeting spaces for forums and public lectures; and social spaces that provide for informal learning.

MEETING COMMUNITY NEEDS AND WANTS IN 2030

COMMUNITY WANTS AND NEEDS EMERGING FROM FUTURE SOCIAL TRENDS	OPPORTUNITIES FOR PUBLIC LIBRARIES
A drive to explore and develop creative interests	Become vibrant creativity hubs, facilitating communal creative development and expression
Opportunities to partner and share with others, both as individuals and as organisations	Become co-working hubs, bringing people and organisations together to collaborate creatively, socially and professionally
Lifelong mental engagement, stimulation and care	Become the community's brain gymnasium
Continuous acquisition of new knowledge and skills to participate fully in a rapidly changing environment	Provide community learning programs that support 21st-century literacies
Stable and trusted relationships with people and places of common interest	Become the community agora – a meeting place for people to gather, share and learn

(Brasher & Tighe, 2013) p7



Further evidence of the role that libraries are playing in the support of communities is found in a draft strategy from the Queensland government which states that public libraries are to be positioned as hubs of digital economic activity.

Queensland, Department of Science, Information Technology, Innovation and the Arts, November 2013

GUIDING PRINCIPLES

The State Library of Queensland (SLQ) supports public libraries in Queensland through the provision of annual grants for the purchase of library materials and special projects. It also takes a lead role in developing and supporting the underpinning philosophy of libraries in the state by setting standards and guidelines which are linked to a Service Level Agreement.

As part of the visioning process for Qld public libraries, SLQ have published strategic documents such as "The Next Horizon: Vision 2017 for Qld Public Libraries". This document articulates a set of guiding principles for public libraries

- Promote the love and value of reading
- Support literacy and learning
- Ensure that communities have access to new and emerging technology
- Reflect local context and content
- Nurture community connectedness
- Encourage collaborative partnerships that reach beyond buildings and into community
- Uphold civic values of access, diversity, equity and a culture of inclusion
- Have a strong focus on customer service
- Be open and responsive to new ideas and be agile in adopting new practices

State Library of Queensland, 2012



VISION 2017

21st century Queensland public libraries are spaces to learn, work and create. Their purpose continues to be one of empowerment and community building - with a dual role as vibrant local centres and portals to the world, providing:

- Creative community spaces
- Connectors - physical and virtual
- Technology trendsetters
- Incubators of ideas, learning and innovation

People who work in Queensland public libraries are at the centre of this vision, fulfilling vital roles to welcome, engage, lead and inspire the people and communities we serve

State Library of Queensland, 2013



SCENIC RIM COMMUNITY VISION

Residents of the Scenic Rim have expressed their vision for themselves in a process of extensive community consultation, culminating in the Community Plan 2011-2026. This document has since been adopted as the basis for Council's corporate plan.

Among other priorities, is the desire for healthy, engaged and resourceful communities. The specific outcomes include

- Strong social interaction and a sense of connectedness

- A life-long learning community with opportunities to thrive
- A community that celebrates its identity, culture and diversity
- A friendly and inclusive community
- A community that embraces and values young and old
- A community where individuals demonstrate commitment to the vision through their personal choices and actions

Scenic Rim Regional Council, 2011

This then, is where library goals must lead. If we take the words of the community plan outcomes and generate a word cloud, we see the picture below. This will describe the library service.



OUR GOALS

GOAL 1

GOAL	STRATEGIES	ACTIONS	BY WHEN
Reflect the vision expressed in the Community plan by being community-focused in all our activities	1.1 Support our "Friends of the Library" groups	1.1.1 Branch staff join the "Friends" of their branch and participate in meetings	Ongoing
		1.1.2 Support "Friends" activities and encourage their participation in the life of the library	Ongoing
	1.2 Partner with heritage and genealogy groups	1.2.1 Invite local heritage groups and museums to give talks and or create displays in the libraries	2015
		1.2.2 Actively promote these groups within the libraries	Ongoing
	1.3 Increase outreach activities to connect with a larger section of the community	1.3.1 Contact and visit local community organisations to inform residents of our services and find ways of supporting them	2015
			1.3.2 Network with and create opportunities for working with community groups
		1.3.3 Establish "Welcome to new residents" Community meetings as a regular part of library programming and ensure that these events become familiar	
	1.4 Actively support volunteering	1.4.1 Create a list of tasks and projects suitable for volunteers of all skill levels	2016
		1.4.2 If appropriate skills are available, hand over outreach activities to allow volunteers to advocate on behalf of libraries	2015
	1.5 Ensure that each branch library reflects its own community while offering consistency of services	1.5.1 Each library to collect local heritage information in line with the local history strategy	2015
1.5.2 Offer programs and opportunities that are of greatest interest to each community		Ongoing	

GOAL 2

GOAL	STRATEGIES	ACTIONS	BY WHEN
Maximise the potential of technology to deliver content and services	2.1 Increase access to technology and play a leadership role in the use of new technologies	2.1.1 Maintain current awareness of trends in technology and work collaboratively with Council's Information services Department to make available a wide range of technology options.	Ongoing
		2.1.2 Ensure access to technology in the libraries is equitable, relevant and up-to-date	Ongoing
		2.1.3 Investigate greater access to smart, mobile devices for personal customer use rather than restricted only to training	2015
	2.2 Fully utilise the potential of the Digital Assets management module of the library management system	2.2.1 Investigate using the module to store heritage related digital assets currently managed by others	2016
		2.2.2 Enable easy uploading and tagging in order to facilitate participation	2016
	2.3 Build dynamic collections both physical and digital	2.3.1 Create collections which reflect community interests	ongoing
		2.3.2 Make resources available in as many digital formats as possible and as easy as possible	ongoing
	2.4 Embrace technology and become more aware of its potentials	2.4.1 Ensure regular dissemination of information to all staff	ongoing
		2.4.2 Encourage sharing of new discoveries and encourage "play" on all devices	ongoing
		2.4.3 Hold annual "tech talks" by experts as a form of professional development for staff	2016
		2.4.4 Budget for the ability to acquire new devices as required	2016
	2.5 Teach our community how to be safe in an online environment by becoming an accredited eSmart library	2.5.1 Register with eSmart Libraries	Dec 2014
		2.5.2 All staff to undertake all training as required for accreditation	Dec 2015
		2.5.3 Devise avenues for dissemination of cyber safety skills and knowledge into the community	2016

GOAL 3

GOAL	STRATEGIES	ACTIONS	BY WHEN
Embody a culture of lifelong learning	3.1 Assist our community to become a learning community throughout all stages of life	3.1.1 Create collections that support the lifelong learning interests of each community	ongoing
		3.1.2 Provide opportunities for, and encourage special interest groups to present demonstrations and share skills in the libraries	ongoing
		3.1.3 Incorporate learning of new skills into children's and young peoples' programming	2015
		3.1.4 Reflect topics of local interest in learning programs	2015
		3.1.5 Target programs at as wide a range of age and interest groups as possible	ongoing
	3.2 Regularly present new ideas to prompt ideas and provoke conversation	3.2.1 Develop and maintain a program of opportunities for people to get together and listen to others	ongoing
	3.3 Increase literacy based programs	3.3.1 Introduce Baby rhyme time session	2015
		3.3.2 Best Start Initiative	2015
	3.4 Assist volunteers to increase their skills	3.4.1 Train additional Boonah Archive volunteers	2016
		3.4.2 Teach volunteers about the full range of library services, how to make best use of them and how to advocate for the library within their communities	2015
		3.4.3 Instruct volunteers in the process of adding information into the Digital Assets module	2015
		3.4.4 Encourage volunteers to "teach" something at the library	ongoing
3.5 Encourage groups to use the library as a means of sharing skills and knowledge	3.5.1 Create and make available spaces for community use	ongoing	
3.6 Actively support other Council departments in their community education activities	3.6.1 Provide venues for information sessions	ongoing	
	3.6.2 Assist with information dissemination	ongoing	

GOAL 4

GOAL	STRATEGIES	ACTIONS	BY WHEN
Create welcoming and attractive spaces	4.1 Undertake ongoing refurbishment of library spaces to make them more attractive and better able to serve the community's needs.	4.1.1 Replacement of shelving at Beaudesert library	2017
		4.1.2 Replacement of old shelving at Tamborine Mtn library	2019
		4.1.3 Refurbishment of Boonah circulation counter and office area	2015
		4.1.4 Insulation and installation of ceiling fans to Beaudesert deck	2015
		4.1.5 Purchase of new armchairs, comfortable seating, and individual study furniture in all branches	2017
		4.1.6 Contract professional assistance to improve amenity of all interior spaces to create inviting spaces. If necessary, plan a sequence of work with associated budget initiatives.	2017
	4.2 Create more useable space	4.2.1 Create more outdoor spaces at all our libraries	2017
		4.2.2 Change shelving types and arrangements to create new spaces within the libraries.	2018
	4.3 Review current branch libraries for suitability and best use of resources	4.3.1 Compare current space requirements in all branches with SLD standards and local activity and conduct a review of suitability of spaces for current and future activity	2016
4.3.2 Analyse collection usage to rationalise physical collections. Replace with digital collections if and where appropriate while keeping in mind that physical collections will always be required.			2016
4.3.3 Develop a 10 year Library Capital Program for all branches			2016

GOAL 5

GOAL	STRATEGIES	ACTIONS	BY WHEN
Support and enable staff to become as skilled and confident as possible	5.1 Create a learning environment	5.1.1 Advocate and encourage the "learn to learn & share what you learn" attitude amongst all staff at all levels	Ongoing
		5.1.2 Ensure all library staff undertake ongoing professional development (PD), particularly taking advantage of training and PD offered by SLQ.	Ongoing
		5.1.3 Ensure that staff training creates the widest possible skills base so that the service as a whole is able to be responsive and agile	Ongoing
	5.2 Match staff skills with services offered	5.2.1 Update position descriptions to better reflect and acknowledge work being done and skills required.	2016
	5.3 Increase general knowledge of and facility with the Spicyus system	5.3.1 Introduce "tips and tricks" and encourage all staff to contribute	2015
		5.3.2 Broaden branch staff knowledge of all modules in order to give understanding of how all areas of the system interact	2015
	5.4 Up-skill casual staff	5.4.1 Ensure casual staff are aware of all our services and changes as they occur	Ongoing
		5.4.2 Ensure staff are able to use and demonstrate use of our resources	Ongoing

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SCENIC RIM REGIONAL COUNCIL

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3.3 Community Grants Round 4 2014-15

Executive Officer: Director Regional Services

File Reference: 15/04/003

Director's Recommendation

That Council approve the allocation of grants under the Community Grants Program 2014/2015 Round 4 for a total of \$35,500.00 as follows:

Community Group	Recommendation	\$
Beaucare Inc	Purchase security fencing.	\$2,000.00
Beaudesert Golf Club Inc	Purchase practice nets.	\$1,000.00
Beaudesert RSL Sub Branch	Purchase lap top computer.	\$1,000.00
Beaudesert Uniting Church	Replace guttering.	\$2,000.00
Blue Care Beaudesert Auxiliary	Host 'Swing n Jazz' Day.	\$500.00
Boonah Bowls Club Inc	Purchase scoreboards and mats.	\$1,000.00
Boonah Scout Group	Provide training equipment.	\$1,000.00
Boonah-Harrisville Anglican Parish	Host Annual Orchid Show.	\$500.00
Canungra RSL Sub Branch	Build display cabinets.	\$2,000.00
Fassifern Car Club Inc	Purchase promotion banners.	\$500.00
Fassifern Community Men's Shed Inc	Purchase sander and compressor.	\$1,000.00
Fassifern Historical Society Inc	Access to storage and displays.	\$1,000.00
Fassifern Netball Assn	Purchase marquee.	\$1,000.00
Historical Society of Beaudesert Inc	Promote Annual Shepherds Walk.	\$500.00
Kalbar & District Agricultural & Pastoral SRA	Build a washing up area.	\$2,000.00
Lions Club of Fassifern Inc	Host Kalbar Country Day.	\$1,500.00
Rathdowney & District Pony Club	Erect fence.	\$2,000.00
Rathdowney & District Soccer Club	Purchase top dressing for fields.	\$2,000.00
Rural Lifestyle Support Options	Replace fence.	\$2,000.00
Selwyn Park Sporting Management Assn	Replace fence around oval.	\$2,000.00
St Vincent de Paul Society QLD - Tamborine Mtn/Boonah	Purchase computers and printer.	\$1,000.00
Tamborine & District Riding Club Inc	Purchase training equipment.	\$1,000.00
Tamborine Mountain Chamber of Commerce	Host Scarecrow Festival.	\$2,000.00
Tamborine Mountain Cricket Club Inc	Purchase turf wicket cover.	\$1,000.00
Tamborine Mountain Garden Club Inc	Host Spring Time on the Mountain.	\$2,000.00
Tamborine Mountain Tennis Club Inc	Purchase new tennis nets.	\$1,000.00
Tamborine Pony Club Inc	Purchase UHF radios.	\$1,000.00

Committee Recommendation

That the Director Regional Services' recommendation be adopted.

Moved: Cr Brent
Seconded: Cr West

Carried unanimously

At the commencement of the meeting, Crs Sanders and O'Carroll declared an interest in this item as they are members of the Board of Beaucare Inc. The Councillors remained in the meeting room and took part in discussions and voting on the item.

Attachments

Nil.

3.4 2015 Be Healthy and Active Program**Executive Officer: Director Regional Services****File Reference: 08/04/002; 26/04/002**

Director's Recommendation

That Council continue to support the Be Healthy and Active Program to deliver improved health and wellbeing outcomes and social connections for Scenic Rim residents.

Committee Recommendation

That the Director Regional Services' recommendation be adopted.

Moved: Cr Stanfield

Seconded: Cr McInnes

Carried

Attachments

1. 2015 Be Healthy and Active Photos.

Attachment 1 - 2015 Be Healthy and Active Photos





Time for Kids

Hip hop workshop inspires youth



Ben Porter from Lyrical Equations teaches Brandon Smith how to write a song at the hip hop workshop.

SCENIC Rise youth got a crash course in hip hop culture last week. More than 50 children took part in hip hop workshops at Bessiah and Broadbeach on Wednesday and Thursday. The workshops were staged by Ben Porter and Josh Mays of Lyrical Equations from Brisbane's north. Mr Mays engaged the children in the basics of rapping while Mr Porter taught them about rapping and the four pillars of becoming



Variana Gilme, 15, Sheridan Wilson, 15, Miguel Dandy, 15, and Eiana Brook, 15, all enjoyed taking part in the freestyling lessons during the hip hop workshop.



Stella Buchanan, 15, and Ellyan Gomez, 15, work on their rap at the hip hop workshop held at The Centre.

an MC (master of ceremonies). Attendees got to come up with their own stage name before being taught song structure and writing their own song. Molly Macken, 14, said she and her friend Brianna Lancaster were keen to be involved with the workshop because they both studied music. "We saw it online and we thought it might be a bit of fun and something we might enjoy as we both enjoy hip hop and lyrical writing," she said. "It's something we haven't done before, it's been good, a new experience." Mr Porter said his workshops aimed to inspire youth to pursue the creative arts. "We run sequential learning programs using creative arts as a way of re-engaging disengaged disadvantaged youth, but also with our engaged youth we like to encourage career pathways within the creative industries, choosing a profession within the creative industries," he said. "That might be singing, dancing, acting, painting, drawing, performing, radio, televi-



Bryce Neave and Daniel Collington both 17 enjoyed writing rap verses at the workshop.



Brianna Lancaster, 15, and Molly Macken, 14, enjoyed their time at the hip hop workshop.

sion, graphic design, fashion design, the list goes on. "Hip hop is the focus as obviously the elements of hip hop culture, rapping, breakdancing, graffiti and also producing or DJing. "They absolutely love it, generally speaking in Queensland there is still not enough access to music culture and arts and when you come to regional areas it's even more needed and it's even more well received." The workshop was part of the Scenic Rise outreach to Healthy and Active program.



Sailing delights at Wyaralong Dam

It was mostly smooth sailing as a group of keen first-time sailors headed out on the water for a disability sailing session at Wyaralong Dam last Wednesday.

About 50 people took part in the session, part of council's Be Healthy and Active Program, including clients from Beaudesert Rural Lifestyle Options Association (RLOA), Beaudesert and Auncare and their carers.

The delight was clear on their faces as they learned new skills and tested their limits on the water, taking turns at handling the tiller and the sails and tacking back to shore.

Beaudesert RLOA client Nathaniel Turner, 21, told the *Times* he felt good after his first sailing experience.

"I really liked how peaceful it was - sailing is really nice and peaceful," he said.

"It was my first time and I was scared at first, thinking 'oh my gosh what's going to happen' but then I did it and it was good."

RLOA support worker Wayne Harrison-Jones said he was impressed with the way Mr Turner and other clients handled the task.

"Nathaniel picked it up really well and he was on the tiller all the way back and even tacked four or five times back to shore," he said.

Participants enjoyed a barbecue lunch, played games and spent time with their friends between sailing sessions.

Mt Alford based instructor Jono Goss will lead a second disability sailing session as part of the Be Healthy and Active program today (Wednesday) from 10am to 3pm at Wyaralong Dam.

For more information phone Jono on 0428 868 169.



Rural Lifestyle Options Association Beaudesert client Devin Reilly strikes a pose as he sails with his friends at Wyaralong Dam.



Rural Lifestyle Options Beaudesert client Nathaniel Turner takes the tiller in the sailing boat at Wyaralong Dam.

4. INFRASTRUCTURE SERVICES**4.1 Proposed Permanent Road Closure, O'Reilly - Application 2015/002870**

Executive Officer: Director Infrastructure Services

File Reference: RMRR15/00004; 28/05/001; L8 RP826101;
Lot10 SPI72405; SI 39997

Director's Recommendation

That Council advise the Department of Natural Resources and Mines that Council has no objection to the application for a proposed permanent road closure adjoining Lot 8 on RP826101 and Lot 10 on SP172405, Locality of O'Reilly, Parish of Roberts.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr West

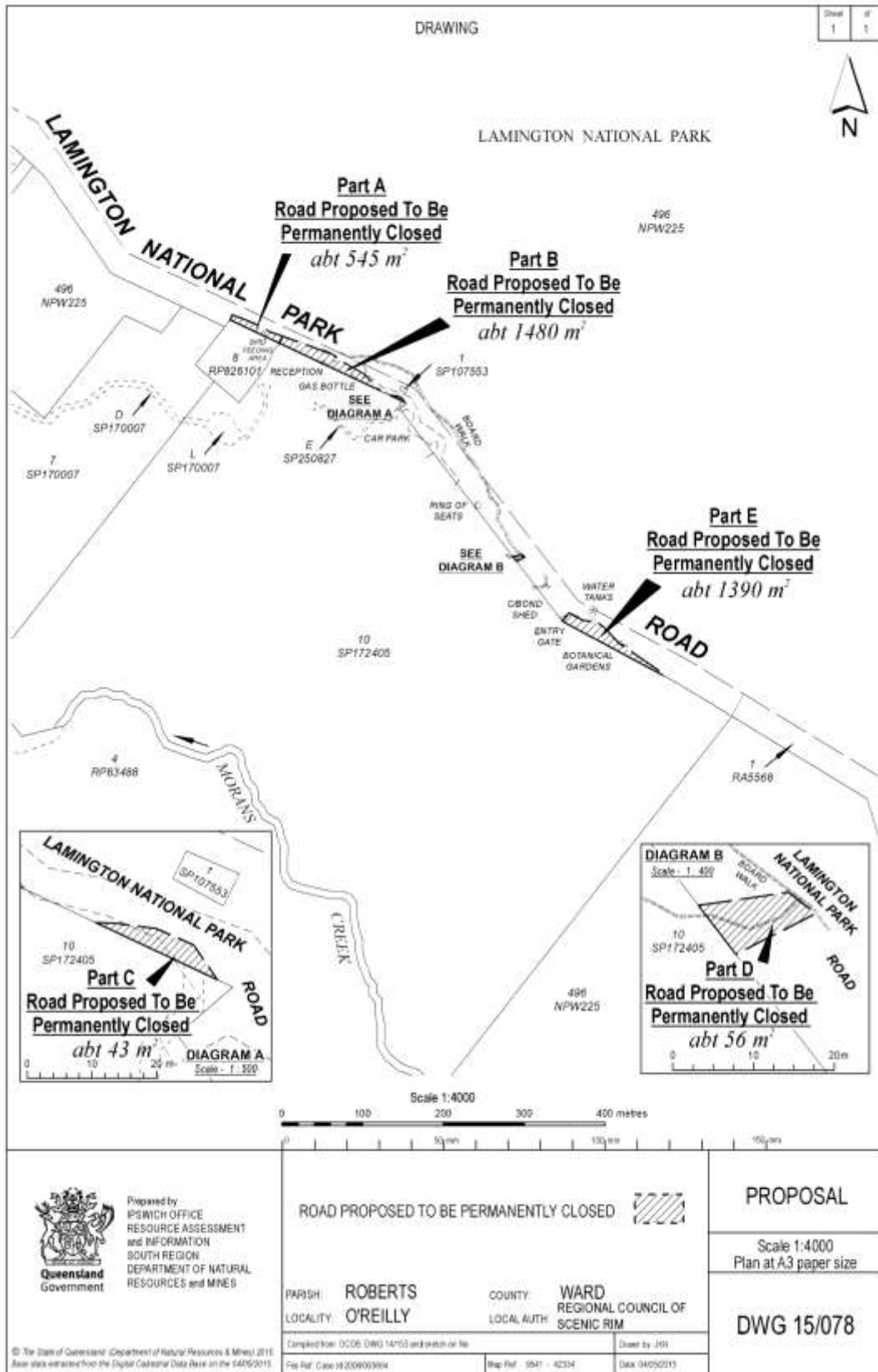
Seconded: Cr O'Carroll

Carried

Attachments

1. Proposal Map, DWG15/078.
2. Locality Map.

Attachment 1 - Proposal Map, DWG15/078



Attachment 2 - Locality Plan



4.2 Proposed Permanent Road Closure, Tamborine - Application 2015/002445**Executive Officer: Director Infrastructure Services****File Reference: RMRR15/00003; 28/05/001; L1SP268147; SI 40144; 40105**

Director's Recommendation

That Council advise the Department of Natural Resources and Mines, that Council has provides no objection to the application for a proposed permanent road closure adjoining Lot 1 on SP268147, Locality of Tamborine, Parish of Tamborine.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Stanfield

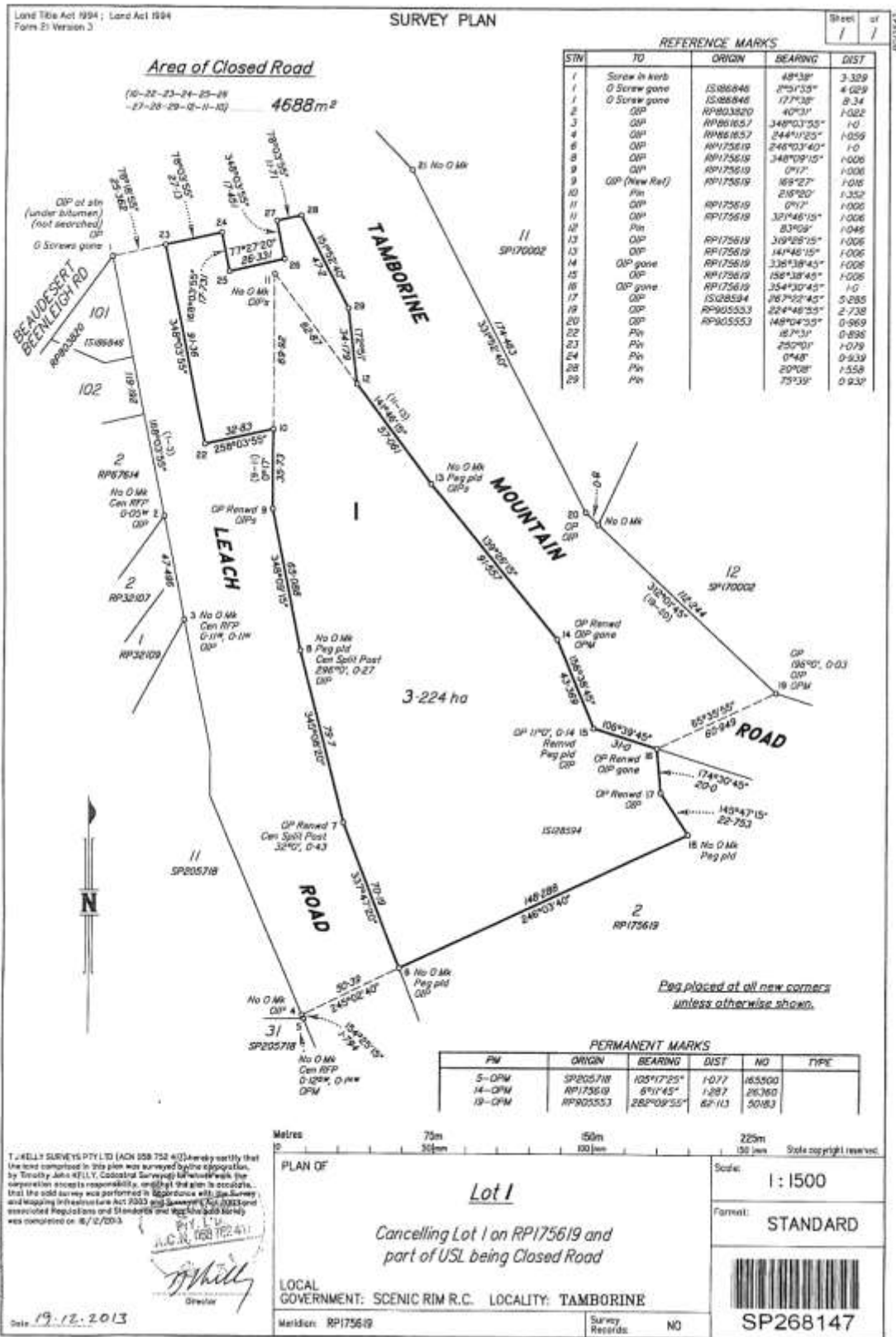
Seconded: Cr O'Carroll

Carried

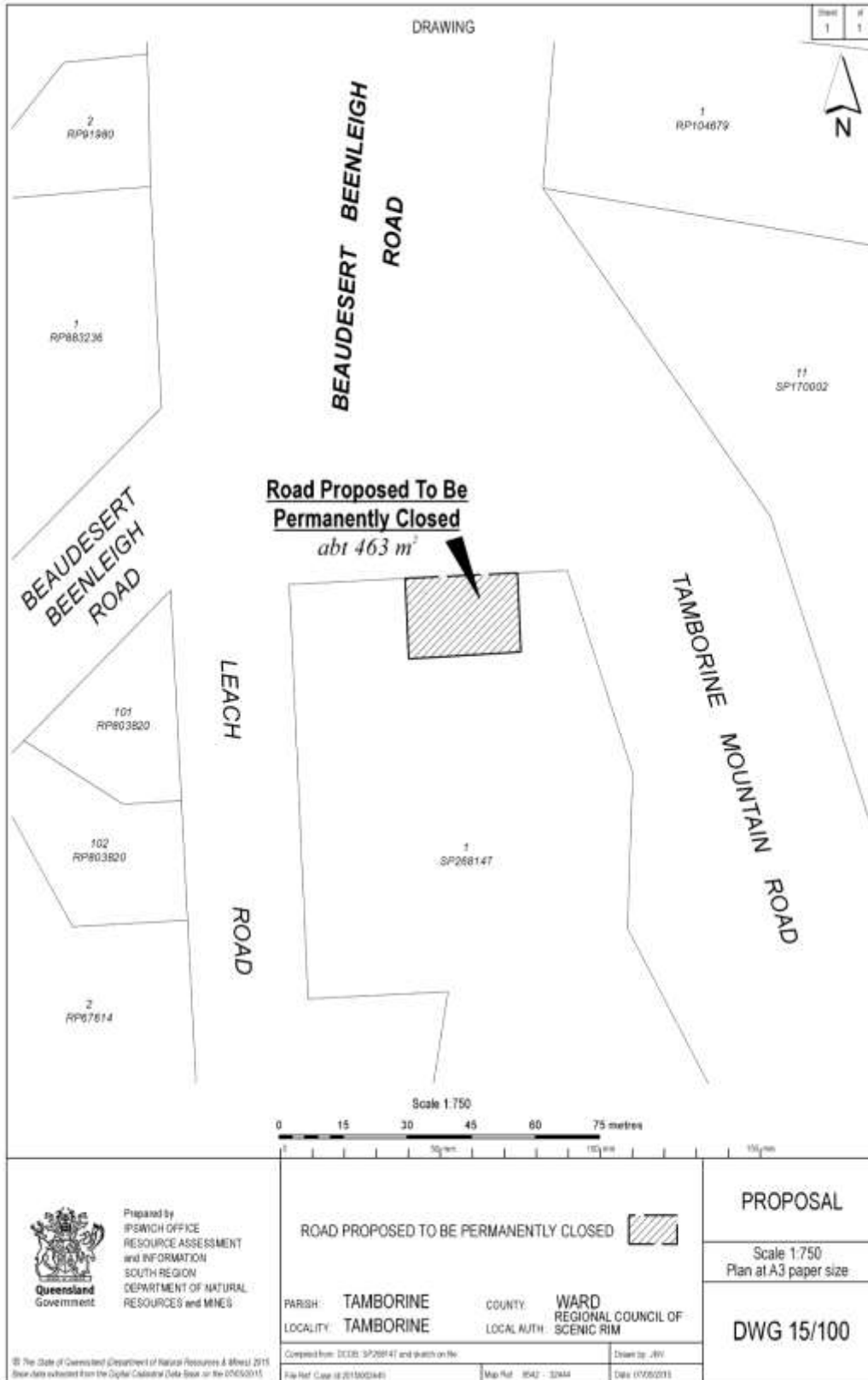
Attachments

1. Extract of registered copy of SP268147.
2. Proposal Map, DWG15/100.
3. Locality Map.

Attachment 1 - Extract of registered copy of SP268147



Attachment 2 - Proposal Map, DWG15/100



Attachment 3 - Locality Map



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4.3 Proposed Permanent Road Closure, Moogerah - Application 2015/002856**Executive Officer: Director Infrastructure Services****File Reference: RMRR15/00005; 28/05/001; L256 SP127884**

Director's Recommendation

That Council advise the Department of Natural Resources and Mines, that Council has provides no objection to the application for a proposed permanent road closure adjoining Lot 256 on SP127884, Locality of Moogerah, Parish of Clumber.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Stanfield

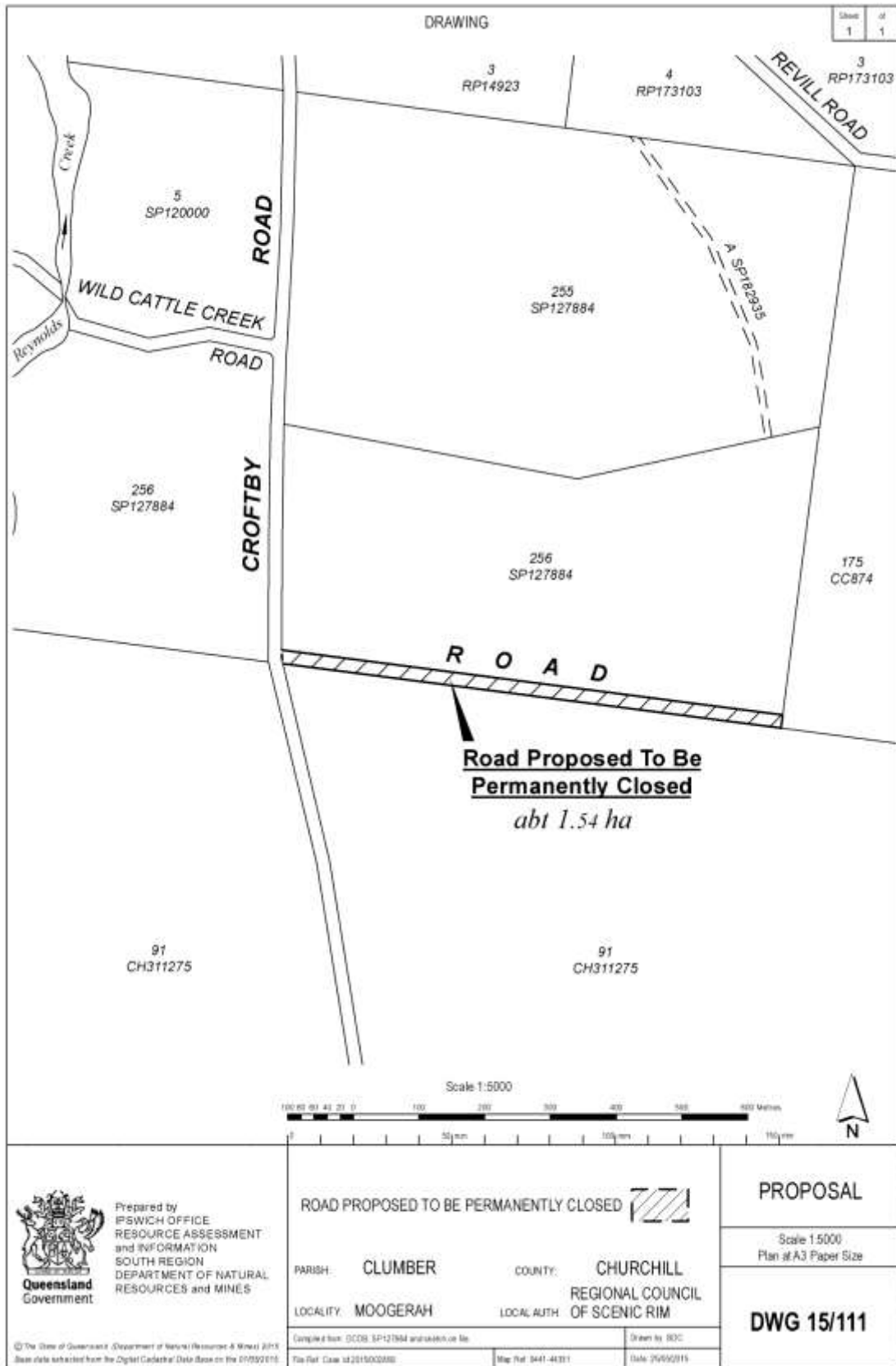
Seconded: Cr Sanders

Carried

Attachments

1. Proposal Map, DWG15/111.
2. Locality Map.

Attachment 1 - Proposal Map, DWG15/111



Attachment 2 - Locality Map



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4.4 Waste Reduction and Recycling Plan - "2025 Vision on Waste"**Executive Officer: Director Infrastructure Services****File Reference: 04/09/014; 31/07/001**

Director's Recommendation

That Council endorse the Waste Reduction and Recycling Plan - "2025 Vision on Waste".

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Sanders

Seconded: Cr Stanfield

Carried

Crs McInnes and West were not present for discussion or voting on this item.

Attachments

1. Draft Waste Reduction and Recycling Plan - "2025 Vision on Waste" (attached separately).

4.5 Property Management Strategy

Executive Officer: Director Infrastructure Services

File Reference: 04/09/012; 04/10/001

Director's Recommendation

That Council adopt the Property Management Strategy, reviewed June 2015.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Stanfield

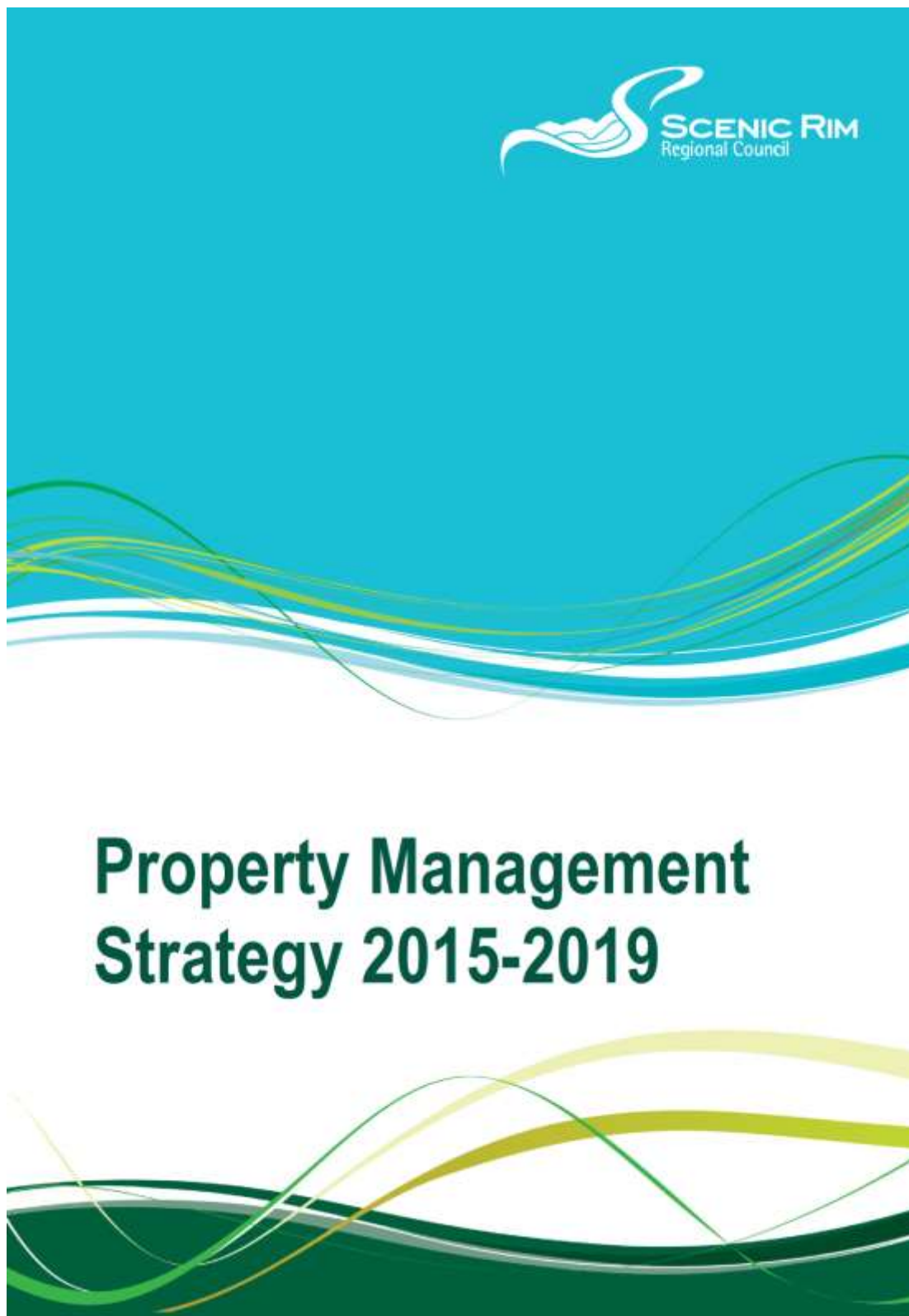
Seconded: Cr Sanders

Carried

Attachments

1. Property Management Strategy.

Attachment 1 - Property Management Strategy



Version Control

Vers	Authorised	Date
1	Manager Property & Operations	January 2013
2	Manager Property & Operations	June 2015

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Introduction

Council maintains an extensive property portfolio comprising operational and non-operational properties. In order to maintain an appropriate land bank, Council must review its strategies regularly to ensure it continues to manage the property portfolio effectively.

Council currently holds 580 parcels of open space that have been set aside for the community either by the State, where Council is Trustee, or by Council, in the case of freehold and leasehold land, which Council has the responsibility to manage. The purpose of community land is primarily for community use. Council is committed to ensuring that land set aside for the community is preserved for such community use in accordance with its obligations under the *Land Act 1994*, the *Local Government Act 2009*, *Local Government Regulation 2012* and relevant Local Laws.

This Strategy is to provide guiding principles and key strategic areas which influence all other plans, policies and strategies associated with the efficient and sustainable management of the property portfolio held by the Scenic Rim Regional Council.

Strategy Context

This Strategy has been developed with consideration to the linkages with a range of strategic documents, legislation, guidelines and standards relating to Council's management of a property portfolio.

The below figure shows the interconnection of the Property Management Strategy with other existing documents of Council.

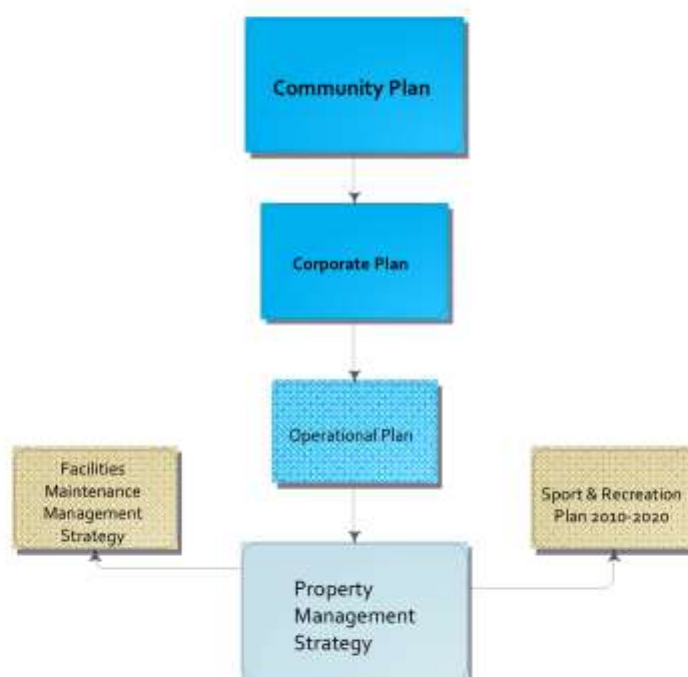


Figure 1. Strategy Plan linkages

Corporate Strategy Documents

The Scenic Rim Community Plan 2011 – 2026 has been prepared following extensive consultation with the community. It is the overarching Plan for the future of the Scenic Rim Region in that it "provides a shared vision and plan for the region's future and will guide Council, other levels of government and community action on issues including the environment, economic development, social wellbeing, infrastructure and governance."

Themes in the Community Plan which focus on Spectacular Scenery and Healthy Environment, Open and Responsive Government and Relaxed Living and Rural Lifestyle are appropriate to this Strategy.

Spectacular Scenery and Healthy Environment

The Community Plan states "The natural environment and rural landscape of the Scenic Rim is unique and our most reassured asset. Our residents, businesses and visitors are seeking to protect our environment and rural landscape from pressing threats and challenges of growth. The Scenic Rim community sees its productive and healthy natural environment as essential for our future lifestyle, wellbeing and prosperity."

Outcomes within this theme include: "Scenic views and vistas are protected; Natural assets are cared for and degraded areas restored."

Open and Responsive Government

The Community Plan states "The Scenic Rim community expects ethical government and supports and represents the community. Residents want government to deliver affordable services efficiently and equitably. Government is expected to take a long term view and strike a balance between often competing interests. Communication, transparency and participation in decision making are highly important. Our communities value their self-reliance and look to government for leadership, firm but fair regulation and support for local initiatives."

Outcomes within this theme include: "Government serves and supports the community; Services are value for money and contribute to community wellbeing; Local community aspirations are respected."

Relaxed Living and Rural Lifestyle

The Community Plan states "A diversity of housing in towns, villages and rural areas provides for relaxed living. Residents enjoy quality facilities and services and ready access to larger South East Queensland communities. The region's rural landscape, parks, waterways and spacious residential living support an active outdoor lifestyle. Our residents expect that future residential growth continues to make a positive contribution to our rural lifestyle."

Outcomes within this theme include: "The region's rural character and heritage is maintained; The region retains its landscape, open spaces and green corridors; Facilities and spaces are available and encourage outdoor recreation."

Legislative Requirements

The *Local Government Act 2009* has been developed with the purpose to provide for "the way in which a local government is constituted and the nature and extent of its responsibilities and power; and a system of local government in Queensland that is accountable, effective, efficient and sustainable" The legislation provides a framework for land dealings for local authorities.

Other legislation governing Council's management of land include the *Acquisition of Land Act 1967*, the *Land Act 1994* and the *Land Title Act 1994*.

Council Local Laws and Policies

Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011, has the purpose to "protect the health and safety of persons using local government controlled land, facilities, infrastructure and roads; and preserve features of the natural and built environment and other aspects of the amenity of local government controlled land, facilities, infrastructure and roads.

Council has adopted a Community Leasing Policy which facilitates community access to Council controlled land via leasing arrangements, as a Community Work on Council Land Policy which facilitates the delivery of community built infrastructure to service the needs of the region.

Strategic Priority Areas

Strategic Priority Areas have been developed to address these needs.

The provision of a well managed property portfolio provides means for Council to achieve corporate outcomes and meet community requirements.

In order to ensure the ongoing provision of such a portfolio, it is necessary to manage the land bank through a variety of documents, including a Property Management Strategy which outlines the key Strategic Areas of focus.

This Strategy covers the Strategic Priority Areas of:

Manage Leases and Agreements

- Manage leases and agreements associated with Council controlled land and property to maximise community benefit and to cater for the needs and aspirations of the community.

Delivering Corporate & Internal Services

- Provide advice and assistance to internal stakeholders to deliver operational outcomes, including variation, specialist consultations, plan sealing and acquisitions.

Delivering External & Community Services

- Provide assistance and support on land and property issues to external stakeholders including public agencies, community groups and individuals.

Strategic Property Management

- Manage Council land and property in a strategic manner to ensure that properties held serve an effective purpose and to create an alternative revenue stream to Council.

Strategic Priority Area 1: Manage Leases and Agreements

Manage leases and agreements associated with Council controlled land and property to maximise community benefit and to cater for the needs and aspirations of the community.

A large number of community leases are currently in place for a range of sporting and community purposes. The process provides community groups with an opportunity to provide a wide range of services and activities that deliver health and wellbeing community outcomes.

Council supports this by managing leasing requirements, facility and service provision and provides advice on leasing matters, including dispute resolution.

Strategies

- 1.1 Ensure that community and sporting leases are developed and implemented to meet the needs of the community and sporting groups, delivering good outcomes for the community.
- 1.2 Manage relevant contracts and agreements for operational Council land, including swimming pools, camping grounds and other community facilities to ensure they achieve their objectives.
- 1.3 Manage and maintain Council controlled land not currently required for an operational purpose.

Strategic Priority Area 2: Delivering Corporate and Internal Services

Provide advice and assistance to internal stakeholders to deliver operational outcomes, including valuation, specialist consultations, plan sealing and acquisitions.

A large number of local government functions require land to deliver essential services to the community. These include road corridors, parks & facilities, depots and natural areas. It is important that effective property management and support is provided internally to support these functions.

Strategies

- 2.1 Provide a timeline and effective plan sealing process to compliment Council's development assessment function.
- 2.2 Provide an acquisition of land procedure to acquire land for Council requirements.
- 2.3 Provide effective services to internal stakeholders on all property related matters.

Strategic Priority Area 3: Delivering External & Community Services

Provide assistance and support on land and property issues to external stakeholders including public agencies, community groups and individuals.

A large number of community groups and individuals access Council for information and assistance in relation to public land use. This includes advice on provision of public land and its potential use, as well as liaising with relevant public agencies to ensure public land is effectively managed.

Strategies

- 3.1 Maintain effective working relationships with relevant public agencies to ensure timeliness and efficiency in service delivery.
- 3.2 Provide advice and assistance to community groups and individuals on land and property issues

Strategic Priority Area 4: Strategic Property Management

Manage Council land and property in a strategic manner to ensure that properties held serve an effective purpose and to create an alternative revenue stream to Council.

As Council holds an extensive land bank, opportunities arise to utilise this resource to maximise community benefit. Council currently holds land suitable for residential, commercial and industrial purposes. In addition, Council also has opportunities to rationalise its land bank where properties not needed for operational purposes are held.

Strategies

- 4.1 Review Council's Land and Property holdings to identify potential opportunities for disposal and/or development.
- 4.2 Regularly review opportunities for potential acquisition of land for entrepreneurial purposes.

4.6 Asset Management Strategy**Executive Officer: Director Infrastructure Services****File Reference: 04/13/002; 04/14/003; 04/12/008; 04/12/009**

Director's Recommendation

That Council adopt the Scenic Rim Regional Council Asset Management Strategy 2014 - 2018, CorePlus 2018, providing a strategic direction for the continuous improvement of Council's asset management practices.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Sanders

Seconded: Cr Stanfield

Carried

Attachments

1. Scenic Rim Regional Council Asset Management Strategy 2014 - 2018.

Attachment 1 - Scenic Rim Regional Council Asset Management Strategy 2014 - 2018



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INTRODUCTION

Purpose of this Strategy

Scenic Rim Regional Council adopted its first Asset Management (AM) Strategy in 2011. In 2014 Council's AM Policy was revised and this strategy aims to support the implementation of the current policy in order to guide the continuous improvement of Council's AM practices.



Figure 1 - The Continuous Improvement Process (IIMM, 2011)

Scope

This Strategy summarises the following:

- Council legislated requirements for asset management;
- Links to Council's Corporate Plan;
- Council's asset management policy and guiding principles;
- An overview of Council's Asset Management Steering Committee;
- The vision, mission, goals and objectives of this strategy; and
- Details of the improvement plan to deliver the desired outcomes of this strategy.

Legislated Requirements

The Local Government Act Part 3 (Financial Planning and Accountability) requires Council to have a long term asset management plan. The Local Government Regulation adds the following requirements (Section 167 Preparation of long-term asset management plan):

- (1) A local government must prepare and adopt a long-term asset management plan.
- (2) The long-term asset management plan continues in force for the period stated in the plan unless the local government adopts a new long-term asset management plan.
- (3) The period stated in the plan must be 10 years or more.

In addition, the long-term asset management plan is required to:

- (a) Provide for strategies to ensure the sustainable management of the assets mentioned in the local government's asset register and the infrastructure of the local government; and
- (b) State the estimated capital expenditure for renewing, upgrading and extending the assets for the period covered by the plan; and
- (c) Be part of, and consistent with, the long-term financial forecast.

Corporate Plan

The table below lists the priority areas and strategies related to the asset management system:

Organisational Sustainability	<p>Implement and maintain an integrated strategic planning framework across Council, which embeds performance, financial and asset management principles.</p> <p>Deliver quality customer focussed services while recognising the impact on the capacity of ratepayers to pay, and contain rate increases as much as practicable.</p> <p>Provide corporate business systems to drive effective and efficient delivery of services and infrastructure.</p> <p>Implement effective risk management and maintain contemporary business processes.</p> <p>Build effective leadership and management capabilities across the organisation, encourage teamwork and innovation.</p>
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Asset Management System

Asset Management Policy

Scenic Rim Regional Council recognises that asset management is fundamental to achieving the community's vision for the region as identified in the Community Plan. Therefore Council will implement an appropriate asset management system consistent with ISO 55001:2014, *Asset Management - Management systems: Requirements*. The asset management system will enable the consistent and sustainable achievement of Council's asset management objectives.

Principles

The following principles are adopted to ensure that Council's asset management objectives are achieved:

- Council's asset management system must be consistent with ISO 55001:2014, *Asset Management - Management systems: Requirements*, including the following elements:
 - asset management strategy
 - asset management objectives; and
 - infrastructure asset and service management plans;
- An asset management system improvement plan will be developed, which includes documentation of the role of the asset management system in supporting the achievement of Council's asset management objectives;
- Integration of the asset management system requirements into Council's business processes;
- Resources for the management of the asset management system will be made available;
- The importance of effective asset management and conformance to the asset management system requirements will be communicated to the community and internal stakeholders; and
- Relevant legislative requirements are taken into account in asset management.

For further information, see Council's Asset Management Policy (Policy Number CM02.04CP), available at www.scenicrim.qld.gov.au/policies.

Asset Management Steering Committee

Council had established an Asset Management Steering Committee (AMSC), to oversee and guide asset management activities across the organisation. The function of the Asset Management Steering Committee is to ensure legislation/standards are adhered to and ensure AM is aligned with Corporate Strategy. The Steering Committee is responsible for approving budgetary strategy, changes to scope, time or budget, monitoring risks, quality and timelines.

The AMSC is chaired by the Director Infrastructure Services and consists of representatives from the Executive Team and Management Group. The steering committee will take an active role in facilitating the implementation of all improvement actions set out in this Strategy.

ASSET MANAGEMENT OBJECTIVES

Vision & Mission

At Scenic Rim Regional Council effective asset management is an integral part of how we do business.

We recognise that effective asset management is fundamental to delivering sustainable services to our community. Our Asset Management Plan balances cost, risk and performance to achieve best value from our assets, both now and into the future.

We are systematically and consistently optimising our asset management practice across the organisation and our asset management system is consistent with the requirements of ISO 55001 Asset Management – Management Systems.

Goals & Objectives

Goals	Objectives
An ISO-55001 compliant Asset Management System	– Improve AM System
Making wise decisions using our Asset Management Plan	– Improve AM Plan/s
Effective AM is an integral part of how we do business	– Improve AM awareness and capability across Council – Integrate AM across Council

An ISO 55001-compliant AM System

- AM Policy review
- "SMART" AM Objectives
- Adopted and resourced AM Strategy & System Improvement Plan (integrated infrastructure strategies)
- Improved AM Plans ("CorePlus" maturity, integrated infrastructure planning)
- AM Leadership (AM Steering Committee, Executive Team, Council)
- AM evaluation & continuous improvement processes

Making wise choices using our AMP

- Integrated with other long term plans (Long Term Financial Forecast, Local Government Infrastructure Plan) and the annual budget
- Improved Level Of Service planning
- Improved confidence in key inputs & assumptions (data collection, information management)
- Role definition (AM governance, business processes & procedures)

Effective AM is an integral part of how we do business.

- Raised awareness, skills & experience across organisation
- Training (existing & new staff)
- Communication
- Greater buy-in from all stakeholders
- Innovation

IMPROVEMENT PLAN***Asset Management System Improvement Program***

Goals	Objectives	Tasks
An ISO-55001 compliant Asset Management System	Improve AM System	<ul style="list-style-type: none"> - Update AM Policy - High-level AM Action Plans - Develop AM Governance Guidelines - Update AMSC Terms of Reference - Develop AM Roles & Responsibilities Matrix - AM Audits/assessment/gap analysis
Making wise decisions using our Asset Management Plan	Improve AM Plan/s	<ul style="list-style-type: none"> - Add LOS reporting against performance targets to Annual Report - Roads AMP to report on costs for earlier intervention points - Asset/Service Demand Management Plan, including risk register - Develop demand forecasts based on high/medium/low growth scenarios for all AMPs - Asset Hierarchy (all assets) - Asset Identification Policy/Procedures - Condition Assessment Program - Data Management Policy & Data Spec - Critical Assets Register - Critical Assets Risk Management Strategy - Measure asset/service utilisation
Effective AM is an integral part of how we do business	Improve AM awareness and capability across Council	<ul style="list-style-type: none"> - Provide AM training for new/existing staff - Provide AM information to staff - Include more AM information in the Annual Report - Ensure AM is referenced in corporate plans/strategies
	Integrate AM across Council	<ul style="list-style-type: none"> - Align AMPs, LTFF and LGIPs - Integrate corporate IT systems, including TechOne, Assetic, GIS and Reflect.

REVISION HISTORY**Table 1 - Revision History Details**

Document No.	Responsible Officer	Original Approval Date by Council	Revision No.	Revision Date
	Asset Management Coordinator		0A	10/09/2014

4.7 Road Strategy 2015 - 2019**Executive Officer: Director Infrastructure Services****File Reference: 04/12/008; 04/10/001; 04/14/008; 28/08/001**

Director's Recommendation

That Council adopt the Scenic Rim Regional Council Road Strategy 2015 - 2019, and the associated Road Strategy Implementation Plan, to provide direction and framework for the provision of services associated with the region's road infrastructure assets.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Stanfield

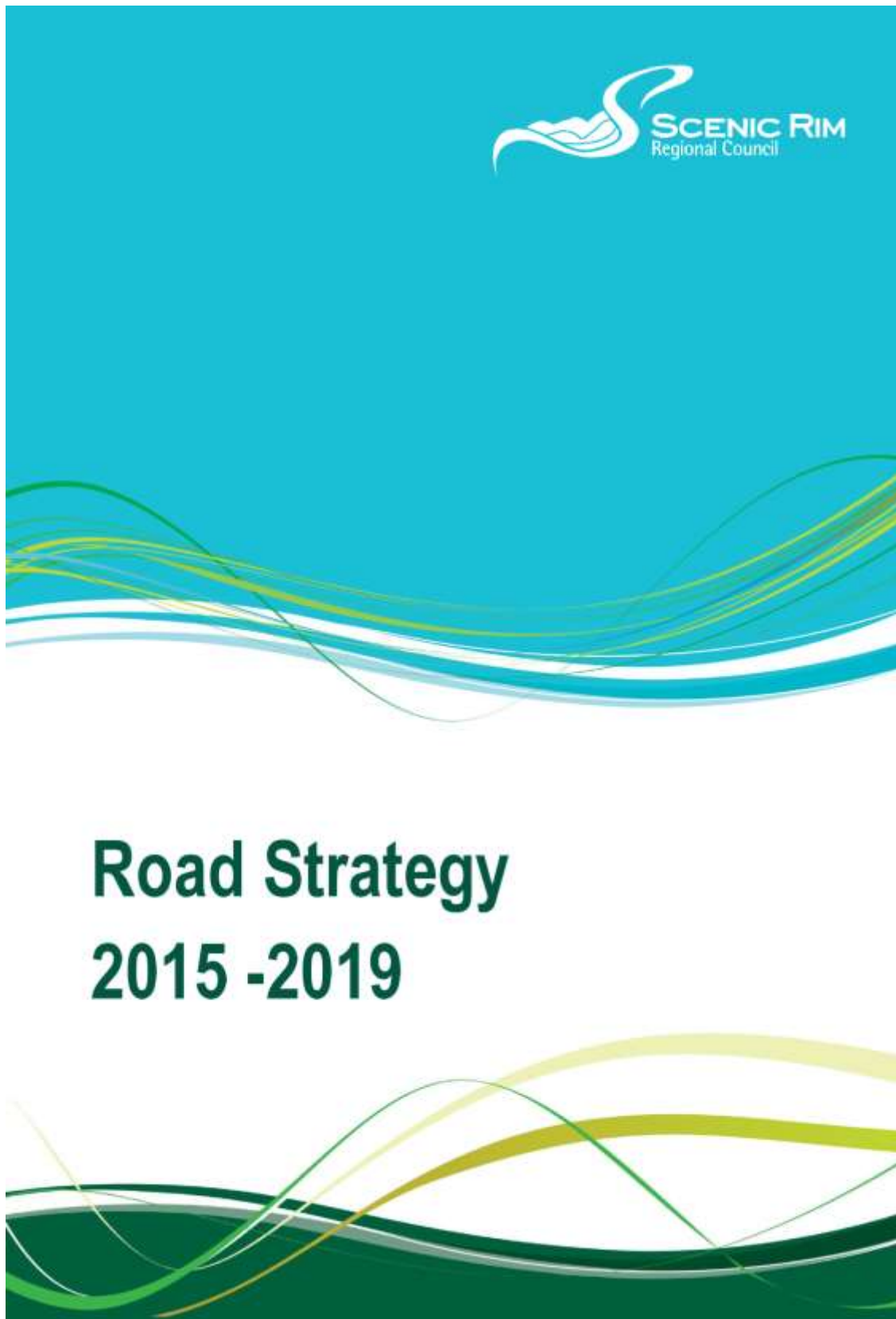
Seconded: Cr McInnes

Carried

Attachments

1. Draft Scenic Rim Regional Council Road Strategy 2015 - 2019.
2. Draft Scenic Rim Regional Council Road Strategy Implementation Plan (attached separately).

Attachment 1 - Draft Scenic Rim Regional Council Road Strategy 2015 - 2019



Version Control

Vers	Authored	Date
1	Manager Technical Services	30 November 2013
2	Manager Works	1 June 2015

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Introduction

Council maintains an extensive road network of sealed and unsealed roads. In order to provide a safe and efficient network Council must review its strategies regularly to ensure it continues to manage the network effectively.

Council provides a road network of 1,810kms, which consists of 956kms of sealed roads, 847kms of unsealed roads and a small amount of unpaved roads. Through a variety of policies, plans, and strategies this infrastructure is managed to ensure maximum life, of the various components of the road, is achieved, at minimal cost to the community.

This Strategy is to provide guiding principles and key strategic areas which influence all other plans, policies and strategies associated with the efficient and sustainable management of the road network within the Scenic Rim Region.

Strategy Context

This Strategy has been developed with consideration to the linkages with a range of strategic documents, legislation, guidelines and standards relating to Council's provision of road network.

The below figure shows the interconnection of the Road Strategy with other existing documents of Council.

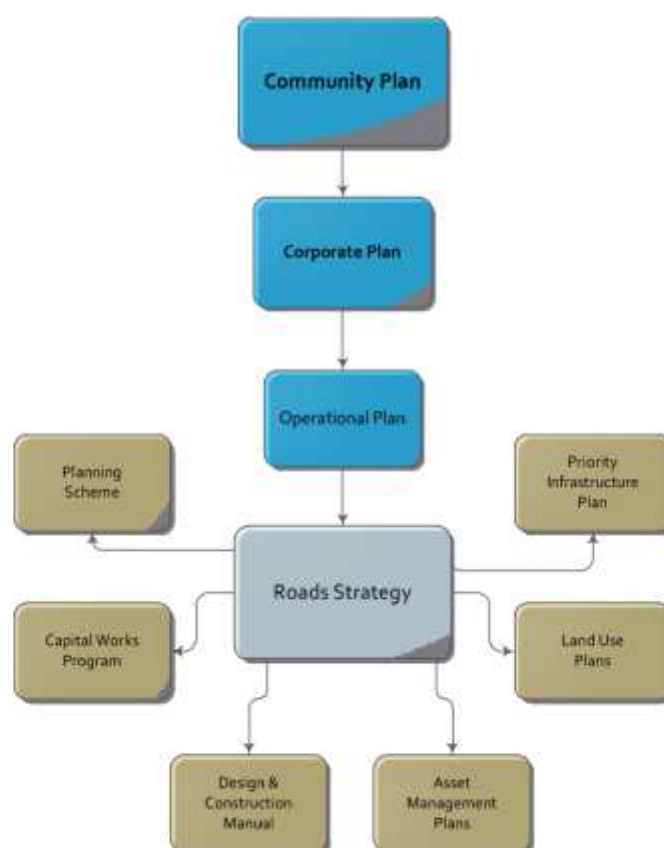


Figure 1. Strategy Plan linkages

Corporate Strategy Documents

The Scenic Rim Community Plan 2011 – 2026 has been prepared following extensive consultation with the community. It is the overarching Plan for the future of the Scenic Rim Region in that it “provides a shared vision and plan for the region’s future and will guide Council, other levels of government and community action on issues including the environment, economic development, social well being, infrastructure and governance.”

A theme in the Community Plan which focuses on Accessible and Serviced Region is appropriate to this Strategy. One of the outcomes in this theme is “Infrastructure and services keep pace with growth and changing needs and are compatible with our environment”.

The Corporate Plan Statement of Intent for Accessible and Serviced Region states “Council will provide and advocate for infrastructure and services in accordance with the prioritised needs of our growing community”. This Strategy must respond to assessment of the prioritised needs of the community. A Prioritisation Model is essential to assist in the development of project priorities.

Legislative Requirements

The *Local Government Act 2009* has been developed with the purpose to provide for “the way in which a local government is constituted and the nature and extent of its responsibilities and power; and a system of local government in Queensland that is accountable, effective, efficient and sustainable”

As defined in *Chapter 3 Part 3 of the Local Government Act 2009*, a road is “an area of land that is dedicated to public use as a road; or an area of land that – is developed for, or has as one of its main uses, the driving or riding of motor vehicles; and is open to, or used by, the public; or a footpath or bicycle path; or a bridge, culvert, ford, tunnel or viaduct.”

The Act outlines the control of roads by Council, the ability to acquire land for a road, closure of roads, how Council may categorise roads, and unauthorised works on roads, amongst other items associated with roads.

In addition to the above State legislation there may be applicable legal or policy requirements under the common law, local government planning schemes, local laws and/or road and transport guidelines and codes.



Council Local Laws and Policies

Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011, has the purpose to "protect the health and safety of persons using local government controlled land, facilities, infrastructure and roads; and preserve features of the natural and built environment and other aspects of the amenity of local government controlled land, facilities, infrastructure and roads." The Local Law achieves this by regulating access to roads, and prohibiting or restricting certain activities.

Further to *Local Law No. 4*, a number of Subordinate Local Laws are relevant to road use, these include *Subordinate Local Law No. 1.1 (Alteration or Improvement to Local Government Controlled Areas and Roads) 2011*, *Subordinate Local Law No. 1.2 (Commercial Use of Local Government Controlled Areas and Roads) 2011*, *Subordinate Local Law No. 1.7 (Gates and Grids) 2011*, *Subordinate Local Law No. 1.14 (Undertaking Regulated Activities on Local Government Controlled Areas and Roads) 2011*, *Subordinate Local Law No. 1.15 (Carrying Out Works on a Road or Interfering with a Road or its Operation) 2011*, *Subordinate Local Law 4 No. (Local Government Controlled Areas, Facilities and Roads) 2011*.

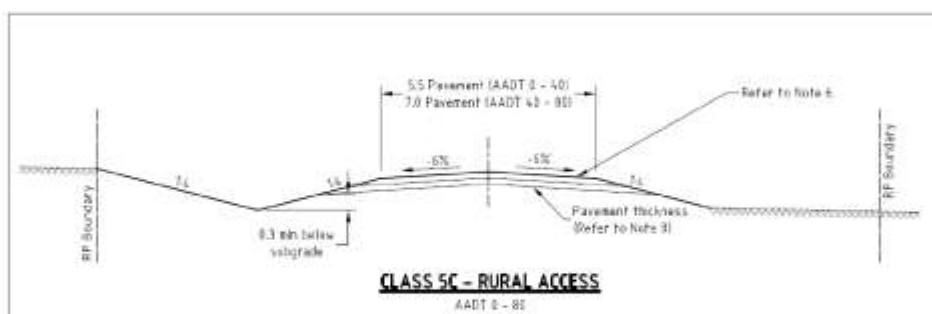
Council has adopted a policy on the Provision of Road Network, which outlines Council's position on a number of areas such as extensions to road network, road and street construction standards, road and street maintenance standards, signage and traffic control devices, stormwater infrastructure in road reserves, vehicles parking within road reserves, vegetation within road reserves, private access entrances, utility services within a road reserve, and works within a road reserve.

Council also has an adopted Road Closure Policy which outlines the Council's position on temporary road closures for special events, temporary or permanent road reserve closures, and road closures by local government (permanent or temporary).

Guidelines and Standards

The Austroads Guidelines are the standards used by Council for the design and management of the road network. Complementing the Austroads Guidelines, are ARRB (Australian Road Research Board) Guidelines and Council's Design and Construction Manual.

New roads are required to be designed and constructed in accordance with these standards and guidelines to ensure the community receives a safe and efficient network to current standards.



Notwithstanding the above technical documents, Registered Professional Engineers (Qld) assume full legal responsibility for all designs. This is a State legislative requirement, under the *Professional Engineers Act*.

Disaster Management

Management of stormwater from roads is controlled by stormwater drainage systems, to minimise the impact of runoff to both Council infrastructure and private property. Generally road infrastructure can only be provided to higher frequency events. The road network will not be available for use during lower frequency events such as natural disasters.

Recovery of the road network following natural disasters is prioritised based on community needs and levels of service. At times, due to funding restrictions, some of the road network may function at a lower level of service for a period of time.

The Natural Disaster Relief and Recovery Arrangements (NDRRA) are a joint funding initiative of the Commonwealth and State Governments to provide disaster relief and recovery payments for infrastructure restoration to help communities recover from the effect of natural disasters.

Following a declared disaster event, there is a period of emergent works whereby Council will rectify the priority areas of the infrastructure network to ensure the immediate safety and connectivity of the community. The remainder of the work to restore the road network to its previous level of function is completed in the restoration period, whereby Council assesses the damage, and submits proposals for approval under NDRRA Guidelines. Once approved, Council (or its contractors) complete the restoration of the network.



Town Planning

The preparation of the Region's Planning Scheme is an opportunity to promote the importance of a sustainable road network through land use planning.

Efficient land use planning must consider suitable network connectivity between different land uses, for now and into the future. Natural features such as ridges and gullies should be considered in the development and road network planning.

Development assessment plays a significant part in the process to ensure suitable alignment of roads. Pre-lodgement discussions with applicants (and their consultants) regarding subdivision layouts, are an opportunity to reinforce the road network layout of major and minor networks.

Conditions of development application approvals allow for the designers to achieve efficient development in terms of sustainable road networks.

Priority Infrastructure Plans

In accordance with the *Sustainable Planning Act 2009*, Council has developed Priority Infrastructure Plans (PIPs). A PIP is a plan for local government trunk infrastructure to service urban growth over a 15 year period. It provides a basis to understand upgrades, or potential trunk infrastructure, to support anticipated growth; and when it will be required.

The PIPs identify desired standards of service for the transport network. Infrastructure plans have been developed for some of the urban areas in the region.

This Strategy has the opportunity to inform the revision of the PIPs in regards to road network requirements for new development areas and the capacity of existing networks.



Asset Management Plans

Council has developed Asset Management Plans for all of the major infrastructure classes it manages. The Asset Management Plans underpin Council's approach to managing community assets, with the purpose of providing a strategic view of Council's assets in a way that promotes sustainable service provision. This is achieved by assessing the long term asset related funding requirements (demand) against proposed spending levels (expenditure). An overall funding shortfall in the planning period suggests service provision is not sustainable in the longer term, and appropriate action must be taken to reduce and ultimately close the gap.

The Roads Asset Management Plan (AMP) addresses the assets of sealed road pavements and surfaces, unsealed road pavements, and concrete kerb and channel.

The Roads AMP indicates the existing road asset base is not being renewed at the same rate at which it is degrading. This means that the current funding level does not match the demand in this asset class, and Council will determine through this strategy how to address this issue.

Increased funding of the asset class may be difficult to achieve, due to decreases in available grant money from both a Federal and State level which may have provided adequate funding in the past, as well as limitations on available funds through rate revenue and community affordability.

Council must continue to examine its operations and maintenance practices, as well as explore options to increase the life of the asset, and overall improvements to the whole of life costs.

Additionally, the level of service provided on the different classes of road requires review to further refine the demand for expenditure and renewal on different road classes.

Strategic Priority Areas

Strategic Priority Areas have been developed to address these needs.

The provision of a safe road network provides a link for visitors and residents to commute throughout the Scenic Rim Region.

In order to ensure the ongoing provision of such a network for all road users, it is necessary to manage the road network through a variety of documents, including a Road Strategy which outlines the key Strategic Areas of focus.

This Strategy covers the Strategic Priority Areas of:

Community Service Levels

- Ensure the road network provides a level of service that meets the needs of the community.

Road Network Infrastructure

- Provide a network of roads to service the range of needs of the community throughout the region in a sustainable manner.

Infrastructure Operation and Maintenance

- Ensure the constructed infrastructure operates in an efficient and effective manner to meet the service level expected of the infrastructure over the life of the asset.

Land Use Planning

- Ensure land use planning delivers development that has a focus on sustainable and efficient road networks.

Project Prioritisation

- Ensure renewal, upgrades and new road infrastructure projects are prioritised according to a risk mitigation approach.

Private and Utility Infrastructure in Road Reserve

- Ensure the installation of private and utility infrastructure in road reserves does not compromise the function and safety of the road.

Strategic Priority Area 1: Community Service Levels

Ensure the road network provides a level of service that meets the needs of the community.

Community service levels must be established through defining the objectives which the road infrastructure must achieve and to link the design standards to these service levels.

Austrroads and ARRB provide guidelines on the assessment of the road infrastructure; and the Design and Construction Manual quantifies the design criteria, basis on the industry risk levels.

Strategies

- 1.1 Align levels of service with the road hierarchy to identify minimum acceptable service standards and desired service standards, for roads across the region.
- 1.2 Roads which meet the minimum acceptable service standard, and have a low crash history, are to be rehabilitated on current alignment and with the same seal width.
- 1.3 Roads which are required to meet the desired service standard are to be reconstructed to current standards based on their hierarchy.
- 1.4 New and reconstructed roads are designed and constructed in accordance with current industry and Council standards, as outlined in Council's Design and Construction Manual and Standard Drawings.

Strategic Priority Area 2: Road Network Infrastructure

Provide a network of roads to service the range of needs of the community throughout the region in a sustainable manner.

The provision of roads to service the demand of the road users is essential to ensure the sustainability of the road network. Whilst there may be a desire to bitumen seal every road within the region, this is not a sustainable option for a responsible asset owner to maintain and renew, given the funding levels and the communities ability to pay.

As such, roads are classified according to their use, and the associated functional class within a hierarchical approach. Each hierarchy class has a level of service to which Council aims to maintain the road. The class is based on the road function, while the level of service is determined by the design parameters such as pavement surface, width of road and ongoing life cycle needs.



New roads donated to Council through private development are required to be constructed to the relevant hierarchical class, which is determined based on the assessed function of the road.

There are a number of gazetted road reserves in the region which do not currently have Council maintained infrastructure within them. Council will not build roads in these road reserves; however will consider a request for the extension of the road network, and the subsequent construction of the road by the applicant, to Council standards. The road would then be added to Councils' Asset Register, and maintained by Council. Roads within road reserve that are not on the Register are not considered Council assets, and will not be maintained by Council.

Due to natural topography, some roads have in the past been constructed outside of the road reserve, or 'off alignment'. When Council becomes aware of these roads, consideration is given to realign the road, or to apply for a road closure and opening to ensure the infrastructure is within the reserve.

From time to time, when designing for renewal of a road, it may become apparent that to ensure a safe road network, the alignment of the road is required to change. This may be required to improve the safety of a corner, to realign an approach to a bridge, or for other safety reasons. In these cases, Council engages with the property owner to acquire the required section of land for road reserve.

Council is committed to working towards the best appropriate practice in asset management. An Asset Management Plan has been developed for the road network, which identifies a significant gap between the renewal requirements and the available funding for this asset class. One of the principles Council aims to achieve is to

determine and document the intervention point in the condition of a road where it is most beneficial to renew the asset. Intervening too early may result in the asset being renewed before it is required, and intervening too late may result in a higher expense to renew the asset. This is the result of the asset generally remaining in an acceptable condition for much of its life, but quickly deteriorating once it reaches a certain point, as demonstrated in Figure 2.

Generally, this intervention point can be associated with a condition rating of the road. Condition ratings are from zero to ten, with zero being a new road, and ten being an unusable road. Council currently aims to renew the road once it has reached condition rating number eight, with the aim of keeping the majority of assets within the range of four to eight when maintaining the roads (Figure 3). Renewal of a road pavement and seal will usually bring the condition back to zero.

The consumption of road is recognised financially through the use of depreciation expense which is based on condition rating. In acknowledgment of this process, it is important that the road conditions do not deteriorate beyond a reasonable condition level. If this is allowed to occur, the amount of depreciation expense significantly increases, and ultimately affects the operating surplus and therefore financial sustainability.

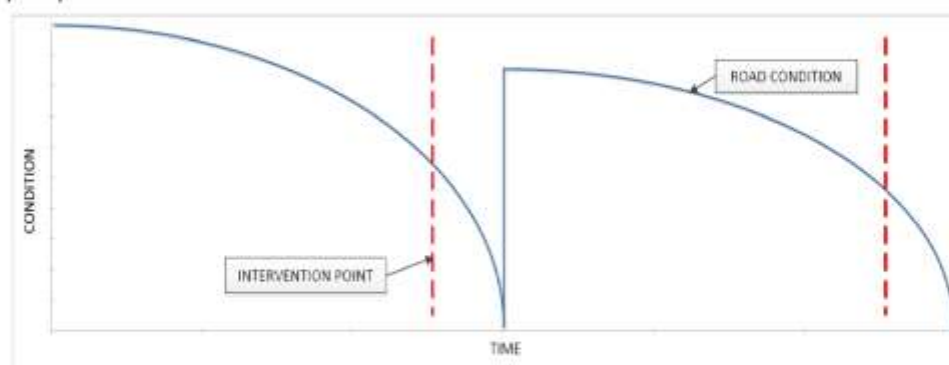


Figure 2. Road Asset Renewal / Rehabilitation Optimisation on the Condition Degradation Curve

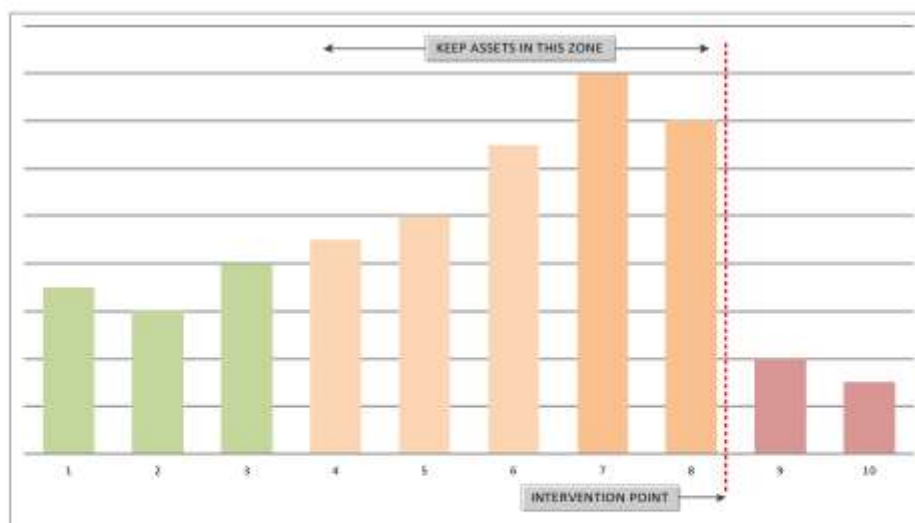


Figure 3: Preferred asset condition zone and intervention point for road assets.

Note: not actual data, see Roads Asset Management Plan for actual condition ratings.

Strategies

- | | |
|---|--|
| <p>2.1 Redefine the road hierarchy, to determine more suitably functional classes. Review the road hierarchy annually.</p> <p>2.2 Road classes and types within the network are upgraded to relevant functional classes on a prioritised basis.</p> <p>2.3 Council retains an Asset Register which lists all Council controlled roads.</p> <p>2.4</p> | <p>Revise Roads Asset Management Plans as appropriate to ensure the strategies are reflected in the investment plans.</p> <p>2.5 Recognise the current funding gap between the demand for renewal of roads and available funds, and determine delivery options for long term sustainability of the road network.</p> <p>2.6 Roads that are not within the road reserve are rectified through the realignment of either the road pavement or the road reserve.</p> <p>2.7 Requests for extensions to the road network are considered by Council and are to be constructed to appropriate standards.</p> |
|---|--|

Strategic Priority Area 3: Infrastructure Operation and Maintenance

Ensure the constructed infrastructure operates in an efficient and effective manner to meet the service level expected of the infrastructure over the life of the asset.

Road networks require regular operational and maintenance activities to maximise the life of the asset and reduce the whole of life costs.

The funding, required to maintain the service level, should be provided based on the condition level of the asset. Inadequate funding for maintenance and operations may result in the condition of the asset worsening beyond an acceptable service level, and consequently an increased renewal cost for the asset.

A Roads Maintenance Management Manual (MMS) has been developed to provide guidance and consistency for the programming and prioritisation of rectification of road defects in the region. It is envisaged that the manual will ultimately result in reducing the number of customer requests as inspections of the network will allow improved identification and programming of works.

Council operates under an accredited Quality Management System for the construction and maintenance of roads. The elements the Quality Management System covers include quality management, environmental management, forms, workplace health and safety management, and an operations manual.

Strategies

- 3.1 The Maintenance Management Manual for road infrastructure is reviewed annually.
- 3.2 Develop and implement an operational delivery plan to ensure road infrastructure conforms to achieve service levels. (e.g. signs visibility/vegetation management)
- 3.3 Develop and implement a maintenance inspection program and delivery plan to ensure defects are logged and rectified on a prioritised basis
- 3.4 The Quality Management System is reviewed and accreditation maintained.



Strategic Priority Area 4: Land Use Planning

Ensure land use planning delivers development that has a focus on sustainable and efficient road networks.

Land Use Planning is an appropriate tool to determine the function of roads within the network, and to provide suitable locations for future linkages between current and future development areas.

Planning for the future growth of the region allows the location of the road corridors to be determined, for both new roads, and any widening of existing roads. This is important to allow Council to secure the road reserves and to ensure the acceptable level of service from the road network is sustained.

The Priority Infrastructure Plans (PIPs) are the tools to determine the future road requirements as the region grows. It is critical that the outcomes of the PIPs are integrated with the Ten Year Capital Works Prioritised Program, the Roads Asset Management Plan, and the Long Term Financial Forecast to assist in the ongoing sustainability of Council.

Strategies

- 4.1 The Scenic Rim Regional Council Planning Scheme is developed with consideration of the principles and key actions of this strategy.
- 4.2 Development in the Scenic Rim region is managed to ensure a sustainable, planned road network is created.
- 4.3 Priority Infrastructure Plans are integrated with other strategic Council documents to ensure the road network is developed to meet community needs.

Strategic Priority Area 5: Project Prioritisation

Ensure renewal, upgrades and new road infrastructure projects are prioritised according to a risk mitigation approach.

As identified in Strategic Priority Area 3: Road Network Infrastructure, there currently a gap exists between the renewal demand of the current road network and the available funding.

The actions in this strategy are intended to mitigate the gap as far as possible; however there remains a need to prioritise the renewal, upgrade, and new works based on risk assessment of the network to determine which roads will remain within the acceptable service level.

A project prioritisation model has been developed which assesses the road based on the hierarchy class, pavement condition, seal width, and road geometry. These categories are ranked, and from these rankings the 10 Year Capital Works Program is developed.

A copy of the current model and the 10 Year Capital Works Program, developed on this model, is included within this Strategy, Appendix 2.

Strategies

- 5.1 Determine criteria for prioritisation of projects in the range of classifications of roads as determined from the road hierarchy.
- 5.2 Review the road infrastructure project prioritisation model on an annual basis.
- 5.3 Undertake an annual reassessment of the 10 Year Capital Works Program based on the revised project prioritisation models.
- 5.4 The Reseals Program methodology is reviewed annually to ensure correct prioritisation of roads for reseal and rehabilitation.

Strategic Priority Area 6: Private and Utility Infrastructure in Road Reserve

Ensure the installation of private infrastructure in road reserves does not compromise the function and safety of the road.

The installation of private infrastructure within a road reserve has implications for Council. These implications include public safety, liability in the case of an accident, visual impact in terms of the regions image, visual amenity and visibility, as well as potential practical implications on maintenance and access, and strategically in terms of the road network management. A poorly placed structure within the road reserve may restrict Council's ability to provide an adequate level of service from its road network.

Examples of infrastructure in road reserve include:

- Mailboxes
- Roadside memorials
- Gates and grids, fencing
- Property accesses
- Private pipelines and conduits
- Entry statements to residential developments
- Raised structures for outdoor dining
- Shop awnings and fixtures

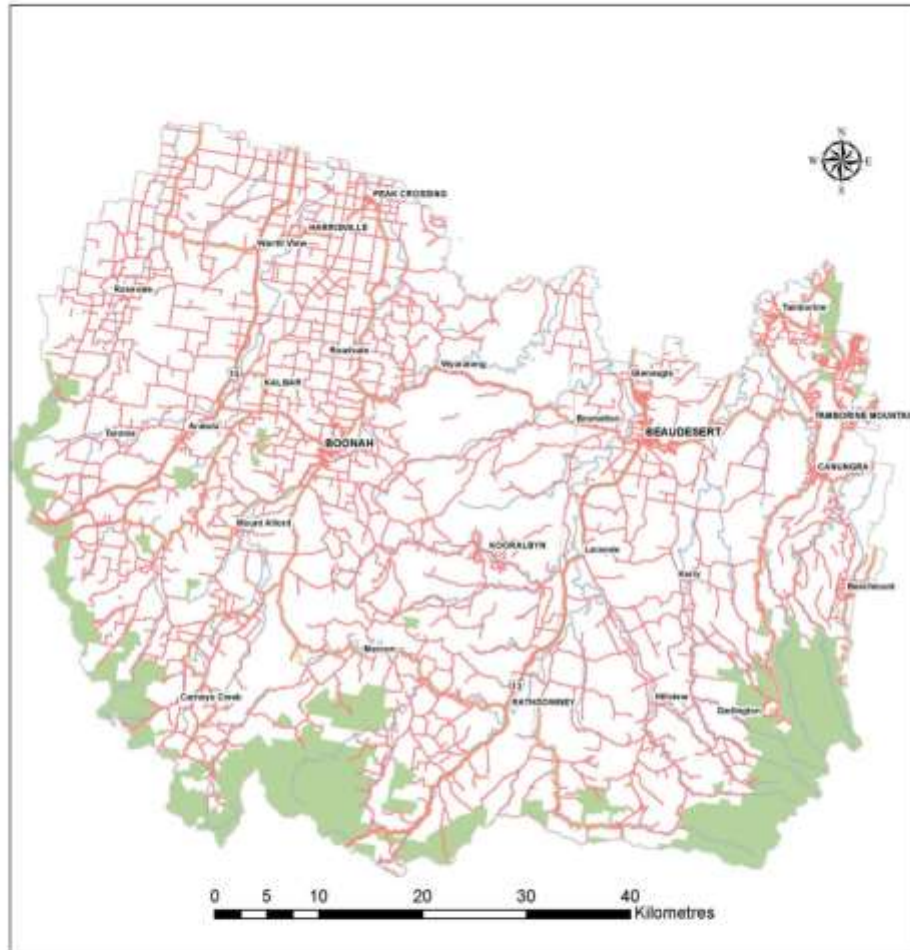
Council regulates infrastructure within road reserves through Local Laws, Subordinate Local Laws, and the subsequent application and approval processes. This ensures appropriate controls and standards for the installation of private infrastructure in road reserves, that private infrastructure does not adversely impact on Council infrastructure within road reserves, protection to the public from damage that may be incurred from the installation of private infrastructure, and protection of the visual amenity and nature of the region.



Strategies

- 6.1 Ensure road and transport assets maintain their service levels by monitoring the current and potential impact of private infrastructure in road reserves through the use of standards for private infrastructure and the permit process.
- 6.2 Ensure safe passage by users of the road network through standards and permits, to allow only safe structures within the road reserve.
- 6.3 Develop a monitoring and inspection process, based on self-assessment of private infrastructure, in road reserves on a risk management approach.

Appendix 1 – Roads Map



Appendix 2 – Road Prioritisation Models and 10 Year Capital Works Program

Sealed Road Prioritisation Model

The Sealed Road Prioritisation Model is based a set of weighted criteria. These criteria include:

- Road Function and Class
- Pavement Condition
- Service Level
- Road Geometry (Safety)

Projects are assessed against these criteria (category) according to ranking, and given a Category Score (Ranking x Weighting = Category Score). An aggregate of the weighted category score is then given an overall project score. Projects are then ranked based upon the overall project score.

Category	Ranking	Description	Weighting
Road Function and Class	4	4a Collector	1
	3	4b Connector	
	2	5a Access	
	1	5b and less Access	
Pavement Condition	6	Pavement Condition rating 9 or higher	1
	5	Pavement Condition rating 8 to < 9	
	4	Pavement Condition rating 7 to < 8	
	3	Pavement Condition rating 6 to < 7	
	2	Pavement Condition rating 5 to < 6	
	1	Pavement Condition rating 5 or less	
Service Standard	4	Does not meet minimum acceptable road cross section (by more than 1 metre)	1.5
	3	Does not meet minimum acceptable road cross section (by 1 metre or less)	
	2	Meets minimum acceptable road cross section	
	1	Meets desirable road cross section	
Road Geometry (Safety)	5	Road Geometry rating > 5	1
	4	Road Geometry rating 4 < 5	
	3	Road Geometry rating 3 < 4	
	2	Road Geometry rating 2 < 3	
	1	Road Geometry rating 1 < 2	
	0	Road Geometry rating 0 < 1	

Unsealed Pavement Capital Works Program (Resheeting)

Category	Ranking	Description	Weighting
Pavement Condition (Visual Assessment)	4	Requires gravel minimal to no gravel present	NA
	3	Requires gravel minimal gravel present	
	2	Monitor may need gravel within 12 to 24 months	
	1	Near new no gravel required	

Note gravel roads classes 5e, 5f and 5g generally would only receive spot gravelling under Road Maintenance Budget.

Seals Capital Works Program (Reseals)

All Capital Projects that have not received a final coat seal are included on the program.

Then a list of potential seal sites is compiled using the following criteria:

1. Seals Condition Rated 6 to 8 are complied.
2. Pavement condition > 8.5 are not considered for reseals.
3. Road sections consisting of greater than 30% pavement failure will be excluded.

The list will be generated for each road class with those seals on higher classes of roads placed on the program first.

A visual assessment is undertaken to confirm the reseal need and provide preliminary reseal preparation estimates.

Note: Asphalt surfacing will be considered in urban areas where pavements in very good condition exist.

4.8 Urban Drainage Strategy 2015 - 2018

Executive Officer: Director Infrastructure Services

File Reference: 04/12/008; 04/10/001; 04/14/008; 28/03/006

Director's Recommendation

That Council adopt the Scenic Rim Regional Council Urban Drainage Strategy 2015 - 2018, and the associated Urban Drainage Strategy Implementation Plan, to provide direction and framework for the provision of services associated with the region's urban stormwater drainage network.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Stanfield

Seconded: Cr O'Carroll

Carried

Attachments

1. Draft Scenic Rim Regional Council Urban Drainage Strategy 2015 - 2018.
2. Draft Scenic Rim Regional Council Urban Drainage Strategy Implementation Plan (attached separately).

**Attachment 1 - Draft Scenic Rim Regional Council Urban Drainage Strategy
2015 - 2018**



Version Control

Vers	Authored	Date
1	Director Infrastructure Services	9 May 2013
2.2	Manager Works	2 December 2013
3	Manager Works	1 June 2015

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Introduction

Stormwater runoff in urban development areas, unless managed, could result in personal and property damage.

A drainage network is generally provided as part of the infrastructure which services the land use to manage stormwater flows. The infrastructure generally consists of a network of collection pits, underground pipes, overland flow paths, water quality treatment systems and outfall structures.

This Strategy is to provide the basis for development and management of stormwater drainage networks to service the urban developments within the Region.



Strategy Context

This Strategy has been developed with consideration to the linkages with a range of strategic documents, legislation, guidelines and standards relating to Council's provision of drainage services.

The below figure shows the interconnection of the Drainage Strategy within other existing documents of Council.

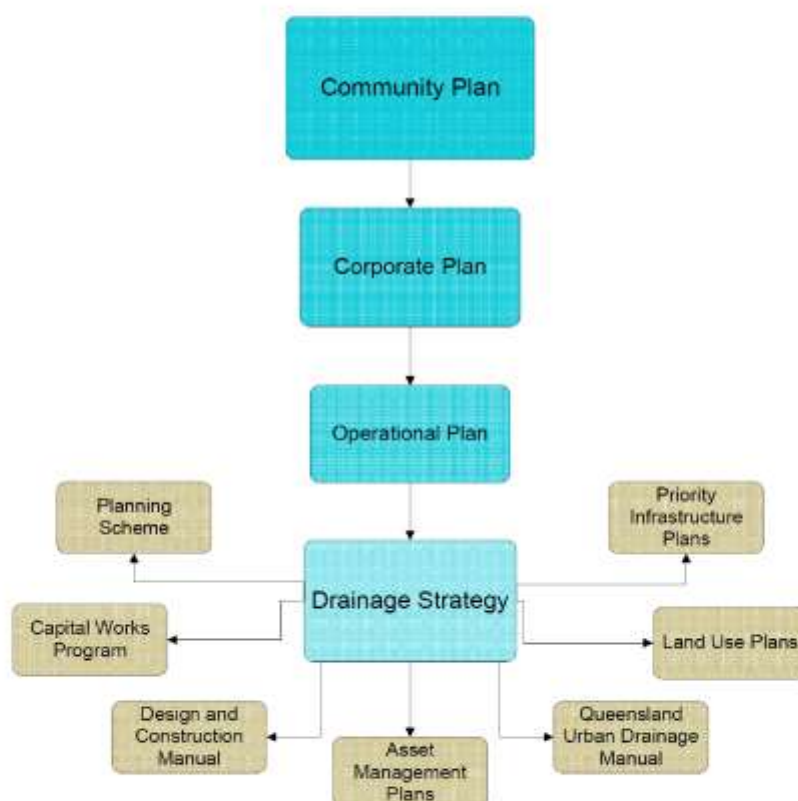


Figure 1. Strategy Plan linkages

Corporate Strategy Documents

The Scenic Rim Community Plan 2011 – 2026 has been prepared following extensive consultation with the community. It is the overarching Plan for the future of the Scenic Rim Region in that it “provides a shared vision and plan for the region’s future and will guide Council, other levels of government and community action on issues including the environment, economic development, social well being, infrastructure and governance.

A theme in the Community Plan which focuses on Accessible and Serviced Region is appropriate to this Strategy. One of the outcomes in this theme is for “Infrastructure and services keep pace with growth and changing needs and are compatible with our environment”.

The Corporate Plan Statement of Intent for Accessible and Serviced Region states “Council will provide and advocate for infrastructure and services in accordance with the prioritised needs of our growing community”. This Strategy must respond to assessment of the prioritised needs of the community. A Prioritisation Model is essential to assist in the development of project priorities.

Legislative Requirements

Legal issues relating to stormwater runoff and impacts arise from both State law and common law.

The *Local Government Act 2009* provides the legislative power for Council to provide services such as drainage. Under the Act, Council has power to levy special rates or charges on land in its area which benefits from the provision of drainage facilities.

Stormwater management should be consistent with the aims of the Environmental Protection Act. A Management Plan (or Strategy) should incorporate objectives that reflect the local catchment resources, environmental and community values, development limitations and soil conditions. Other legislative matters that need to be considered are the *Water Act 2000*, *Fisheries Act*, *Aboriginal Cultural Heritage Act* and *Sustainable Planning Act*.

In addition to the above State law there may be applicable legal or policy requirements under the common law, local government planning schemes, local laws and/or stormwater manual/codes.



Newly installed gully pit - Main Street, Tamborine



Stormwater drainage at Kate's Avenue, Boonah

Legal issues may arise in the context of many stormwater management actions, including diversion of stormwater flows, and changes in volume of flows, water quality and sedimentation. Any of the above issues can result in downstream owners, under common law principles, seeking compensation for damages incurred.

The lawful point of discharge "test" has been used by the industry to assess whether discharge of stormwater in its modified form at a particular location is lawful. Identification of the lawful point of discharge has, over the past years, become more complex due to progressive development of catchments without overall management plans. Master plans assist in providing confidence in the implementation of drainage systems that meet legal requirements.

Council Local Laws and Policies

Council does not have any specific Local Laws regarding the provision of drainage however Local Laws such as Subordinate Local Law No.11 – Alteration or improvement to Local Government Controlled areas and roads, and Subordinate local Law No.1.15 – Carrying out Works on a Road or Interfering with a road or its operations, allows Council to control works, such as vehicle entrances that may affect stormwater runoff and drainage structures such as table drains and kerb and channel.

Council has adopted a policy on the Provision of Road Network, and this Policy includes a clause on stormwater infrastructure in road reserves. It states that drainage systems will only be provided in urban areas to carry away stormwater runoff for frequent storm events, to minimise the impact on property damage. Also the road reserve will be used as an overland flow path for major storms. Importantly, the Policy requires infrastructure to be provided in accordance with Queensland Urban Drainage Manual (QUDM) with priorities determined by risk assessment and Council's Design and Construction Manual.

Guidelines and Standards

The Queensland Urban Design Manual (QUDM) was developed for the purpose of assisting engineers and stormwater designers in the planning and design of urban drainage systems. The aim of QUDM is to provide details of technical and regulatory aspects to be considered in the provision of stormwater infrastructure and to provide details of appropriate design methods and computational procedures.

Council's Design and Construction Manual's Stormwater Drainage section provides designers with Council's minimum stormwater drainage design parameters, which allows the safe and efficient removal of stormwater from urban and rural living environments.

Notwithstanding the above technical documents, Registered Professional Engineers (Qld) assumes full legal responsibility for all designs. This is a state legislative requirement, under the *Professional Engineers Act*.

Disaster Management

Stormwater drainage systems provide management of stormwater runoff to minimise the impact of runoff to property and personal damage. Unfortunately communities generally can only afford to provide infrastructure for higher frequency events. Lower frequency events such as natural disasters cannot be managed within existing urban developments that have not been constructed with overland flow paths of the appropriate capacity.

Future land use planning must take into account these lower frequency events in the placement of urban habitation. Further, where there is likelihood of urban development which is upstream from existing urban areas, the planning and design for stormwater management should analyse downstream impacts with regards to current capabilities of existing infrastructure.

Peak Probable Floods must be considered in overland flood management.

Town Planning

The preparation of the Region's Planning Scheme is an opportunity to promote the importance of stormwater management in land use planning.

Efficient land use planning must consider stormwater runoff impacts as one of the constraints to urban development so as not to adversely impact on current and future residential areas. Natural flow paths should be retained and any development layout should consider overland flow paths in the first instance, otherwise the risk of property damage cannot be economically mitigated.

Development assessment plays a significant part in the process to ensure flooding in

urban areas is mitigated. Pre-lodgement discussions with applicants and their consultants, regarding subdivision layouts, is an opportunity to reinforce the drainage concepts of major and minor networks.

Conditions of development application approvals allow for the designers to achieve efficient development in terms of stormwater runoff management.

Priority Infrastructure Plans

In accordance with the *Sustainable Planning Act 2006*, Council has developed Priority Infrastructure Plans (PIPs). A PIP is a plan for local government trunk infrastructure to service urban growth over a 15 year period. It provides a basis to understand upgrades or potential trunk infrastructure to support anticipated growth, and when it will be required.

The PIPs identify desired Standards of Service for drainage and floodplain management, and water quality management, under the stormwater network section. Infrastructure plans have been developed for some of the urban areas in the region.

The outcome of this Strategy has the opportunity to inform the revision of the PIPs in regards to drainage network requirements for new development areas and the potential gaps in the structure and capacity of existing networks.

Infrastructure Agreements (IAs)

Infrastructure Agreements with developers have been used with the identification of major transport network needs and contributions required for delivery. The opportunity exists to utilise the same framework for trunk stormwater infrastructure.

Operational Works

Filling or soil movement within a urban lot may cause adverse impacts on upstream or downstream properties. Operational Works applications may be required to ensure the impact is assessed and managed.

Strategic Priority Areas

Strategic Priority Areas have been developed to address these needs.

The provision of the drainage network in the Scenic Rim Region relies on the maintenance and enhancement of existing networks, ensuring new development is carried out with a focus on provision of infrastructure and overland flow paths and retrofitting in existing developed areas that lack the infrastructure to manage stormwater flow.

In order to protect the community interests in safe and convenient living there is a need to develop and manage the stormwater drainage network.

The Strategy covers the Strategic Priority areas of:

Community Service Levels

- Ensure the drainage networks provide a level of service that meets the needs of the community.

Personal and Property Security

- Provision of stormwater infrastructure to ensure stormwater runoff does not adversely impact on persons and property.



Installation of Kerb and Channel

Urban Drainage Network Infrastructure

- Provide a network of stormwater infrastructure that manages the stormwater runoff to the extent set down in the community service level.

Infrastructure Operation and Maintenance

- Ensure the constructed infrastructure operates in an efficient and effective manner.
- Ensure the infrastructure is maintained over its useful life to perform as the design intended.

Land Use Planning

- Ensure land use planning delivers development that has a focus on effective management of stormwater runoff through the development and does not adversely impact on downstream properties.

Project Prioritisation

- Ensure the upgrades to or the installation of stormwater drainage infrastructure projects are prioritised according to a risk mitigation approach.

Strategic Priority Area 1: Community Service Levels

Ensure the drainage networks provide a level of service that meets the needs of the community.

The Community Service levels must be established through defining the objectives which the drainage infrastructure must achieve and to link the design standards to these service levels.

The Queensland Urban Design Manual provides the guidelines on the assessment of the stormwater drainage infrastructure and the Design and Construction Manual quantifies the design criteria basis on the industry risk levels.

Strategies

- 1.1 Review the Community Service objectives and subsequent service levels for the provision of stormwater drainage.
- 1.2 Critically review investment proposal for drainage project to limit Council's exposure to funding liabilities in order to achieve the service levels for Council's stormwater network.
- 1.3 Undertake assessment of the existing stormwater network on a priority basis to assess the capacity and gaps where the stormwater infrastructure does not meet the standards, and therefore unable to achieve Community Service levels.

Strategic Priority Area 2: Personal and Property Security

Provision of stormwater infrastructure to ensure stormwater runoff does not adversely impact on persons and property.

Without effective drainage systems that can manage flow depths, velocity and flow paths, stormwater runoff can cause property damage and may result in injury to members of the community.

Standards have been developed over time by industry professionals for the installation of infrastructure to ensure adverse impacts of stormwater runoff to personal and property damage is minimised.

Strategies

- 2.1 Ensure the safety of the general public through the design and construction of new stormwater infrastructure meets the current standards.
- 2.2 Undertake a review of existing drainage infrastructure to ensure that high risk items of infrastructure are identified, and program the necessary rectification as funding permits.
- 2.3 Operate and maintain the existing drainage infrastructure in order for it to operate at its optimum performance in regards to personal and property security.



Rock lined table drain and pipe entry - Tolima Drive, Tamborine Mountain

Strategic Priority Area 3: Stormwater Network Infrastructure

Provide a network of stormwater infrastructure that manages the stormwater runoff to the extent set down in the community service level.

The provision of stormwater drainage infrastructure in newly developed areas is paramount to achieve liveable communities in regard to accessibility and safety.

The design standards provide the basis for the provision of such infrastructure that will achieve the Community Service levels. The layout of urban and industrial development must consider efficient stormwater flows prior to locking in development layouts that simply maximises property densities.

While it is generally accepted that existing development has provided adequate infrastructure, this is not always the case. Some urban development within the region has streets built as roads, with minimal cross drainage and table drains. There has been little attention paid to overland flow paths in easements as well as lawful points of discharge.

The current stormwater drainage infrastructure as currently known is depicted in plan in Appendix A.



Strategies

- 3.1 Continue to identify and record all stormwater assets within the urban developments of the region.
- 3.2 Develop master drainage plans for each of the urban areas within the region.
- 3.3 Identify priority sub catchment areas for hydraulic assessment and capital projects for necessary upgrades to meet defined service standards.
- 3.4 Ensure Development Assessment only approves urban and industrial developments with appropriate stormwater compliant layouts by developing appropriate development conditions.
- 3.5 Promotion of development designs that meet the requirements of Council's Design and Construction Manual, during Operational Works approval stage.
- 3.6 Review and assess the existing drainage for conformance with current standards and develop a program subject to funding to upgrade the infrastructure

Strategic Priority Area 4: Infrastructure Operation and Maintenance

Ensure the constructed infrastructure operates in an efficient and effective manner.

Ensure the infrastructure is maintained over its useful life to perform as the design intended.

The provision of a drainage network is only one part of meeting the Community Service Standards. Over time the infrastructure is subject to wear and tear, and at times becomes blocked by debris, and renders the infrastructure useless in effectively managing stormwater flow. Unless there is an ongoing program to operate the network through clearing debris and unblocking inlets and outlets, the infrastructure cannot perform as expected.

Also high flows, debris collisions and environmental impacts cause the infrastructure to deteriorate over time. A Maintenance Management System is required to ensure the infrastructure is kept at a standard to achieve service levels.

Strategies

- 4.1 Develop and implement a Maintenance Management System for stormwater drainage infrastructure.
- 4.2 Develop and implement an operational and maintenance inspection program to ensure defects are logged and rectified.
- 4.3 Minimal acceptable program for operation and maintenance budget allocations are determined.

Strategic Priority Area 5: Land Use Planning

Ensure land use planning delivers development that has a focus on effective management of stormwater runoff through the development and does not adversely impact on downstream properties.

Land Use Planning is an appropriate tool to manage the runoff impacts of new development as they have the potential to overload existing infrastructure with catchment modifications such as permeability of the catchment and moving runoff from one catchment to another. Change in flow volume and velocity in many cases may not meet legal points of discharge.

Strategies

- 5.1 The preparation of the Regional Planning Scheme should take into account the constraints for intense development as a result of higher than reasonable levels of stormwater runoff.
- 5.2 Optimal development must take into account stormwater flow paths in minimising risk and conflicts with dense urban and industrial development.
- 5.3 Minimise the impacts of upstream development where the existing downstream drainage infrastructure does not have the hydraulic capacity to receive the increased runoff.
- 5.4 Consider legal points of discharge of new development where there are limited flow paths that can in legal terms handle the runoff from upstream developments.

Strategic Priority Area 6: Project Prioritisation

Ensure the upgrades to or the installation of stormwater drainage infrastructure projects are prioritised according to a risk mitigation approach.

The lack of appropriate infrastructure development of urban developments in the past has left this Council, and future ones, a backlog of drainage projects that cannot be funded from current funding levels. Therefore a project prioritisation model is required to ensure the highest priority projects are addressed.

Council has been using a model to develop its Ten Year Capital Works Program. A copy of the current model is included within this Strategy, Appendix B.

Strategies

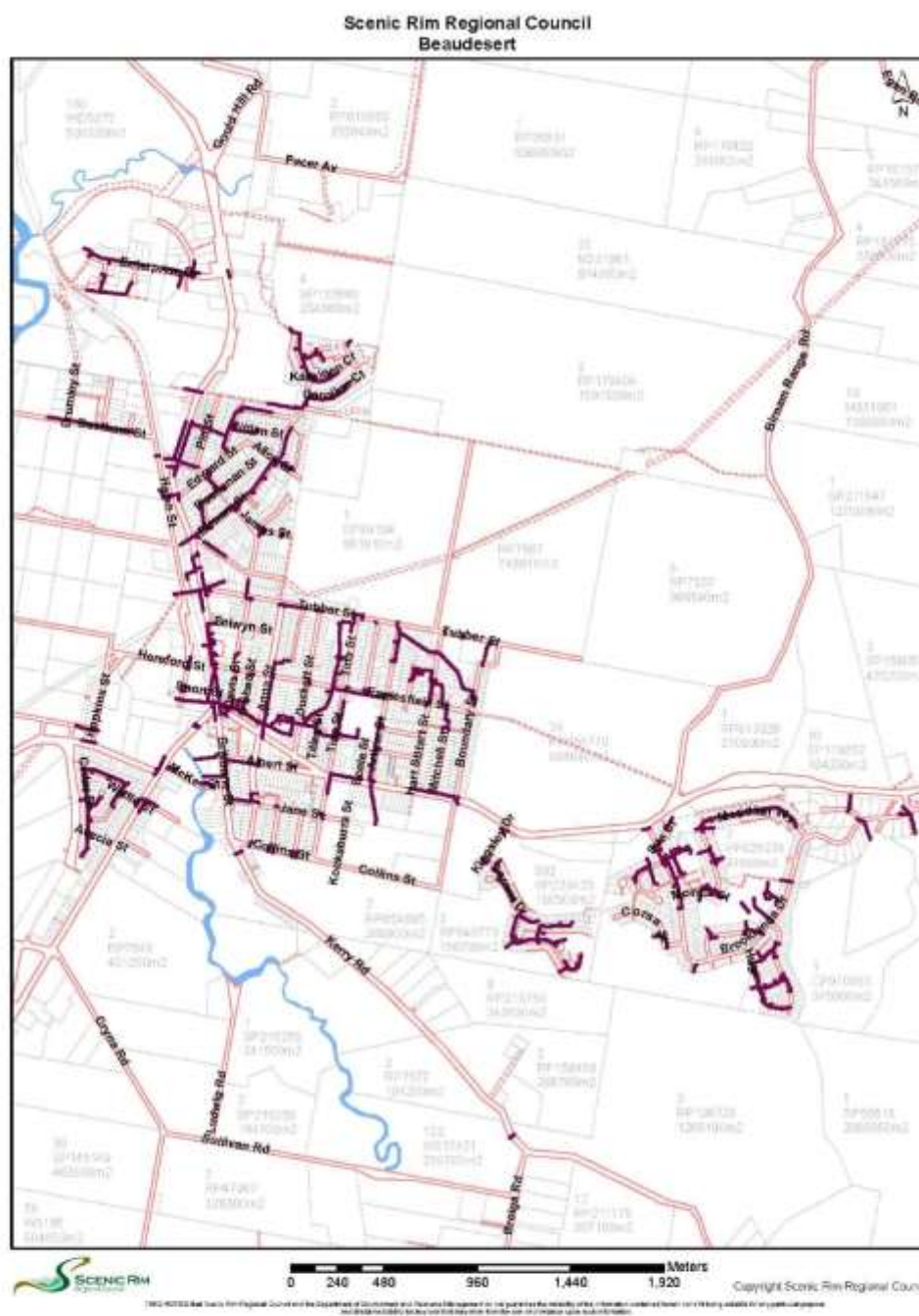
- 6.1 Reassess the drainage infrastructure projects that are necessary for managing stormwater runoff through the urban and industrial developments in the region.
- 6.2 Annually review the drainage infrastructure project prioritisation model.
- 6.3 Undertake a reassessment of the Ten Year Capital Works Program based on the revised project prioritisation model.
- 6.4 Include provision within the Ten Year Capital Works Program for minor projects which may assist in managing higher frequency events, without the implementation of fully developed drainage schemes.

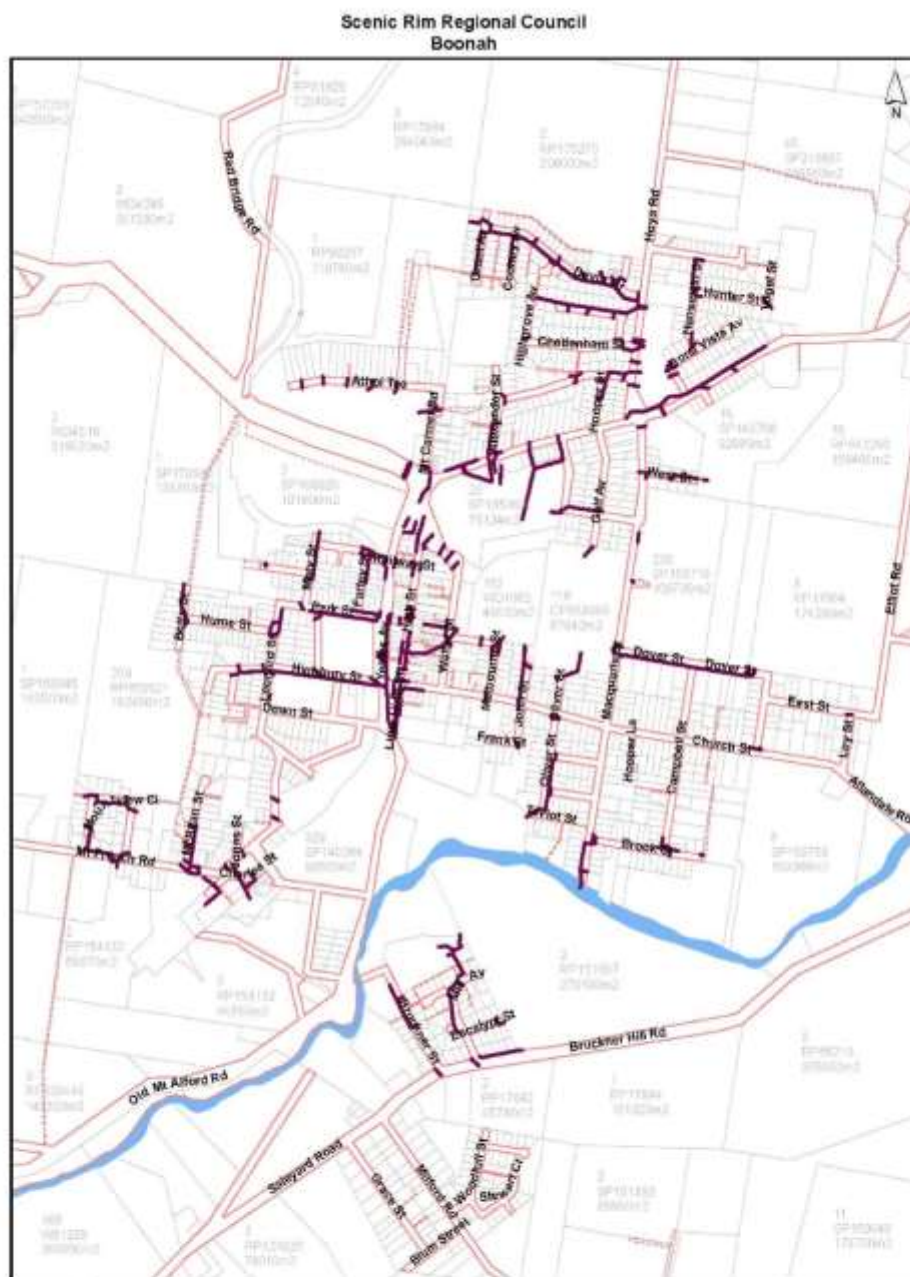


Drainage infrastructure upgrade – Railway Street, Kalbar

Appendix 1 – Drainage Maps



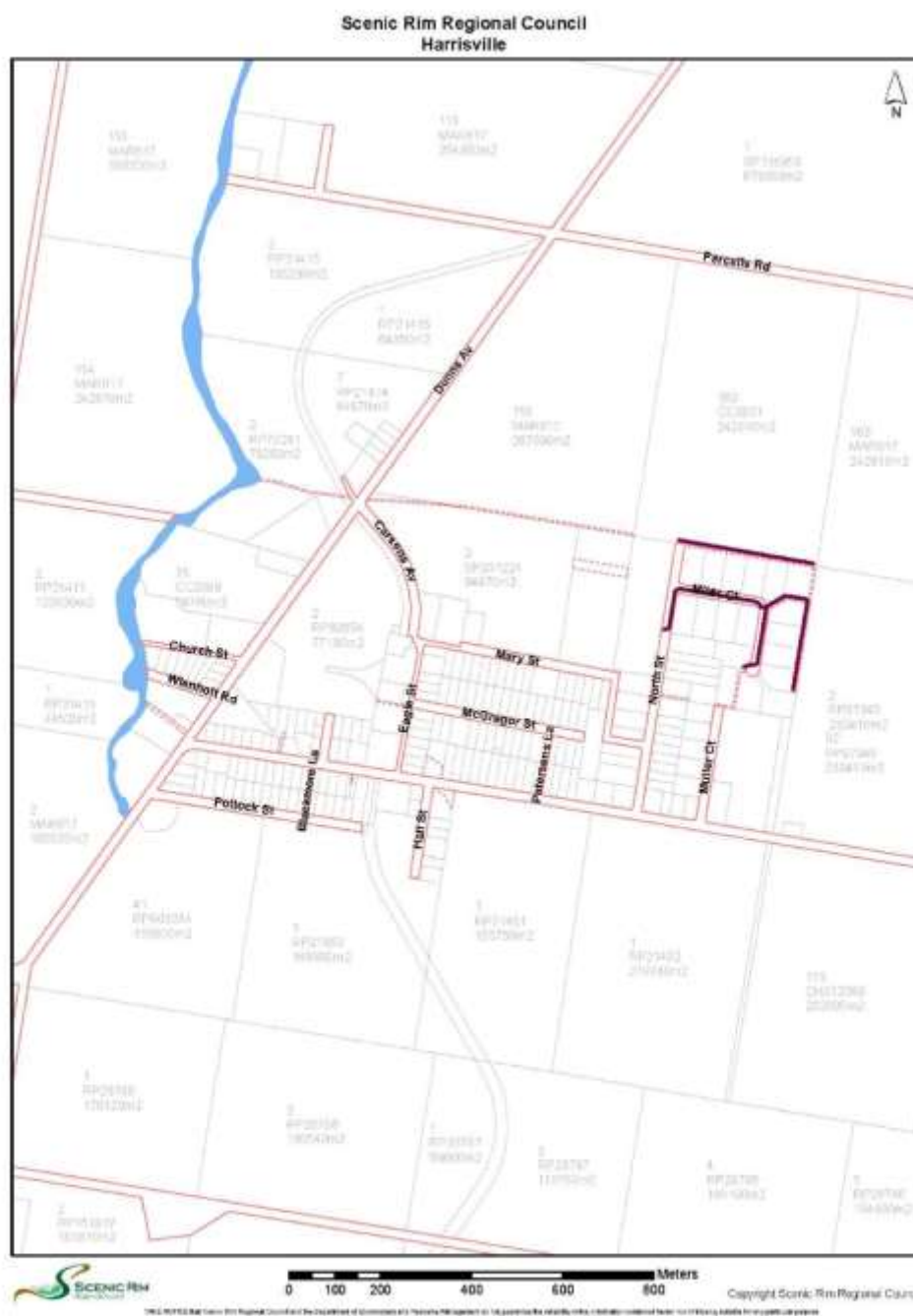




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Appendix 2 – Drainage Prioritisation Model

The Drainage Prioritisation model is based a set of weighted criteria. These criteria include:

- Impact to Property
- Impacting Rain Event
- Value in Investment
- Condition and Public Risk

Projects are assessed against these criteria (category) according to ranking, and given a Category Score (Ranking x Weighting = Category Score). An aggregate of the weighted category score is then given an overall project score. Projects are then ranked based upon the overall project score; based on the knowledge and experience, these projects are harmonised.

Category	Ranking	Description	Weighting
Impact to Property	3	Drain Water impacts on residents' dwellings.	1.5
	2	Drain Water impacts on property structures.	
	1	Drain Water impacts on property ground surface but no structures	
Impacting Rain Event Frequency	3	Moderate Rain: Drain fails <Q10 flow event.	1
	2	Heavy Rain: Drain fails between Q10 to Q50 flow event	
	1	Extreme Rain: Drain fails > Q50 flow event	
Value in Investment (Benefit / Cost)	3	Low Cost: Drainage work costs ≤ \$50,000 per affected property	1
	2	Medium Cost: Drainage work costs between \$50,000 to \$150,000 per affected property	
	1	High Cost: Drainage work costs > \$150,000 per affected property	
Condition and Public Risk	3	Drain poses a significant risk for injury and damage in a high flow event	1.5
	2	Drain poses a moderate risk for injury and damage in a high flow event	
	1	Drain poses a low risk for injury and damage in a high flow event	

4.9 Beaudesert Town Centre Bypass - Stage 1 [Closed s.275(1)(e)]**Executive Officer: Director Infrastructure Services****File Reference: 19/03/004; 28/08/001**

Council resolved into closed session in accordance with the provisions of Section 275(1) of the Local Government Regulation 2012 and Council's Meetings and Other Forums Policy relating to closed session meetings to discuss this and other closed items.

Moved Cr Brent
Seconded Cr West

CARRIED

Following discussion in closed session of this item, Council resumed in open session for the proposal of Committee recommendations.

Moved Cr Stanfield
Seconded Cr West

CARRIED

Director's Recommendation**That:**

1. Council provide 'in principle' agreement to the Department of Transport and Main Roads to surrender Lot 3 RP105611 to 'road' free of cost to the Department of Transport and Main Roads, in order to accommodate for the Beaudesert Town Centre Bypass Bromelton Street intersection; and
2. Council provide no objection to the Department of Transport and Main Roads proposal for the provision of an alternative route for southbound movements via Hereford Street and Hopkins Street, with northbound movements maintained via Short Street, for the proposed Beaudesert Town Centre Bypass.

Committee Recommendation

That the Director Infrastructure Services' recommendation be adopted.

Moved: Cr Stanfield
Seconded: Cr McInnes

Carried

Attachments

Nil.

.....

Cr N.J. Waistell

CHAIRPERSON

CORPORATE & COMMUNITY SERVICES COMMITTEE