



# **AGENDA**

**Wednesday, 19 December 2018**

## **Ordinary Council Meeting**

**I hereby give notice that an Ordinary Meeting of Council will be held on:**

**Date: Wednesday, 19 December 2018**

**Time: 9:00am**

**Location: Council Chambers**

**Peter Franks  
Chief Executive Officer**





## Order Of Business

<b>1</b>	<b>Members in Attendance .....</b>	<b>5</b>
<b>2</b>	<b>Apologies/Leave of Absence/Absence on Council Business .....</b>	<b>5</b>
<b>3</b>	<b>Bereavements/Condolences .....</b>	<b>5</b>
<b>4</b>	<b>Declaration of any Material Personal Interests/Conflicts of Interest .....</b>	<b>5</b>
<b>5</b>	<b>Confirmation of Minutes .....</b>	<b>5</b>
<b>6</b>	<b>Business Arising out of Minutes of Previous Meeting .....</b>	<b>5</b>
<b>7</b>	<b>Deputations and Delegations.....</b>	<b>5</b>
<b>8</b>	<b>Corporate and Community Services .....</b>	<b>7</b>
8.1	A & A Salinovic - Reconfiguring a Lot - Subdivision (1 into 9 Lots) - Lot 100 on SP202702 - 72-76 Masons Road, Kuranda - RAL/18/0029 .....	7
8.2	Application for Renewal of Term Lease 237606 - Lot 166 on HG622, Locality of Arriga .....	77
8.3	Delegations Update December 2018 .....	85
8.4	Financial Statements period ending 30 November 2018.....	97
8.5	Community Housing Capital Works 2018/19 .....	109
<b>9</b>	<b>Infrastructure Services.....</b>	<b>127</b>
9.1	Traffic Advisory Committee - Minutes of Meeting held 4 December 2018 .....	127
9.2	Reef Councils Major Integrated Projects Program Endorsement .....	135
9.3	Mareeba Airport Upgrading - November 2018 Progress Report .....	189
9.4	Infrastructure Services, Technical Services Monthly Activities Report - November 2018.....	197
9.5	Infrastructure Services, Works Section Activity Report - November 2018 .....	205
9.6	Waste Management Services Strategy Public Consultation .....	215
9.7	Infrastructure Services, Waste Operations Report - November 2018 .....	275
9.8	Infrastructure Services, Water and Wastewater Group Monthly Operations Report - November 2018 .....	279
<b>10</b>	<b>Office of the CEO .....</b>	<b>287</b>
10.1	Mareeba Community Hub .....	287
10.2	Amendment to Subordinate Local Law No. 1 (Animal Management) 2018 .....	291
<b>11</b>	<b>Confidential Reports.....</b>	<b>299</b>
11.1	Sale of Land Due to Rates and Charges in Arrears .....	299
<b>12</b>	<b>Business without Notice .....</b>	<b>301</b>
<b>13</b>	<b>Next Meeting of Council .....</b>	<b>301</b>
<b>14</b>	<b>For Information .....</b>	<b>303</b>
14.1	Summary of New Planning Applications & Delegated Decisions For The Month of November 2018.....	303



**1 MEMBERS IN ATTENDANCE**

**2 APOLOGIES/LEAVE OF ABSENCE/ABSENCE ON COUNCIL BUSINESS**

**3 BEREAVEMENTS/CONDOLENCES**

**4 DECLARATION OF ANY MATERIAL PERSONAL INTERESTS/CONFLICTS OF INTEREST**

**5 CONFIRMATION OF MINUTES**

Ordinary Council Meeting - 21 November 2018

**6 BUSINESS ARISING OUT OF MINUTES OF PREVIOUS MEETING**

**7 DEPUTATIONS AND DELEGATIONS**



## 8 CORPORATE AND COMMUNITY SERVICES

### 8.1 A & A SALINOVIC - RECONFIGURING A LOT - SUBDIVISION (1 INTO 9 LOTS) - LOT 100 ON SP202702 - 72-76 MASONS ROAD, KURANDA - RAL/18/0029

**Date Prepared:** 6 November 2018

**Author:** Planning Officer

**Attachments:** 1. [Proposed Plan](#) ↓  
2. [Submissions](#) ↓

#### APPLICATION DETAILS

APPLICATION		PREMISES	
<b>APPLICANT</b>	A & A Salinovic	<b>ADDRESS</b>	72-76 Masons Road, Kuranda
<b>DATE LODGED</b>	26 September 2018	<b>RPD</b>	Lot 100 on SP202702
<b>TYPE OF APPROVAL</b>	Development Permit		
<b>PROPOSED DEVELOPMENT</b>	Reconfiguring a Lot - Subdivision (1 into 9 Lots)		
<b>FILE NO</b>	RAL/18/0029	<b>AREA</b>	4.26 Ha
<b>LODGED BY</b>	Brazier Motti	<b>OWNER</b>	A & A Salinovic
<b>PLANNING SCHEME</b>	Mareeba Shire Council Planning Scheme 2016		
<b>ZONE</b>	Rural Residential Zone (not within a subdivision precinct)		
<b>LEVEL OF ASSESSMENT</b>	Impact Assessment		
<b>SUBMISSIONS</b>	Nine (9) Submissions Received		

#### EXECUTIVE SUMMARY

Council is in receipt of an impact assessable development application described in the above application details. Nine (9) properly made submissions were received during public notification of the application, all of which objected to the proposed development.

The application and supporting material has been assessed against the Mareeba Shire Council Planning Scheme 2016 and does conflict with a Performance Outcome contained within the Reconfiguring a Lot Code which discourages further subdivision of Rural Residential zoned allotments that are not situated within a subdivision "precinct". Despite this conflict, it is considered that the proposed development can comply with the higher order Overall Outcomes contained within both the Reconfiguring a Lot Code and the Planning Scheme's Strategic Framework. Specifically, the subject site is generally free from constraints (particularly environmental constraints) and the development can be serviced by all infrastructure typically conditioned for this scale of rural residential development, including sealed road access, town water and electricity.

It is considered that there are sufficient planning grounds to approve the development, despite the identified conflicts with the Planning Scheme.

Draft conditions were provided to the Applicant care of their consultant and have been agreed to.

It is recommended that the application be approved in full, subject to conditions.

**OFFICER'S RECOMMENDATION**

1. That in relation to the following development application:

APPLICATION		PREMISES	
<b>APPLICANT</b>	A & A Salinovic	<b>ADDRESS</b>	72-76 Masons Road, Kuranda
<b>DATE LODGED</b>	26 September 2018	<b>RPD</b>	Lot 100 on SP202702
<b>TYPE OF APPROVAL</b>	Development Permit		
<b>PROPOSED DEVELOPMENT</b>	Reconfiguring a Lot - Subdivision (1 into 9 Lots)		

and in accordance with the Planning Act 2016, the applicant be notified that the application for a development permit for the development specified in (A) is:

Approved by Council in accordance with the approved plans/documents listed in (B), subject to assessment manager conditions in (C), assessment manager's advice in (D), relevant period in (E), further permits in (F), and further approvals from Council listed in (G);

And

The assessment manager does **not** consider that the assessment manager's decision conflicts with a relevant instrument.

- (A) **APPROVED DEVELOPMENT:** Development Permit for Reconfiguring a Lot - Subdivision (1 into 9 Lots)

- (B) **APPROVED PLANS:**

Plan/Document Number	Plan/Document Title	Prepared by	Dated
34579/001A	Proposed Reconfiguration Lots 1 - 9 & Emts A - D	Brazier Motti	26 July 2018

- (C) **ASSESSMENT MANAGER'S CONDITIONS (COUNCIL)**

- (a) Development assessable against the Planning Scheme

- Development must be carried out substantially in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, and subject to any alterations:
  - found necessary by the Council's delegated officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements; and
  - to ensure compliance with the following conditions of approval.
- Timing of Effect

- 2.1 The conditions of the development permit for each stage of the development must be complied with to the satisfaction of Council's delegated officer prior to the endorsement of the plan of survey for each stage of the development, except where specified otherwise in these conditions of approval.

### 3. General

- 3.1 The development approval would not have been issued if not for the conditions requiring the construction of infrastructure or the payment of infrastructure charges within the conditions of approval.
- 3.2 The applicant/developer is responsible for the cost of necessary alterations to existing public utility mains, services or installations required by works in relation to the proposed development or any works required by condition(s) of this approval.
- 3.3 All payments or bonds required to be made to the Council pursuant to any condition of this approval must be made prior to the endorsement of the plan of survey and at the rate applicable at the time of payment.
- 3.4 The developer must relocate (in accordance with FNQROC standards) any services such as water, sewer, drainage, telecommunications and electricity that are not wholly located within the lots that are being created/serviced where required by the relevant authority, unless approved by Council's delegated officer.
- 3.5 Where utilities (such as sewers on non-standard alignments) traverse lots to service another lot, easements must be created in favour of Council for access and maintenance purposes. The developer is to pay all costs (including Council's legal expenses) to prepare and register the easement documents.
- 3.6 Where approved existing buildings and structures are to be retained, setbacks to any new property boundaries are to be in accordance with Planning Scheme requirements for the relevant structure and/or Queensland Development Code.
- 3.7 All works must be designed, constructed and carried out in accordance with FNQROC Development Manual requirements (as amended) and to the satisfaction of Council's delegated officer.
- 3.8 Charges  
  
All outstanding rates, charges, and expenses pertaining to the land are to be paid in full.
- 3.9 Bushfire Management (for Lots 2, 3 and 6 - 9 only)  
  
A bushfire hazard management plan for the subject land and proposed allotments must be prepared by suitably qualified person, and submitted to Council prior to the endorsement of the plan of survey.

All future development on the subject land must comply with the bushfire hazard management plan.

### 3.10 Slope Stability

For any new building work proposed on a slope of 15% or greater, the applicant/developer must provide Council with a site specific geotechnical report prepared by a suitably qualified Registered Professional Engineer of Queensland (RPEQ) that certifies:

- the long-term stability of the development site; and
  - that the development site will not be adversely affected by land slide/slip activity originating on sloping land above the development site.
4. Infrastructure Services and Standards

### 3.11 Building Envelopes

- (a) The approved building envelopes for proposed lots 1 - 4 and 6 - 9 are the building envelopes shown on Brazier Motti plan no. 34579/001A dated 26 July 2018.
- (b) Prior to the endorsement of the survey plan the approved building envelope areas must be defined by markers set at each corner, to the satisfaction of Council's delegated officer.
- (c) All future buildings including associated on-site effluent disposal systems must be located within the approved building envelopes.
- (d) No vegetation shall be cleared outside the approved building envelopes.

## 4. Infrastructure Services and Standards

### 4.1 Access

- (a) Industrial/commercial grade access crossovers must be constructed (from the edge of the Mason Road kerbing to the commencement of each shared driveway required by 4.1 (b) below) in accordance with FNQROC Development Manual standards, to the satisfaction of Council's delegated officer.

An access crossover must be provided/constructed to each allotment from the shared access driveways required by 4.1 (b) below) to the boundary of each proposed lot) in accordance with the FNQROC Development Manual, to the satisfaction of Council's delegated officer. The provision of layback kerb along the road/access easement frontages of each allotment will satisfy this condition.



- (b) An asphalt or concrete sealed driveway, including kerb and channel shall be provided for the full length of the access handles of Lots 1 and 6 (covered by easements A and B), to the satisfaction of Councils delegated officer. Each driveway will:
- have a minimum formation width of 4 metres;
  - be constructed generally in the centre of each access handle;
  - be formed to cater for stormwater drainage such that any stormwater runoff is discharged to Masons Road or another approved legal point of discharge;
  - service and utility conduits, including water supply pipes are to be provided for the full length of each driveway to service the benefited allotments.
- (c) A formed concrete wheelie bin set-down area capable of accommodating 4 wheelie bins must be constructed adjacent the Masons Road kerbing next to each access crossover required by 4.1 (a) above.
- (d) Reciprocal "access and services" easement must be established over the access handles of Lots 1 and 6 which benefit Lots 2 - 5 and Lots 7 - 9. Easement documents must be made available to Council for review prior to endorsement of a plan of survey creating any lots.

**Prior to works commencing, plans for the abovementioned works must be approved as part of a subsequent application for Operational Works.**

#### 4.2 Stormwater Drainage

- (a) The applicant/developer must take all necessary steps to ensure a non-worsening effect on surrounding land as a consequence of the development.
- (b) Prior to operational works commencing, the applicant must submit a Stormwater Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) that meets or exceeds the standards of design and construction set out in the Queensland Urban Drainage Manual (QUDM) and the FNQROC Development Manual to the satisfaction of Council's delegated officer.
- (c) Prior to works commencing the applicant must submit a Stormwater Quality Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) that meets or exceeds the standards of design and construction set out in the Urban Stormwater Quality Planning Guideline and the Queensland Water Quality Guideline to the satisfaction of Council's delegated officer.
- (d) The Stormwater Quality Management Plan must include an Erosion and Sediment Control Plan that meets or exceeds the Soil Erosion and

Sedimentation Control Guidelines (Institute of Engineers Australia) to the satisfaction of Council's delegated officer.

- (e) The applicant/developer must construct the stormwater drainage infrastructure in accordance with the approved Stormwater Management Plan and/or Stormwater Quality Management Plan and Report.
- (f) Temporary drainage is to be provided and maintained during the construction phase of the development, discharged to a lawful point and not onto the construction site.
- (g) All stormwater channels through private property must be registered, with the easement for drainage purposes in favour of Council. All documentation leading to the registration of the easement must be completed at no cost to Council.
- (h) All stormwater drainage collected from the site must be discharged to an approved legal point of discharge.
- (i) The applicant (at their cost) must video all stormwater lines and submit the video for inspection by Council's delegated officer prior to the development being taken "off maintenance" to ensure that no defects have occurred during the 12 month maintenance period.

#### 4.3 Water Supply

- (a) Where the existing reticulated water supply does not currently service the site or is not at an adequate capacity, the developer is required to extend or upgrade the reticulated water supply infrastructure to connect the site to Council's existing infrastructure at a point that has sufficient capacity to service the development in accordance with FNQROC Development Manual standards (as amended).
- (b) A water service connection must be provided to each proposed lot in accordance with FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer.

#### 4.4 Wastewater Disposal

At the time of construction of a future dwelling or outbuilding on each lot, any associated on-site effluent disposal system must be constructed in compliance with the latest version On-Site Domestic Wastewater Management Standard (ASNZ1547) to the satisfaction of the Council's delegated officer.

#### 4.5 Electricity provision/supply

The applicant/developer must ensure that an appropriate level of electricity supply is provided to each allotment in accordance with FNQROC Development

Manual standards (as amended) to the satisfaction of Council's delegated officer.

Written advice from an Electricity Service Provider is to be provided to Council indicating that an agreement has been made for the provision of **underground** power reticulation.

#### 4.6 Telecommunications

The applicant/developer must demonstrate that a connection to the national broadband network is available for each allotment, or alternatively, enter into an agreement with a telecommunication carrier to provide telecommunication services to each lot and arrange provision of necessary conduits and enveloping pipes (to be included for the full length of the shared driveways required by 4.1 (b) above).

### 5. Additional Payment Condition/s (section 130 of the Planning Act 2016)

5.1 The additional payment condition has been imposed as the development will create additional demand on trunk infrastructure which will create additional trunk infrastructure costs for council.

5.2 The developer must pay \$16,960.00 per additional lot as a contribution toward trunk infrastructure with the amount of the contribution increased on 1 July each year in accordance with the increase for the PPI index for the period starting on the day the development approval takes effect, adjusted by reference to the 3-yearly PPI index average to the date of payment.

5.3 The trunk infrastructure for which the payment is required is:

- The trunk transport network servicing the land (\$4,585.00 per additional allotment)
- The trunk open space infrastructure servicing the land (\$4,585.00)
- The trunk water supply infrastructure servicing the land (\$7,790.00 - Mason High Level Zone)

5.4 The developer may elect to provide part of the trunk infrastructure instead of making the payment.

5.5 If the developer elects to provide part of the trunk infrastructure the developer must:

- Discuss with Council's delegated officer the part of the works to be undertaken;
- Obtain the necessary approvals for the part of the works;
- Indemnify the Council in relation to any actions, suits or demands relating to or arising from the works;
- Take out joint insurance in the name of the Council and the developer in the sum of \$20,000,000 in relation to the undertaking of the works;

- Comply with the reasonable direction of Council officers in relation to the completion of the works;
- Complete the works to the standards required by the Council; and
- Complete the works prior to endorsement of the plan of subdivision.

(D) ASSESSMENT MANAGER'S ADVICE

- (a) A number of other charges or payments may be payable as conditions of approval. The applicable fee is set out in Council's Fees & Charges Schedule for each respective financial year.

(b) Water Meters/Water Service Connection

Prior to the water service connection works commencing, a Water Quotation and Connection Request must be lodged with Council. The cost of the required water connection will be determined based upon the assessment of the Water Quotation Request. The Water Quotation Request must be lodged and the required connection fee paid prior to the signing of the survey plan.

(c) Easement Documents

Council has developed standard easement documentation to assist in the drafting of formal easement documents for Council easements. Please contact the Planning Section for more information regarding the drafting of easement documents for Council easements.

(d) Endorsement Fees

Council charges a fee for the endorsement of a Survey Plan, Community Management Statements, easement documents, and covenants. The fee is set out in Council's Fees & Charges Schedule applicable for each respective financial year.

(e) Compliance with applicable codes/policies

The development must be carried out to ensure compliance with the provisions of Council's Local Laws, Planning Scheme Policies, Planning Scheme and Planning Scheme Codes to the extent they have not been varied by a condition of this approval.

(f) Notation on Rates Record

A notation will be placed on Council's Rate record with respect to each lot regarding the following conditions:

- a registered covenant (Lot 9 only)
- an approved building envelope plan (Lots 1 - 4 and 6 - 9 only)
- building on sloped land (greater than 15% grade)
- conditions regarding bushfire management (Lots 2, 3 and 6 - 9 only)
- an approved bushfire management plan (Lots 2, 3 and 6 - 9 only)
- a registered easement over the subject site (Lots 1, 2, 3 and 6 only)
- the standard of any future on-site effluent disposal system

(g) Transportation of Soil

All soil transported to or from the site must be covered to prevent dust or spillage during transport. If soil is tracked or spilt onto the road pavements as a result of works on the subject site, it must be removed prior to the end of the working day and within four (4) hours of a request from a Council Officer.

(h) Environmental Protection and Biodiversity Conservation Act 1999

The applicant is advised that referral may be required under the *Environmental Protection and Biodiversity Conservation Act 1999* if the proposed activities are likely to have a significant impact on a matter of national environmental significance. Further information on these matters can be obtained from [www.environment.gov.au](http://www.environment.gov.au)

(i) Cultural Heritage

In carrying out the activity the applicant must take all reasonable and practicable measures to ensure that no harm is done to Aboriginal cultural heritage (the “cultural heritage duty of care”). The applicant will comply with the cultural heritage duty of care if the applicant acts in accordance with gazetted cultural heritage duty of care guidelines. An assessment of the proposed activity against the duty of care guidelines will determine whether or to what extent Aboriginal cultural heritage may be harmed by the activity. Further information on cultural heritage, together with a copy of the duty of care guidelines and cultural heritage search forms, may be obtained from [www.datsip.qld.gov.au](http://www.datsip.qld.gov.au)

(E) RELEVANT PERIOD

When approval lapses if development not started (s.85)

- Reconfiguring a Lot– four (4) years (starting the day the approval takes effect);

(F) OTHER NECESSARY DEVELOPMENT PERMITS AND/OR COMPLIANCE PERMITS

- Development Permit for Operational Works

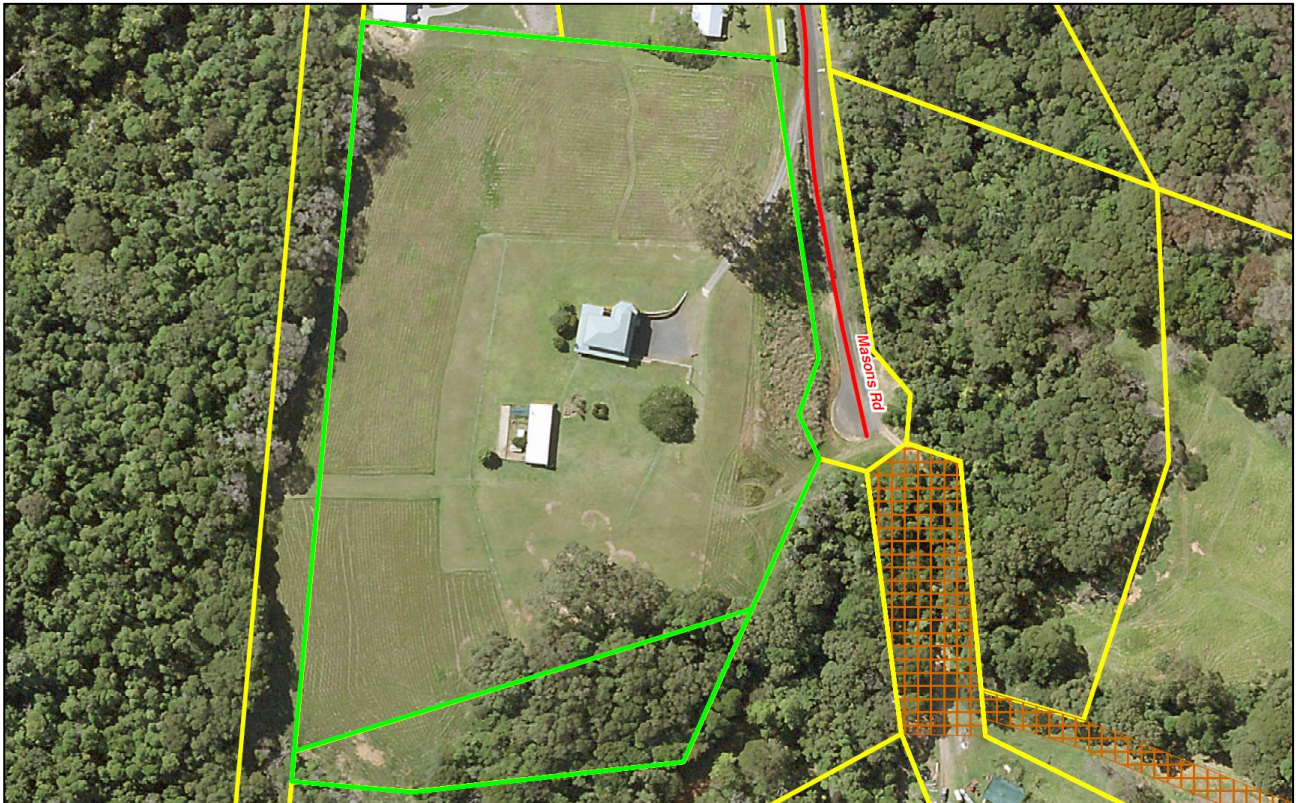
(G) OTHER APPROVALS REQUIRED FROM COUNCIL

- Access approval arising from condition number 4.1 (Not required if carried out at operational works stage).

## THE SITE

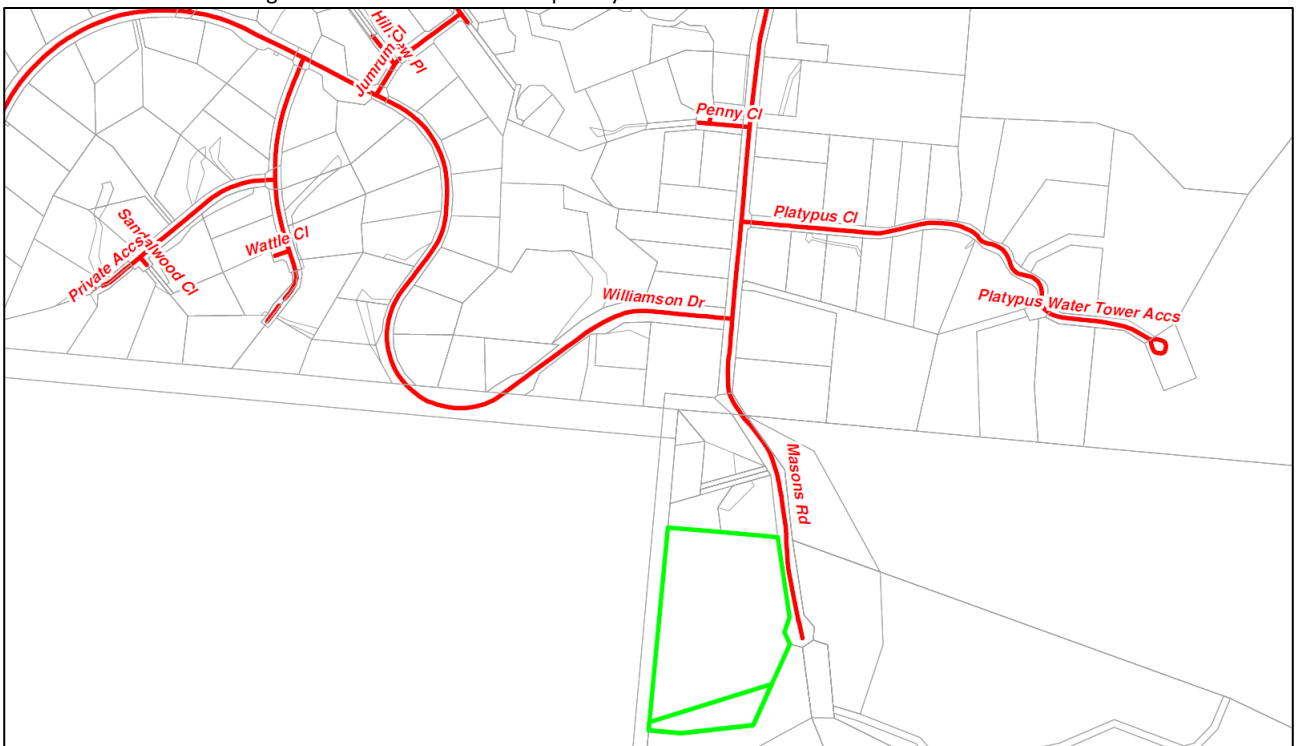
The subject site is situated at 72-76 Masons Road, Kuranda, and is described as Lot 100 on SP202702. The site is generally regular in shape with a total area of 4.426 hectares and is zoned Rural Residential under the Mareeba Shire Council Planning Scheme 2016. The site is not mapped as being situated within subdivision precincts A, B or C. The site contains 150 metres of frontage to Masons Road which is constructed to a bitumen sealed standard for its entire length. The sites frontage to

Masons Road does include layback kerbing for its entire length and the site is accessed via an unsealed crossover in the north-east corner of the site.



Map Disclaimer:

Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) (2009). In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.



Map Disclaimer:

Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) (2009). In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.

The site is improved by a dwelling house, shed and ancillary infrastructure situated towards the centre of the allotment on a slight ridge. The land slopes down from this ridge towards the north, east and southern sides of the allotment. The site has been cleared of all vegetation with the exception of approximately 5,000m<sup>2</sup> of land in the south-east corner of the site which remains covered by mature remnant vegetation. The majority of this remaining vegetation is covered by an environmental covenant (Cov G on SP202702) for conservation purposes.

## **BACKGROUND AND CONTEXT**

Nil

## **PREVIOUS APPLICATIONS & APPROVALS**

### MC2005/2

Council, at its Ordinary Meeting on 19 April 2005, approved an application made by Charles O'Neill Pty Ltd Surveyors on behalf of A & A Salinovic (the landowners) to rezone land described as then Lots 1 on RP732710 and Lot 101 on SP162915, situated at Mason Road, Kuranda from a Rural zoning to a Rural Residential zoning. This approval permitted the change of zone only, and a subsequent application to reconfigure the land was required to actually create the lots.

A further reconfiguration application was lodged over Lot 1 on RP732710 which was subdivided into the 4 rural residential lots situated immediately to the north of the land subject to this application.

Lot 101 on SP162915 was never developed in accordance with rezoning approval MC2005/2. Lot 101 on SP162915 is now described as Lot 100 on SP202702 (the subject land for this application).

## **DESCRIPTION OF PROPOSED DEVELOPMENT**

The development application seeks a Development Permit for Reconfiguring a Lot - Subdivision (1 into 9 Lots) in accordance with the plan shown below and included as **Attachment 1**.





As shown on the above plan, the nine (9) proposed lots will range in size from 3,664m<sup>2</sup> up to 9,590m<sup>2</sup>. The development will be carried out in 2 stages as follows:

#### Stage 1

Stage 1 will create proposed Lots 1 - 5 with the existing dwelling house to be contained within proposed Lot 5. Access to all 5 lots will be gained via a 10m wide access handle to proposed Lot 1 which will be covered by an access and services easement in favour of Lots 2 - 5. 2 other easements are proposed along the northern boundary of Lots 2 and 3 for stormwater drainage purposes.

#### Stage 2

Stage 2 will create proposed Lots 6 - 9. Access to all 4 lots will also be gained via a 10 metre wide access handle to proposed Lot 6 which too will be covered by an access and services easement in favour of Lots 7 - 9.

Both Stage 1 and 2 access handles (covered by the easements) will contain sealed driveways and all lots will include building envelopes as well as electricity and telecommunications supplies and a connection to Council's town water supply.

The building envelope for proposed Lot 9 will ensure that no development will occur over the eastern half of the allotment which remains vegetated, most of which is protected by environmental covenant (Cov G on SP202702).



## REGIONAL PLAN DESIGNATION

The subject site is included within the Regional Landscape and Rural Production Area land use category in the Far North Queensland Regional Plan 2009-2031.

The Regional Plan Map 3- 'Areas of Ecological Significance' also identifies the site as containing:

- *Strategic Rehabilitation Area*

## PLANNING SCHEME DESIGNATIONS

	<b>Land Use Categories</b> <ul style="list-style-type: none"><li>• Rural Residential Area</li></ul>
Strategic Framework:	<b>Natural Environment Elements</b> <ul style="list-style-type: none"><li>• Biodiversity Area</li></ul>
Zone:	Rural Residential Zone
Precinct:	N/A
Overlays:	Bushfire Hazard Overlay Environmental Significance Overlay Hill and Slope Overlay

## RELEVANT PLANNING INSTRUMENTS

Assessment of the proposed development against the relevant planning instruments is summarised as follows:-

### (A) Far North Queensland Regional Plan 2009-2031

Separate assessment against the Regional Plan is not required because the Mareeba Shire Council Planning Scheme appropriately advances the Far North Queensland Regional Plan 2009-2031, as it applies to the planning scheme area.

### (B) State Planning Policy

Separate assessment against the State Planning Policy (SPP) is not required because the Mareeba Shire Council Planning Scheme appropriately integrates all relevant aspects of the SPP.

### (C) Mareeba Shire Council Planning Scheme 2016

#### Strategic Framework

#### **3.3 Settlement pattern and built environment**

##### **3.3.10 Element—Rural residential areas**

##### **3.3.10.1 Specific outcomes**

- (1) *Rural residential development is consolidated within rural residential areas where it will not result in the fragmentation or loss of agricultural areas or biodiversity areas.*

- (2) *Infill development within rural residential areas occurs only where appropriate levels of infrastructure are available and provided, the existing rural living character can be maintained and an activity centre is proximate.*
- (3) *No further subdivision of greater than anticipated density occurs within rural residential areas that are not proximate to an activity centre and its attending physical and social infrastructure.*
- (4) *Rural residential areas across Mareeba Shire are characterised by a range of lot sizes, consistent with the form of historical subdivision in the vicinity of proposed development.*

#### Comment

The subject site is in a rural residential area and is not agricultural land. The site has been cleared of nearly all vegetation with the exception of a portion of remnant vegetation in south-east corner of the site which is protected by an existing environmental covenant. The proposed reconfiguration will not lead to the fragmentation or loss of biodiversity areas.

The proposed development is infill development. The development will be serviced by all infrastructure typically conditioned for rural residential development. The site lies adjacent existing 4,000m<sup>2</sup> rural residential allotments and the size and configuration of the proposed allotments will maintain the existing rural living character.

The proposed development does not conflict with these specific outcomes.

### **3.3.14 Element—Natural hazard mitigation**

#### **3.3.14.1 Specific outcomes**

- (1) *The risk of loss of life and property associated with bushfires, cyclones, flooding, landslides and other weather related events are minimised through the appropriate use of land having regard to its level of susceptibility to the hazard or potential hazard.*
- (2) *Development in an area subject to a natural hazard incorporates appropriate siting and design measures that mitigate risks to infrastructure, buildings and the community.*
- (3) *Development considers the potential for increased occurrence of natural hazards as a result of climate change, including greater frequency of extreme weather events and increased rainfall intensities.*
- (4) *Development incorporates emergency response measures to ensure the impacts of natural hazards can be minimised.*

#### Comment

The majority of the subject land is mapped as being situated within a "potential impact buffer" area for bushfire hazard, and a small portion of the land in the south-east corner is mapped as being situated within a "high potential bushfire intensity" area.

No future building work will occur within the area mapped as high potential bushfire intensity. Furthermore, each lot has a designated building envelope area free from vegetation and each lot

will be connected to Kuranda's town water supply. A condition of approval requires the preparation of a bushfire hazard management plan to be adhered to by future land owners.

Some parts of the subject site are also mapped as "hill and slope areas". Any future building works proposed on this sloped land will require further engineering input and subsequent building pad preparation and/or footings design measures to ensure land slip hazard is appropriately mitigated against.

The proposed development can be conditioned to comply with these specific outcomes.

### **3.4 Natural resources and environment**

#### **3.4.2 Element—Conservation areas**

##### **3.4.2.1 Specific outcomes**

- (1) New development adjacent to conservation areas will:
  - (a) be compatible with natural values; and
  - (b) sensitively located and setback from conservation areas; and
  - (c) ensure no irreparable disturbances to the areas of ecological significance; and
  - (d) mitigate the cumulative impacts of development; and
  - (e) ensures contaminants do not impact conservation areas.

#### Comment

The subject site is situated almost immediately adjacent a conservation area, separated by a 20-metre-wide undeveloped section of road reserve. The subject site has been cleared of nearly all vegetation and any approval will include conditions to ensure that no further clearing occurs on the land.

Through the implementation of building envelopes, future residential development on the proposed lots will be adequately separated from nearby conservation areas.

The proposed development is not likely to impact on nearby conservation areas and is therefore compliant with specific outcome 1.

#### **3.4.4 Element—Biodiversity areas**

##### **3.4.4.1 Specific outcomes**

- (1) *Development avoids adverse impacts on the ecological values of biodiversity areas and where avoidance is not possible the adverse impacts are minimised and, for an area of high ecological significance, no net loss in biodiversity values is achieved.*
- (2) *Development on lots containing biodiversity areas ensures their ongoing protection and retention through application of conservation covenants or dedication for public use.*
- (3) *Biodiversity areas that are considered to be of regional, state or higher levels of significance are awarded levels of protection commensurate with these values.*
- (4) *The ecological values of biodiversity areas which have been degraded are rehabilitated as part of the development, and commensurate with the scale of development.*

- (6) *Endangered and of-concern ecosystems and threatened species habitat including upland refugia ecosystems, wet sclerophyll, and the habitat of endemic species are protected across all land tenures.*

### Comment

The subject site is almost entirely cleared of vegetation with the exception of a small portion of vegetation remaining in the south-east corner of the site. The majority of this vegetation is protected by an existing environmental covenant (Cov G on SP202702). The remaining vegetation in the south-east corner of the site outside the covenant area will be protected from future clearing by condition of approval.

The proposed development is not likely to impact on the biodiversity values on or adjacent the subject site. The development therefore does not conflict with these specific outcomes.

### **Relevant Developments Codes**

The following Development Codes are applicable to the assessment of the application:

- 6.2.10 Rural residential zone code
- 8.2.3 Bushfire hazard overlay code
- 8.2.4 Environmental significance overlay code
- 8.2.8 Hill and slope overlay code
- 9.4.2 Landscaping code
- 9.4.3 Parking and access code
- 9.4.4 Reconfiguring a lot code
- 9.4.5 Works, services and infrastructure code

The application included a planning report and assessment against the planning scheme. An officer assessment has found that the application satisfies the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) of the relevant codes set out below, provided reasonable and relevant conditions are attached to any approval.

Relevant Codes	Comments
Rural Residential Zone Code	The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code.
Bushfire Hazard Overlay Code	The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code.
Environmental Significance Overlay Code	The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code.
Hill and Slope Overlay Code	The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code.

Landscaping Code	The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code.
Parking and Access Code	The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code.
Reconfiguring a Lot Code	<p>The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code apart from the following:</p> <ul style="list-style-type: none"> <li>• Acceptable Outcome AO1.1</li> <li>• Performance Outcome PO13 (no acceptable outcome)</li> </ul> <p>The applicant has demonstrated compliance with the higher order Performance Outcome PO1 and in the case of PO13 and AO13, demonstrated compliance with the higher order Overall Outcomes of the Reconfiguring a Lot code.</p> <p>Further detail is provided in the planning discussion section of report.</p>
Works, Services and Infrastructure Code	The application can be conditioned to comply with the relevant acceptable outcomes (or performance outcomes where no acceptable outcome is provided) contained within the code.

#### **(D) Planning Scheme Policies/Infrastructure Charges Plan**

The following planning scheme policies are relevant to the application:

Planning Scheme Policy 4 - FNQROC Regional Development Manual

A condition will be attached to any approval requiring all development works be designed and constructed in accordance with FNQROC Development Manual standards.

#### **(E) Additional Trunk Infrastructure Condition**

The subject land is located outside the identified Priority Infrastructure Area (PIA).

Section 130 of the Planning Act 2016 allows Council to condition additional trunk infrastructure outside the PIA.

The development, which will create three (8) additional rural residential lots, is predicted to place additional demand on Council's trunk water supply infrastructure, trunk transport infrastructure and trunk open space infrastructure.

The developer must pay a one-off payment of **\$16,960.00** (per additional lot) as a contribution toward trunk infrastructure with the amount of the contribution increased on 1 July each year in accordance with the increase for the PPI index for the period starting on the day the development

approval takes effect, adjusted by reference to the 3-yearly PPI index average to the date of payment.

The trunk infrastructure for which the payment is required is:

- The trunk transport network servicing the land (\$4,585.00 per additional lot)
- The trunk water supply infrastructure servicing the land (\$7,790.00 per additional lot)
- The trunk open space infrastructure servicing the land (\$4,585.00 per additional lot)

## REFERRAL AGENCIES

This application did not trigger referral to a any Referral Agencies.

## Internal Consultation

Development Engineering

## PUBLIC NOTIFICATION

The development proposal was placed on public notification from 11 October 2018 to 1 November 2018. The applicant submitted the notice of compliance on 2 November 2018 advising that the public notification requirements were carried out in accordance with the requirements of the Act.

Nine (9) properly made submissions were received, all of which objected to the proposed development.

One (1) submission was received outside the public notification period and is therefore deemed "not properly made" and has not been considered.

The grounds for objection/support are summarised and commented on below:

Grounds for objection /support	Comment
The size of the lots proposed is inconsistent with lots in the vicinity of the site and will impact on the residential character of the area.	The smallest of the 9 lots proposed has an area of 3,664m <sup>2</sup> . Most lots in the nearby Kuranda Springs Estate are approximately 4,000m <sup>2</sup> in size, however some lots are below 4,000m <sup>2</sup> with some as small as 1,700m <sup>2</sup> . The lots proposed are not inconsistent with existing nearby rural residential development and the proposal is not likely to impact on the residential character of the area.
Stormwater runoff from the proposed development will impact on adjoining properties.	A stormwater management plan designed by an RPEQ is required to be submitted to Council for review and approval prior to any operational works being carried out on site. Easements along the northern boundary of the land are proposed to convey overland flow from the site to Masons Road which is a legal point of discharge.  All stormwater collected along the shared access driveways will also be discharged to Masons Road.  The development has been designed so that stormwater discharge will not impact adjoining properties.
The proposed development is inconsistent with Performance Outcome PO13 of the	Refer to planning discussion section of report for commentary on non-compliance with PO13.

Reconfiguring a Lot Code which discourages the creation of new lots in the Rural Residential zone outside "subdivision precincts" A, B and C.	
There appears to be no reason why Council should allow the proposed development to occur given its zoning.	Refer to planning discussion section of report for commentary on non-compliance with PO13.
The subject land lies within a mapped ecological corridor and its protection from development is vitally important to the functioning of the corridor.	Although it is acknowledge that the site does lie within a mapped environmental corridor, its functionality as a portion of the corridor is questionable given the fact that the land is almost entirely cleared. At present, the landowner could erect boundary fencing around the perimeter of the site without the need for Council approval. The proposed development is not likely to impact on wildlife connectivity especially considering the presence of protected State land on either side of the site as well as surrounding large rural holdings that are likely to remain undeveloped due to environmental and slope constraints.
Despite the property being located in an environmentally sensitive area, no request for a supportive ecological assessment report has been made.	A supporting ecological assessment is not a mandatory requirement for development situated within an ecological corridor or habitat linkage (refer to Notation below Performance Outcome PO8 of the Environmental Significance Overlay Code). Council planning officers did not consider it necessary to request an ecological assessment given the lack of environmental constraints on the subject land.
Subdividing the property into two equally sized allotments would be more appropriate for the area.	Council officers are required to assess the scale of development applied for. In its current extent, it is considered that there are reasonable grounds to approve the development.
Council should condition the revegetation of the land as part of any approval in keeping with the Environmental Significance Overlay code which requires development to protect and enhance a development sites environmental values.	It is not considered reasonable to require future landowners to revegetate their allotments. Each proposed lot will contain a building envelope which will limit the siting of future improvements on each lot. It is likely that future landowners will carry out revegetation of their individual lots on their own accord.
The subject land is situated directly adjacent to known Cassowary and Kuranda Tree Frog habitat which makes the development a matter of National significance as Cassowaries and the Kuranda Tree Frog are threatened species under the EPBC Act.	The EPBC Act is administered by the Federal Department of Environment and Energy. The applicant/developer is required to determine whether the application requires referral under the EPBC Act (see Advice clause (h) in the Officer's Recommendation section of this report). This process occurs outside this development assessment process.
If approved, it is requested that conditions be attached to ensure that no fencing be erected except around building envelopes in order to promote wildlife movement.	This condition would be considered unreasonable. It is likely that the Estate proposed would be developed in a similar manner to surrounding rural residential estates with the majority of landowner not having installed boundary fencing.
If approved, it is requested that covenants be placed over the land to prohibit the keeping of domestic cats and dogs.	This is considered unreasonable.
The proposed development will set a precedent for future small lot subdivision in the area.	The subject site is unique in that it is almost entirely free from environmental constraint. It is unlikely that any further subdivision will occur in the area considering the constraints that exist over most lots in the area (environmental, slope).
The proposed development will increase the amount of traffic using an already strained road network.	Masons Road is constructed to a reasonable standard. The applicant/developer is required to pay a contribution towards road upgrades which will be used for future upgrades of Masons Road. That section of Masons Road fronting the subject land is

	has been widened and kerbing has been installed on the development side of the road.
--	--

## Submitters

Name of Principal submitter	Address
1. Norman Guy & Pauline Taylor-Guy	66B Masons Road, Kuranda / PO Box 536 Kuranda QLD 4881
2. Nadine O'Brien	345 Fantin Road, Koah QLD 4881
3. Gaby Schierenbeck	PO Box 741 Kuranda QLD 4881
4. Janet Dean	64-66 Masons Road, Kuranda QLD 4881
5. Graham Fowles	66A Masons Road, Kuranda QLD 4881
6. Kuranda Regional Planning Group C/- Jo Martin	<a href="mailto:ojo@ojoonline.com">ojo@ojoonline.com</a> / <a href="mailto:info@kurandaregion.org">info@kurandaregion.org</a>
7. Sarah Isaacs	345 Fantin Road, Koah QLD 4881
8. Kuranda Envirocare C/- Cathy Retter	PO Box 494 Kuranda QLD 4881
9. Kuranda Conservation Community Nursery C/- Jax Bergersen	1 Pademelon Lane, Kuranda QLD 4881

## PLANNING DISCUSSION

Compliance with the Performance Outcomes and Purpose of the Reconfiguring a Lot Code is summarised as follows:

### Reconfiguring a Lot Code

#### **PO1**

*Lots include an area and frontage that:*

- (a) *is consistent with the design of lots in the surrounding area;*
- (b) *allows the desired amenity of the zone to be achieved;*
- (c) *is able to accommodate all buildings, structures and works associated with the intended land use;*
- (d) *allow the site to be provided with sufficient access;*
- (e) *considers the proximity of the land to:*
  - (i) *centres;*
  - (ii) *public transport services; and*
  - (iii) *open space; and*
- (f) *allows for the protection of environmental features; and*
- (g) *accommodates site constraints.*

#### **AO1.1**

*Lots provide a minimum area and frontage in accordance with **Table 9.4.4.3B**.*

### Comment

Table 9.4.4.3B does not nominate a minimum area and frontage for rural residential allotments that are located outside a precinct.

Assessment is therefore necessary against PO1 and the criteria it nominates:

- (a) The proposed lots will be consistent with the design of lots in the surrounding area.
- (b) The proposed lots allow the desired amenity of the zone to be achieved.



- (c) Each of the proposed lots is of sufficient size and shape to be able to accommodate all buildings, structures and works associated with the intended land use;
- (d) Masons Road is constructed to a reasonable standard and with and includes layback kerbing for the full frontage of the site. The proposed lots will be accessed via 2 shared driveways which will be constructed to an asphalt/concrete standard and will also include kerbing. Each driveway will be covered by reciprocal access and services easements.
- (e) The subject land is situated immediately adjacent existing rural residential development and in proximity to the large "Kuranda Springs" Estate. The site is linked to Kuranda's urban centre by a reasonably constructed road network.
- (f) Building envelopes will ensure future development on site does not result in any further vegetation clearing. Minimal environmental impact is envisaged.
- (g) The proposed lot layout reasonably responds to the site's constraints.

The development complies with PO1.

**PO13**

*New lots are only created in the Rural residential zone where land is located within the 4,000m<sup>2</sup> precinct, the 1 hectare precinct or the 2 hectare precinct.*

**AO13**

*No acceptable outcome is provided.*

Comment

The proposed development conflicts with PO13 as the subject land is not located within a rural residential zone precinct.

An assessment of the development's consistency with the purpose and overall outcomes contained within the Reconfiguring a Lot Code is discussed below:

*The purpose of the Reconfiguring a Lot code will be achieved through the following overall outcomes:*

- (a) *Subdivision of land achieves the efficient use of land and the efficient provision of infrastructure and transport services;*

The site is already serviced by all infrastructure typically conditioned for rural residential development. This infrastructure will be upgraded and extended to service each proposed allotment and will include electricity and telecommunications connections and town water supply.

- (b) *Lots are of a suitable size and shape for the intended or potential use having regard to the purpose and overall outcomes of the relevant zone or precinct;*

The size and shape of the proposed allotments are consistent with the Rural Residential zone - 4,000m<sup>2</sup> precinct. The subject land is within the Rural Residential zone, but outside the 4,000m<sup>2</sup> precinct.

The subject land is situated immediately adjacent existing 4,000m<sup>2</sup> rural residential development. Each lot proposed will be of a suitable size and shape to accommodate future residential development.

- (c) *Subdivision of land creates lots with sufficient area and dimensions to accommodate the ultimate use, meet user requirements, protect environmental features and account for site constraints;*

The ultimate use of each lot is a single dwelling house with the potential for some ancillary domestic outbuildings. Proposed Lot 5 already contains a dwelling house.

All other proposed Lots have sufficient area and dimensions to accommodate a future dwelling house and avoid/protect environmental features. A building envelope is nominated for each lot to ensure future development is appropriately separated from any remaining environmental features.

- (d) *A range and mix of lot sizes is provided to facilitate a variety of industry and housing types;*

The proposed development would add to the range of lot sizes available.

- (e) *Subdivision design incorporates a road network that provides connectivity and circulation for vehicles and provide safe and efficient access for pedestrians, cyclists and public transport;*

Not applicable. The proposed development does not require an extension to the road network.

- (f) *Subdivision design provides opportunities for walking and cycling for recreation and as alternative methods of travel;*

The subject site is situated immediately adjacent established rural residential estates and is connected to Kuranda's urban centre by a reasonable constructed road network.

- (g) *Subdivision of land provides and integrates a range of functional parkland, including local and district parks and open space links for the use and enjoyment of the residents of the locality and the shire;*

The subject land is located a short distance from existing parklands and areas of public open space which include the Barron Falls and Kuranda Recreation Centre. The subject land also has convenient access to existing local/district parks and facilities found throughout the Kuranda district.

Due to the proposed developments relatively small scale and the adequate supply of existing parkland and facilities, a monetary infrastructure contribution is considered to be appropriate.

- (h) *Subdivision of land contributes to an open space network that achieves connectivity along riparian corridors and between areas with conservation values;*

A riparian corridor exists in the south-east corner of the site which is currently protected by an Environmental Covenant. The site contains no other riparian corridors.

- (i) *Subdivision within the Rural zone maintains rural landholdings in viable parcels;*

Not applicable. The subject land is within the Rural Residential zone, not the Rural zone.

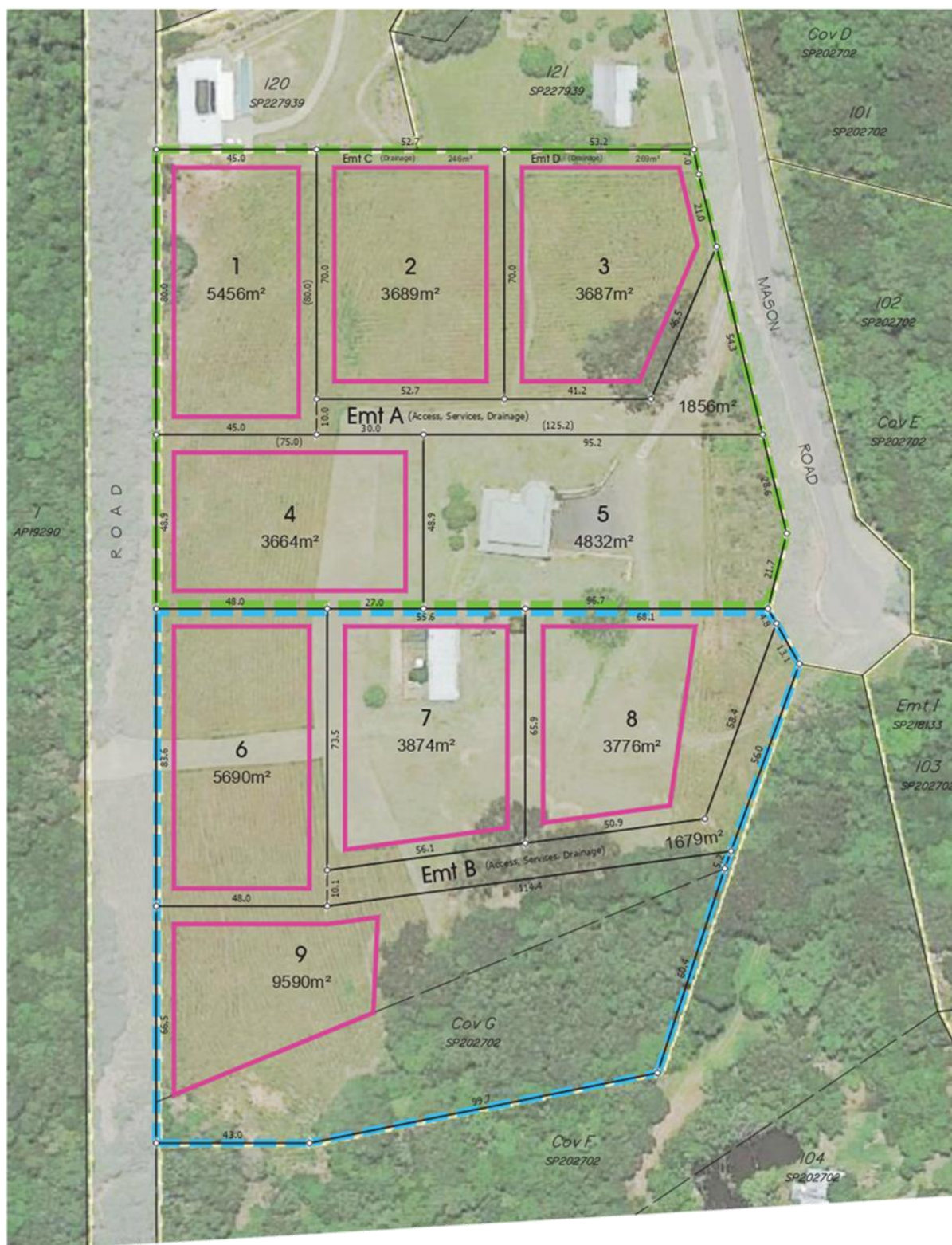
- (j) *Land in historical townships is not reconfigured to be used for urban purposes; and*

Not applicable. The subject land is not within a historical township for the purpose of the planning scheme.

- (k) *Residential subdivision and greenfield development is designed to consider and respect:*

- i. topography;*
- ii. climate responsive design and solar orientation;*
- iii. efficient and sustainable infrastructure provision;*
- iv. environmental values;*
- v. water sensitive urban design;*
- vi. good quality agricultural land; and*
- vii. the character and scale of surrounding development.*

The proposed lot layout appropriately and efficiently responds to the relevant identified criteria.



0 10 20m
   
 This plan is conceptual and for discussion purposes only. All areas, dimensions and land uses are preliminary, subject to investigation, survey, engineering, and Local Authority and Agency approvals.

**PROPOSED RECONFIGURATION**  
 Lots 1-9 & Emts A - D  
 Cancelling Lot 100 on SP202702  
 72-76 Masons Road, Kuranda

Date: 26th July 2018  
 Scale: 1:1000 @A3  
 Drawn: WCHO  
 Job No: 34579/1-1  
 Plan No: 34579/001A  
 surveying | town planning | project management | mapping and GIS

**From:** Pauline Taylor  
**Sent:** 29 Oct 2018 15:00:22 +1000  
**To:** Info (Shared)  
**Subject:** RAL/18/0029 - Pauline Taylor Guy and Norman Guy submit objection to development application - Lot 100 SP202702  
**Attachments:** response to Masons Road planning application.pdf

Dear Mr Ewin, please find attached our objection to the above planning application. Please can you acknowledge receipt of this email.

--

Warm Regards

Professor Pauline Taylor-Guy  
[www.linkedin.com/in/pauline-taylor-guy-23350423](http://www.linkedin.com/in/pauline-taylor-guy-23350423)

66b Masons Road  
PO Box 536  
Kuranda 4881  
[drpaulinettaylor@gmail.com](mailto:drpaulinettaylor@gmail.com)  
[normanguy@iprimus.com.au](mailto:normanguy@iprimus.com.au)  
**October 28 2018**

Ref: RAL/18/0029  
Attn: Mr Carl Ewin

Dear Mr Ewin

We are the owners of the abovementioned property adjoining the proposed development. We wish to submit our strong objection to the proposal as lodged with Mareeba Shire Council for 72-76 Masons Road Kuranda.

There are two main areas of objection/concern:

**1. The size of the proposed lots in the subdivision**

Specifically, our objection refers to the fact that the density of the proposed development in its current form with the majority of blocks (6/9 less than 4000m<sup>2</sup>) will significantly affect the residential character of the area, is not consistent with acceptable development of this area and is not of a scale and nature that contributes to the proper and orderly development of the locality.

Our purchase of land and subsequent build on Lot 120 (now 66b) was predicated on the fact that any subsequent development would be within the constraints and character of rural/residential land development. This was a significant factor in our purchase of Lot 120 (66b). The current proposal is of a density which is not consistent with the current character of the locality.

Further, this proposed number and area of the 9 blocks is not at all consistent with the four blocks subdivided by the owner in his first redevelopment of the land (66a, 66b, 66c and 66d) all of which exceed 4000m<sup>2</sup>. The current proposal sees six of the nine blocks proposed less than 4000m<sup>2</sup>. This is clearly inconsistent not only with the immediate proximal area but also of all development around Williamson Drive, Platypus Close and Masons Road. Areas such as Williamson, as noted even in the application fall within the 4000m<sup>2</sup>, one and two hectare precincts. This makes the current proposal even more contrary to the current character of the entire area.

**2. The lack of consideration in the planning proposal of known issues due to stormwater runoff on the current land profile.**

We note that the water management plan for the development meets **minimal** standards only. This will not be appropriate to the development. We also note that no account whatsoever has been made in the proposal of a known significant stormwater runoff issue which runs across two proposed blocks (1 and 2) into Lot 120 (66b). This issue has required our cutting of a V drain and the digging of water runoff trenches to avoid serious erosion of the access road to 66a, b, c and d and flooding to block 66d in the rainy season. Any alteration to the profile of the land in the areas proposed for Lots 1 and 2 will impact adversely on blocks 66a, b, c and d. Storm water runoff in this area requires very careful management.

Yours Sincerely,

Norman Guy Pauline Taylor-Guy

**From:** nadine O'Brien  
**Sent:** 29 Oct 2018 22:43:24 +1000  
**To:** Info (Shared)  
**Subject:** RAL/18/0029 - New Submission - Lot 100 SP202702 - 72-76 Masons Road Kuranda  
**Attachments:** Submission RAL180029.pdf

To the assessment manager

Please find attached submission to RAL180029 reconfiguring a lot/subdivision of 1 lot into 9 lots - Lot 100 at SP202702 at 72-76 Masons Road, Kuranda.

regards  
Nadine O'Brien  
345 Fantin Road  
Koah  
QLD 4881



Submission to RAL180029 Reconfiguring a lot/subdivision of 1 lot into 9 lots - Lot 100 at SP202702 at 72-76 Masons Road, Kuranda

To the assessment manager

The land proposed for subdivision is zones general rural residential land and lies outside the rural residential land zones A,B and C.

The near new MSC2016 planning scheme allows precinct A to be subdivided into 4000 square metre lots. Precinct B allows subdivision into 1 hectare lots and precinct C into 2 hectare lots. Those subdivisions only require code assessment.

The general rural residential zoned areas, not really intended to be further subdivided under the MSC2016 plan, require impact assessment, if an application for subdivision is made.

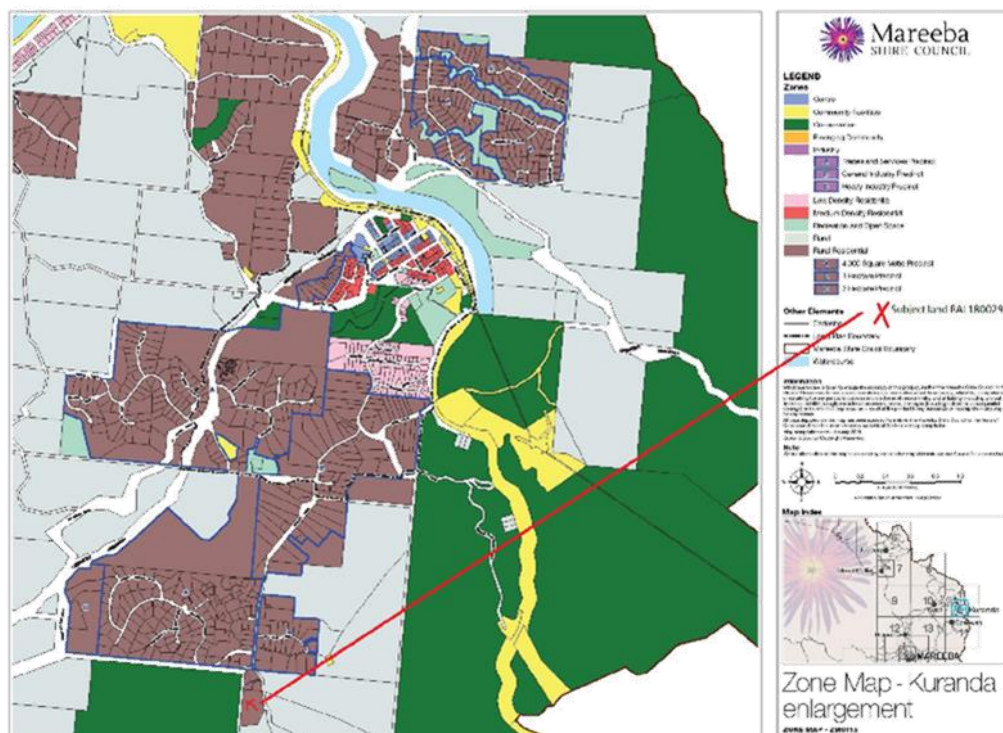
The subsequent land is bordered on the east by conservation land.

The south and west is bordered by rural zoned land.

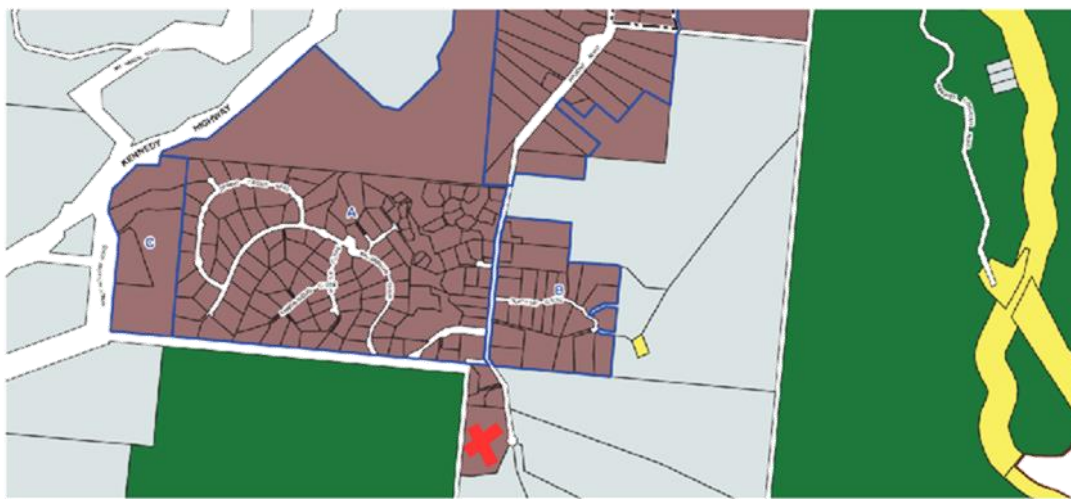
While the north borders more general rural residential zoned land.

In fact 4 blocks of general rural residential zoned land lie between the subsequent land and the next rural zoned A and B lots.

There appears to be no logical reason why subdivision into small parcels, consistent with the rural residential A zoned land, should be allowed in the general rural residential zone.

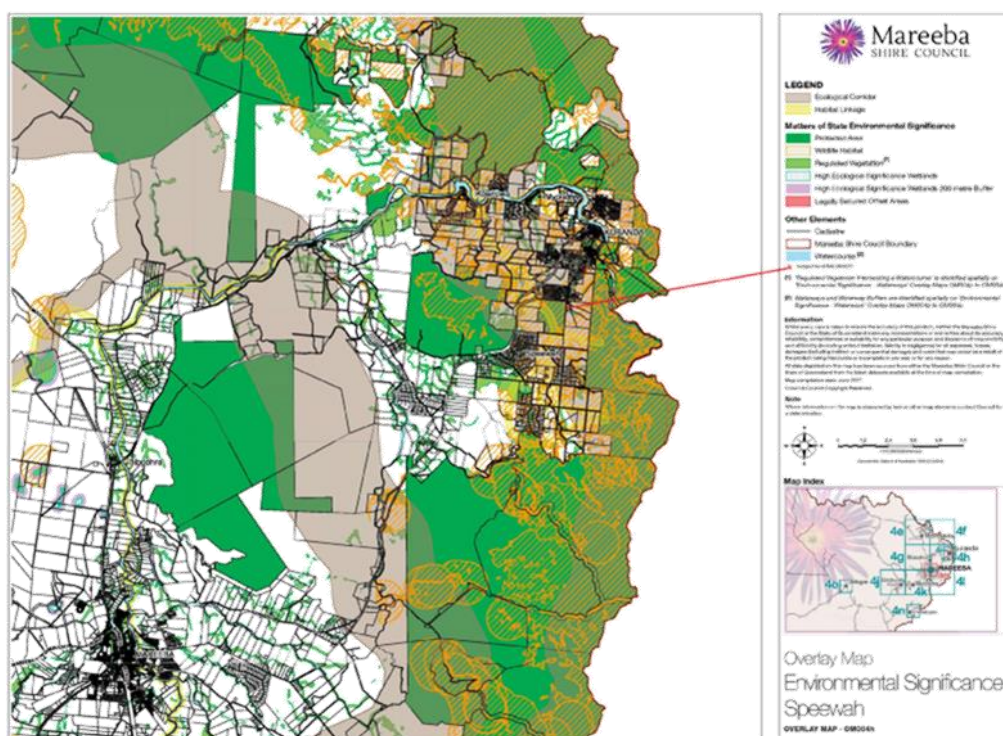


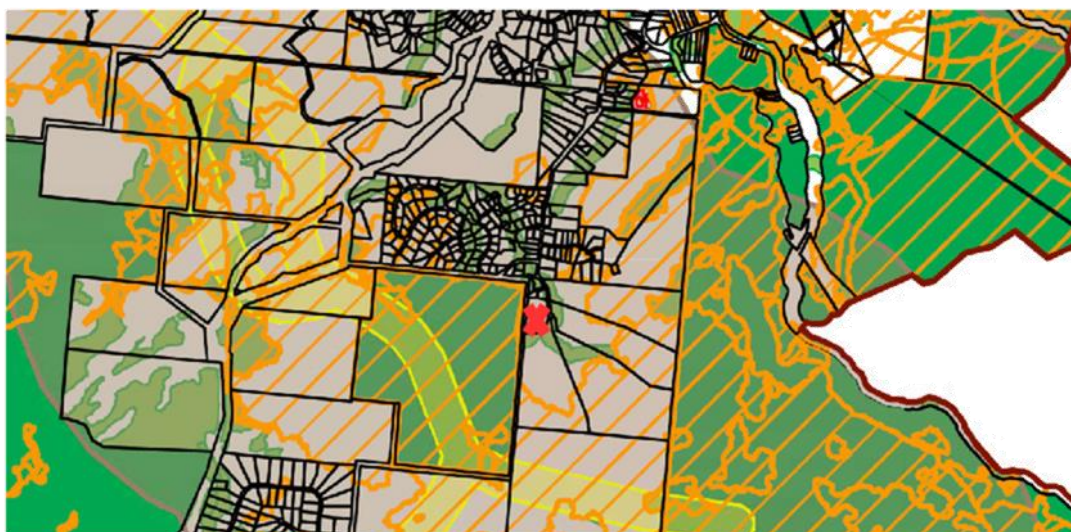




*Enlarged section of MSC2016 zoning map with a red cross marking the subject land*

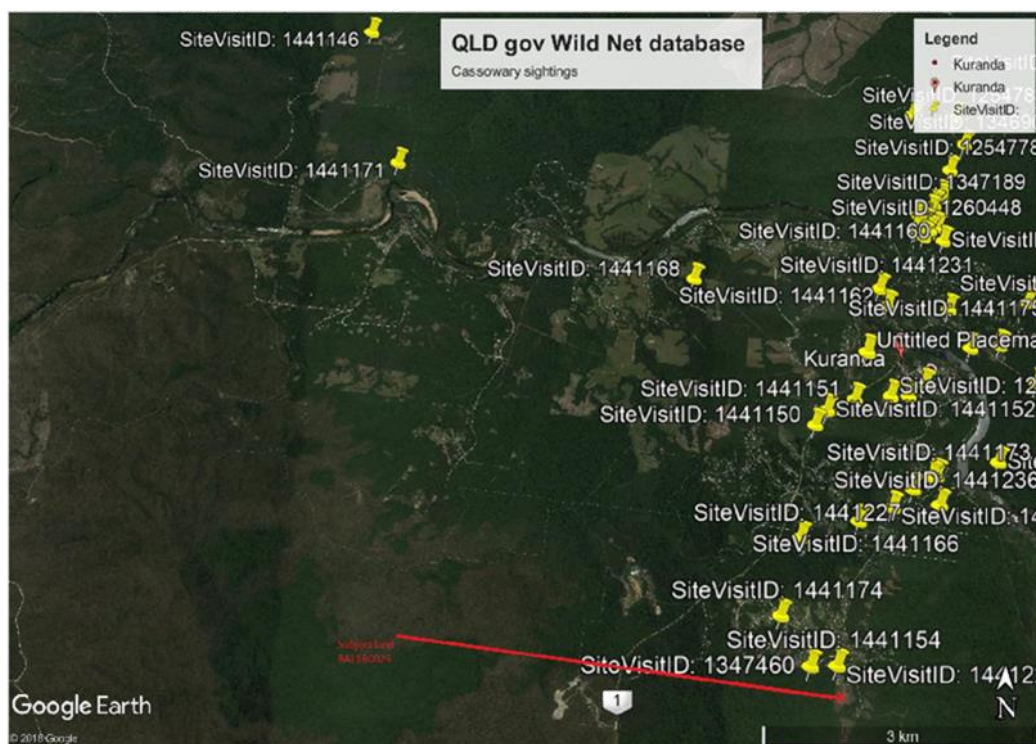
The land proposed for subdivision, lies entirely in an ecological corridor, as per MSC2016 plan environmental significant overlay code mapping. Due to its location and despite the property being cleared of trees, it is vitally important as a functioning ecological corridor.





*Enlarged section of MSC2016 environmental significance map with a red cross marking the subject land*

The property is bordered mostly by forested land, much of it mapped essential Cassowary habitat. The QLD gov WildNet mapping(see below), showing Cassowary sightings within a few hundred metres away from the property proves the above made points.





Despite the property being located in an environmentally sensitive area, no request for a supporting ecological assessment report has been made.

Under these circumstances, I request that at the most subdivision into two equally sized blocks be allowed.

This size is more appropriate for the general rural residential zoned land.

I also urge Council to use the opportunity and condition an approval with the re vegetation of the land.

Further conditions should include, fencing being limited to the building envelopes and no dogs and cats be allowed.

These conditions are consistent with the MSC2016 plan, which in the environmental significance overlay code requires that development in rural residential zoned land protects and enhances matters of environmental significance.

This includes ecological corridors and connectivity.

#### 8.2.4 Environmental significance overlay code

##### 8.2.4.1 Application

- (1) This code applies to assessing development where:
  - (a) land the subject of development is affected by a constraint category identified on the **Environmental significance overlay maps (OM-004a-z)**; and
  - (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Biodiversity and Water quality are appropriately reflected in Overlay Map 4 and is required to be mapped by State Government in response to Environment and Heritage State Interests.

##### 8.2.4.2 Purpose

- (1) The purpose of the Environmental significance overlay code is to identify and protect matters of environmental significance, which include matters of state environmental significance (MSES) as defined under the state planning policy.

The Environmental significance overlay code ensures that:

- (a) waterways and high ecological significance wetlands are protected and enhanced to maintain ecosystem services and hydrological processes and provide aquatic habitat for flora and fauna; and
  - (b) the environmental values of regulated vegetation, wildlife habitat, protected areas and legally secured offset areas are protected and managed.
- (2) The purpose of the code will be achieved through the following overall outcomes:
    - (a) the biodiversity values, ecosystem services and climate change resilience of areas of environmental significance are protected, managed, enhanced and rehabilitated;
    - (b) the biodiversity values of protected areas and legally secured offset areas are protected from development unless overriding community need is demonstrated;
    - (c) development is located, designed and managed to minimise the edge effects of development on areas of regulated vegetation and wildlife habitat;
    - (d) areas of regulated vegetation and wildlife habitat are managed to minimise biodiversity losses;
    - (e) development maintains, protects and enhances a regional network of vegetated corridors that assist in wildlife movement and contribute to the maintenance of habitat and biological diversity;
    - (f) development is appropriately setback from waterways and high ecological significance wetlands to minimise direct and indirect impacts on water quality and biodiversity; and
    - (g) riparian vegetation and vegetation associated with high ecological significance wetlands is protected and enhanced to improve water quality and natural

Performance outcomes	Acceptable outcomes
<b>Ecological corridors and Habitat linkages</b>	
<p><b>PO8</b> Development located:</p> <ul style="list-style-type: none"> <li>(a) in the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone or Rural residential zone; and</li> <li>(b) within an 'Ecological corridor' or a 'Habitat linkage' identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b></li> </ul> <p>does not compromise the provision of habitat connectivity of the corridor/linkage, having regard to:</p> <ul style="list-style-type: none"> <li>(a) the environmental values of the area of the site identified in the 'Ecological corridor' or 'Habitat linkage';</li> <li>(b) the environmental values of adjoining and nearby land within the 'Ecological corridor' or 'Habitat linkage';</li> <li>(c) the extent of any modification proposed to the natural environment including (but not limited to) vegetation and topography;</li> <li>(d) the location and design of proposed improvements that may impact on the functions of the 'Ecological corridor' or 'Habitat linkage' including (but not limited to) buildings, structures, fences, lighting, vehicle movement areas and infrastructure services; and</li> <li>(e) the ability for the 'Ecological corridor' or 'Habitat linkage' to be enhanced to improve ecological connectivity.</li> </ul> <p><small>Note—A supporting Ecological Assessment Report prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports may be appropriate to demonstrate compliance with PO8.</small></p>	<p><b>AO8</b> No acceptable outcome is provided</p>

Nadine O'Brien  
345 Fantin Road  
Koah  
QLD 4881

29 October 2018

nadine\_obrien@yahoo.com.au



**From:** Gaby S  
**Sent:** 30 Oct 2018 11:29:15 +1000  
**To:** Info (Shared)  
**Subject:** RAL/18/0029 - New Submission - Gaby Schierenbeck  
**Attachments:** Submission RAL180029 Masons Road.pdf

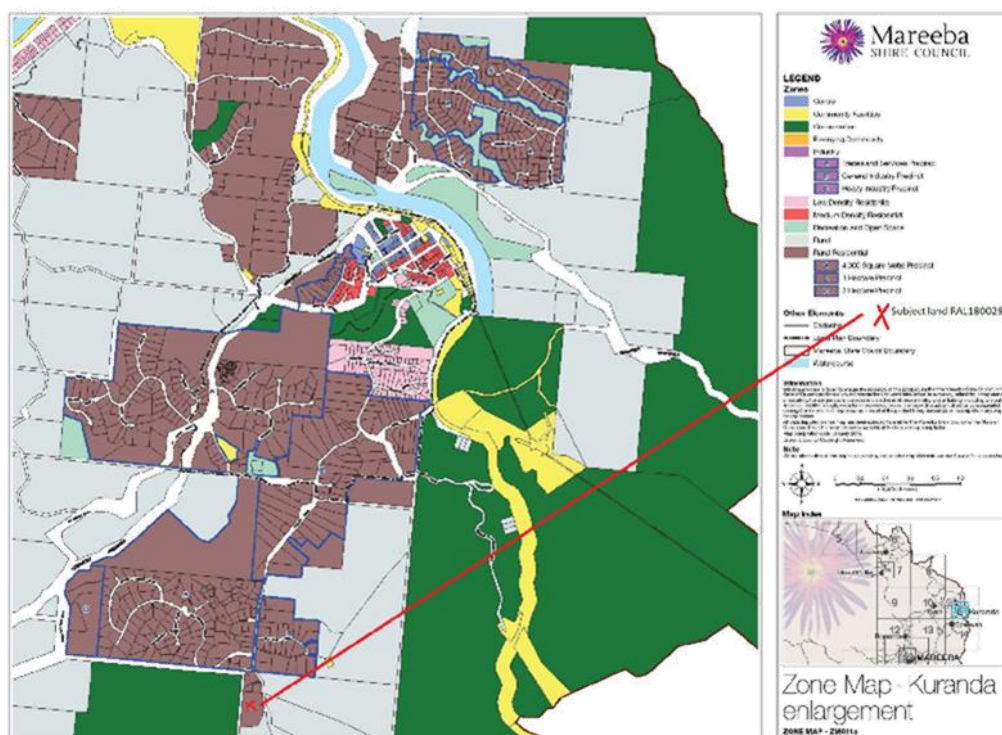
Please find attached submission RAL180029

Regards

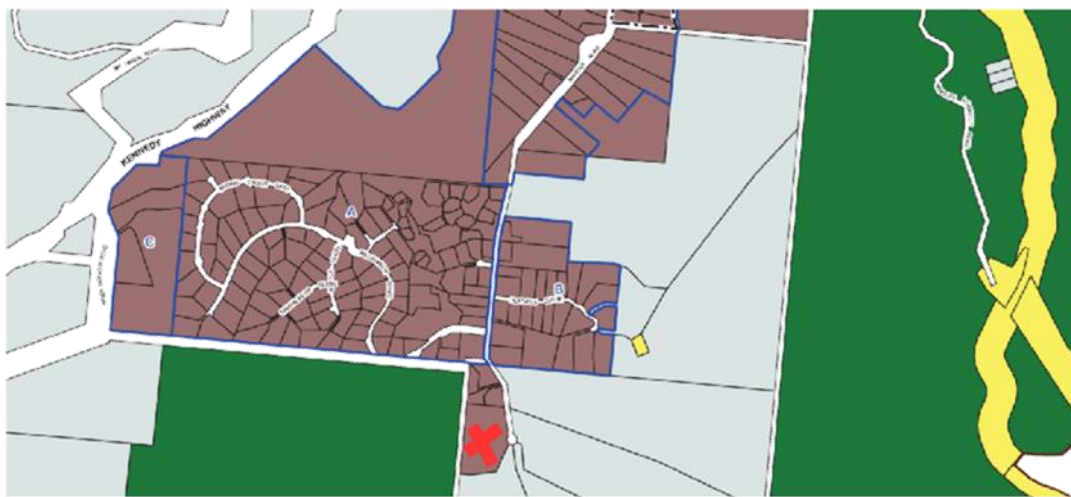
Gaby Schierenbeck

Document Set ID: 3468250  
Version: 1 Version Date: 30/10/2018

There appears to be no logical reason why subdivision into small parcels, consistent with the rural residential A zoned land, should be allowed in the general rural residential zone.

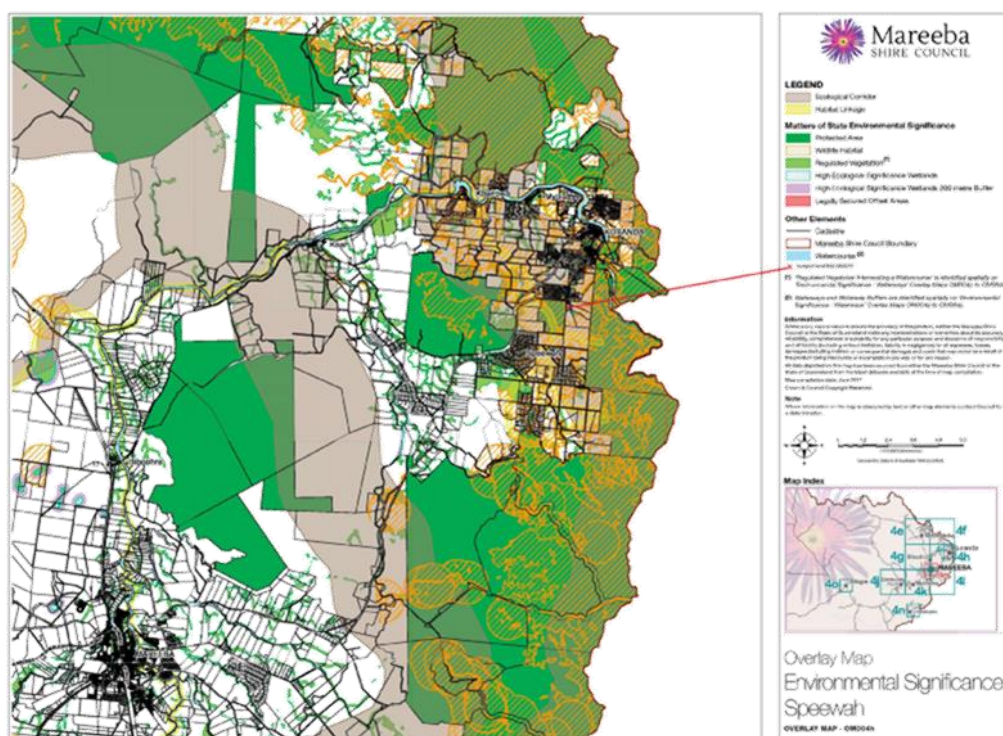






Enlarged section of MSC2016 zoning map with a red cross marking the subject land

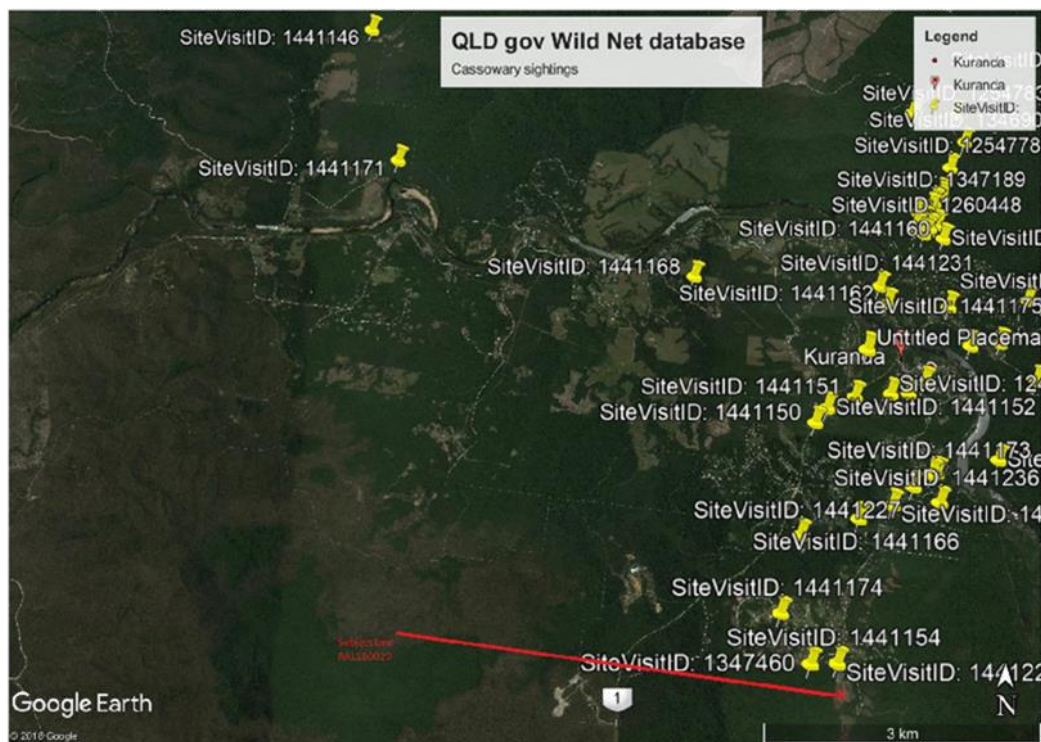
The land proposed for subdivision, lies entirely in an ecological corridor, as per MSC2016 plan environmental significant overlay code mapping. Due to its location and despite the property being cleared of trees, it is vitally important as a functioning ecological corridor.





*Enlarged section of MSC2016 environmental significance map with a red cross marking the subject land*

The property is bordered mostly by forested land, much of it mapped essential Cassowary habitat. The QLD gov WildNet mapping(see below), showing Cassowary sightings within a few hundred metres away from the property proves the above made points.





Despite the property being located in an environmentally sensitive area, no request for a supporting ecological assessment report has been made.

Under these circumstances, I request that at the most subdivision into two equally sized blocks be allowed.

This size is more appropriate for the general rural residential zoned land.

I also urge Council to use the opportunity and condition an approval with the re vegetation of the land.

Further conditions should include, fencing being limited to the building envelopes and no dogs and cats be allowed.

These conditions are consistent with the MSC2016 plan, which in the environmental significance overlay code requires that development in rural residential zoned land protects and enhances matters of environmental significance.

This includes ecological corridors and connectivity.

#### 8.2.4 Environmental significance overlay code

##### 8.2.4.1 Application

- (1) This code applies to assessing development where:
  - (a) land the subject of development is affected by a constraint category identified on the **Environmental significance overlay maps (OM-004a-z)**; and
  - (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Biodiversity and Water quality are appropriately reflected in Overlay Map 4 and is required to be mapped by State Government in response to Environment and Heritage State Interests.

##### 8.2.4.2 Purpose

- (1) The purpose of the Environmental significance overlay code is to identify and protect matters of environmental significance, which include matters of state environmental significance (MSES) as defined under the state planning policy.
 

The Environmental significance overlay code ensures that:

  - (a) waterways and high ecological significance wetlands are protected and enhanced to maintain ecosystem services and hydrological processes and provide aquatic habitat for flora and fauna; and
  - (b) the environmental values of regulated vegetation, wildlife habitat, protected areas and legally secured offset areas are protected and managed.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) the biodiversity values, ecosystem services and climate change resilience of areas of environmental significance are protected, managed, enhanced and rehabilitated;
  - (b) the biodiversity values of protected areas and legally secured offset areas are protected from development unless overriding community need is demonstrated;
  - (c) development is located, designed and managed to minimise the edge effects of development on areas of regulated vegetation and wildlife habitat;
  - (d) areas of regulated vegetation and wildlife habitat are managed to minimise biodiversity losses;
  - (e) development maintains, protects and enhances a regional network of vegetated corridors that assist in wildlife movement and contribute to the maintenance of habitat and biological diversity;
  - (f) development is appropriately setback from waterways and high ecological significance wetlands to minimise direct and indirect impacts on water quality and biodiversity; and
  - (g) riparian vegetation and vegetation associated with high ecological significance wetlands is protected and enhanced to improve water quality and natural

Performance outcomes	Acceptable outcomes
<b>Ecological corridors and Habitat linkages</b>	
<p><b>PO8</b> Development located:</p> <ul style="list-style-type: none"> <li>(a) in the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone or Rural residential zone; and</li> <li>(b) within an 'Ecological corridor' or a 'Habitat linkage' identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b></li> </ul> <p>does not compromise the provision of habitat connectivity of the corridor/linkage, having regard to:</p> <ul style="list-style-type: none"> <li>(a) the environmental values of the area of the site identified in the 'Ecological corridor' or 'Habitat linkage';</li> <li>(b) the environmental values of adjoining and nearby land within the 'Ecological corridor' or 'Habitat linkage';</li> <li>(c) the extent of any modification proposed to the natural environment including (but not limited to) vegetation and topography;</li> <li>(d) the location and design of proposed improvements that may impact on the functions of the 'Ecological corridor' or 'Habitat linkage' including (but not limited to) buildings, structures, fences, lighting, vehicle movement areas and infrastructure services; and</li> <li>(e) the ability for the 'Ecological corridor' or 'Habitat linkage' to be enhanced to improve ecological connectivity.</li> </ul> <p><small>Note—A supporting Ecological Assessment Report prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports may be appropriate to demonstrate compliance with PO8.</small></p>	<p><b>AO8</b> No acceptable outcome is provided</p>

Full name: Gaby Schierenbeck  
Address: PO Box Kuranda, 4881 Qld

Date: 30.10.18

E-mail: gaschi21@hotmail.com

**From:** Kuranda Library  
**Sent:** 31 Oct 2018 11:07:26 +1000  
**To:** Info (Shared)  
**Subject:** RAL/18/0029 - Objection Submission from Janet Dean - 72-76 Masons Road Kuranda  
**Attachments:** 201810311102.pdf

REF: RAL/18/0029

Please find attached Objection to subdivision 72 - 76 Masons Road Kuranda lodged by Jane Dean, 64 - 66 Masons Road Kuranda.

Thank you

Kuranda Library

Mareeba Shire Council

Phone: 1300 308 461 | Direct: 07 4093 9185 | Fax: 07 4093 9561  
 Email: [kurandal@msc.qld.gov.au](mailto:kurandal@msc.qld.gov.au) | Website: [www.msc.qld.gov.au](http://www.msc.qld.gov.au)  
 65 Rankin Street, Mareeba | PO Box 154, Mareeba, Queensland, Australia, 4880

-----Original Message-----

From: [ricohscans@msc.qld.gov.au](mailto:ricohscans@msc.qld.gov.au) <[ricohscans@msc.qld.gov.au](mailto:ricohscans@msc.qld.gov.au)>  
 Sent: Wednesday, 31 October 2018 11:03 AM  
 To: Kuranda Library <[KurandaL@msc.qld.gov.au](mailto:KurandaL@msc.qld.gov.au)>  
 Subject: Message from "KUR-LIB-Ricoh-01"

This E-mail was sent from "KUR-LIB-Ricoh-01" (Aficio MP C3002).

Scan Date: 31.10.2018 11:02:46 (+1000)  
 Queries to: [ricohscans@msc.qld.gov.au](mailto:ricohscans@msc.qld.gov.au)

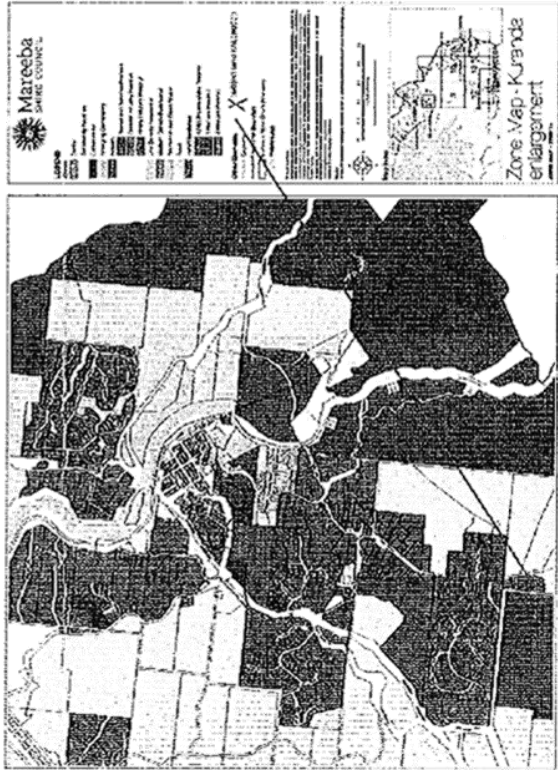
Submission to RAL180029 Reconfiguring a lot/subdivision of 1 lot into 9 lots - Lot 100 at SP202702 at 72-76 Masons Road, Kuranda

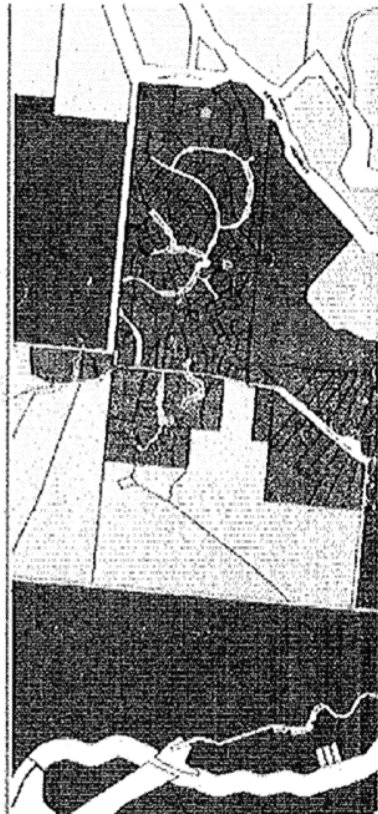
To the assessment manager

The land proposed for subdivision is zones general rural residential land and lies outside the rural residential land zones A,B and C.  
The near new MSC2016 planning scheme allows precinct A to be subdivided into 4000 square metre lots. Precinct B allows subdivision into 1 hectare lots and precinct C into 2 hectare lots. Those subdivisions only require code assessment.

The general rural residential zoned areas, not really intended to be further subdivided under the MSC2016 plan, require impact assessment, if an application for subdivision is made.

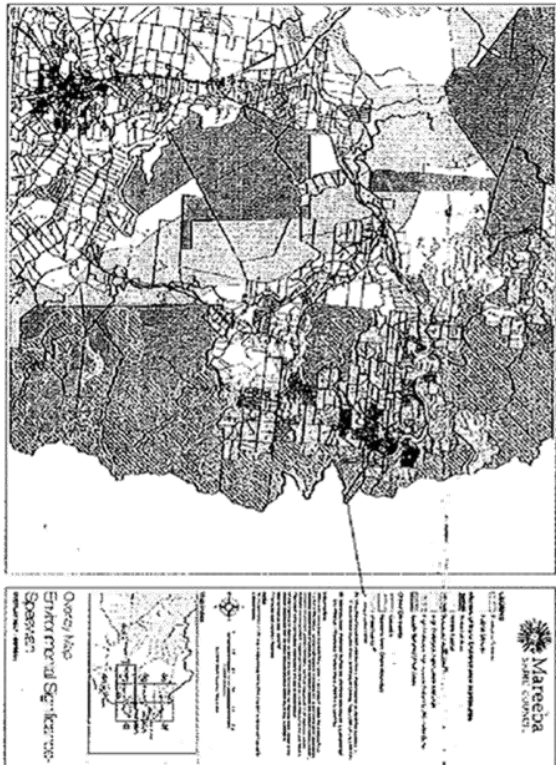
The subsequent land is bordered on the east by conservation land.  
The south and west is bordered by rural zoned land.  
While the north borders more general rural residential zoned land.  
In fact 4 blocks of general rural residential zoned land lie between the subsequent land and the next rural zoned A and B lots.  
There appears to be no logical reason why subdivision into small parcels, consistent with the rural residential A zoned land, should be allowed in the general rural residential zone.





*Enlarged section of MSC2016 zoning map with a red cross marking the subject land*

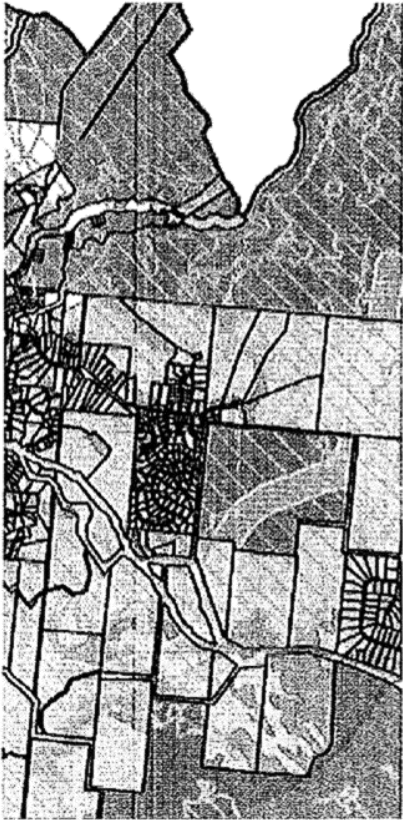
The land proposed for subdivision, lies entirely in an ecological corridor, as per MSC2016 plan environmental significant overlay code mapping. Due to its location and despite the property being cleared of trees, it is vitally important as a functioning ecological corridor.



<https://data.bosk.com/v/59.2708-27.14503783.1940840472.h=5d5c704a53c83c17273a8b61c931898e=53d238=28.d1=1>

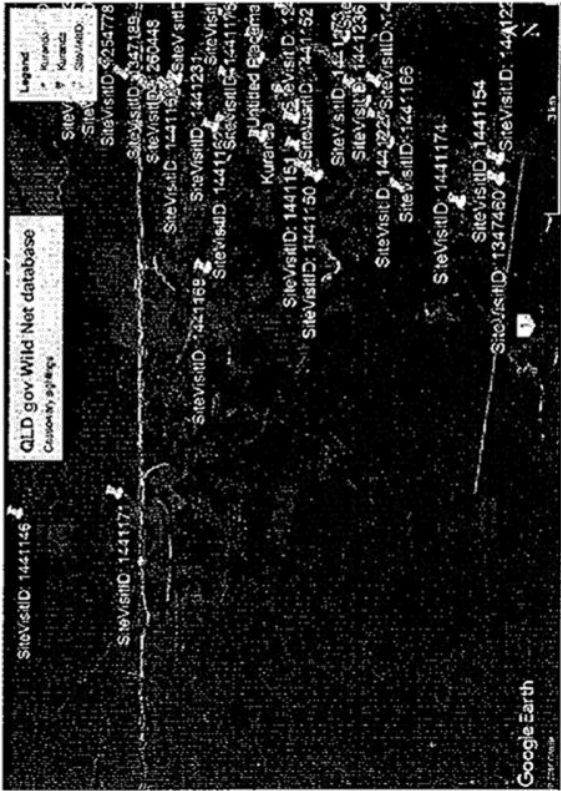
20/10/18, 1:45 PM  
Page 2 of 5

Document Set ID: 3468521  
Version: 2 Version Date: 31/10/2018



Enlarged section of MSC2016 environmental significance map with a red cross marking the subject land

The property is bordered mostly by forested land, much of it mapped essential Cassowary habitat. The QLD gov WildNet mapping(see below), showing Cassowary sightings within a few hundred metres away from the property proves the above made points.



Despite the property being located in an environmentally sensitive area, no request for a supporting ecological assessment report has been made.

Under these circumstances, I request that at the most subdivision into two equally sized blocks be allowed. This size is more appropriate for the general rural residential zoned land.

I also urge Council to use the opportunity and condition an approval with the re vegetation of the land. Further conditions should include, fencing being limited to the building envelopes and no dogs and cats be allowed. These conditions are consistent with the MSC2016 plan, which in the environmental significance

[https://ccn.bsbx.com/v/159.27c8-2/45037672\\_1940840472\\_h=3d9c71c4e60e36c72173a8161c851698cc=59DC9B9F2&dl=1](https://ccn.bsbx.com/v/159.27c8-2/45037672_1940840472_h=3d9c71c4e60e36c72173a8161c851698cc=59DC9B9F2&dl=1)



overlay code requires that development in rural residential zoned land protects and enhances matters of environmental significance. This includes ecological corridors and connectivity.

#### 8.2.4 Environmental significance overlay code

##### 8.2.4.1 Application

- (1) The code applies to assessing development where:
- the subject of development is affected by a constraint category identified on the Environmental Significance overlay maps (EM-004a-d), or
  - it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

*Note: Subordinate and Minor maps are progressively updated on Overlay Maps and is required to be mapped by State Government in response to Environment and Heritage State legislation.*

##### 8.2.4.2 Purpose

- (1) The purpose of the Environmental significance overlay code is to identify and protect matters of environmental significance, which include matters of state environmental significance (PSES) as defined under the state planning policy.
- The Environmental significance overlay code ensures that:
- waterways and high ecological significance wetlands are protected and enhanced to maintain ecosystem services and hydrological processes and provide aquatic habitat for flora and fauna, and
  - the environmental values of regulated vegetation, wildlife habitat, protected areas and legally secured offset areas are protected and managed.
- (2) The purpose of the code will be achieved through the following overall outcomes:
- the biodiversity values, ecosystem services and climate change resilience of areas of environmental significance are protected, managed, enhanced and rehabilitated;
  - the biodiversity values of protected areas and legally secured offset areas are protected from development unless overriding community need is demonstrated;
  - development is located, designed and managed to minimise the edge effects of development on areas of regulated vegetation and wildlife habitat;
  - areas of regulated vegetation and wildlife habitat are managed to minimise biodiversity losses;
  - development maintains, protects and enhances a regional network of important corridors that assist in wildlife movement and contribute to the maintenance of habitat and biological diversity;
  - development is appropriately setback from waterways and high ecological significance wetlands to minimise direct and indirect impacts on water quality and biodiversity; and
  - maintain vegetation and vegetation associated with high ecological significance wetlands to protect and enhance to improve water quality and natural

Document Set ID: 3468521  
Version: 2 Version Date: 31/10/2018

Performance outcomes	Acceptable outcomes
<p><b>Ecological corridors and Habitat linkages</b></p> <p><b>PO8</b></p> <p>Development located:</p> <p>(a) in the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone or Rural residential zone; and</p> <p>(b) within an 'Ecological corridor' or a 'Habitat linkage' identified on the Environmental Significance Overlay Maps (OM1004a-o)</p> <p>does not compromise the provision of habitat connectivity of the corridor/linkage.</p> <p>(a) the environmental values of the area of the site identified in the 'Ecological corridor' or 'Habitat linkage';</p> <p>(b) the environmental values of adjoining and nearby land within the 'Ecological corridor' or 'Habitat linkage';</p> <p>(c) the extent of any modification proposed to the natural environment including (but not limited to) vegetation and topography;</p> <p>(d) the location and design of proposed improvements that may impact on the functions of the 'Ecological corridor' or 'Habitat linkage' including (but not limited to) buildings, structures, fences, lighting, vehicle movement areas and infrastructure services; and</p> <p>(e) the ability for the 'Ecological corridor' or 'Habitat linkage' to be enhanced to improve ecological connectivity.</p> <p><small>Note—A supporting Ecological Assessment Report prepared in accordance with Planning Scheme Policy 2 — Ecological Assessment. Reports may be appropriate to demonstrate compliance with PO8.</small></p>	<p><b>AO8</b></p> <p>No acceptable outcome is provided</p>

Full name: Janet Paen Date: 30/10/18  
Address: 64-66 Masens Rd Kororua

E-mail:  
Signature if possible:

Two wildlife cases & its a release for wallabies  
30 wallabies have been released over last 4 yrs  
Black being 3,000 goats will be residential (maple)  
All sites in the area are Rural Residential  
Access to the new development is inadequate  
the road is a very small access to the limited  
housing that exists



Document Set ID: 3468521  
Version: 2 Version Date: 31/10/2018

**From:** Kuranda Library  
**Sent:** 31 Oct 2018 11:59:44 +1000  
**To:** Info (Shared)  
**Subject:** RAL/18/0029 - Graham Fowles submits objection to Development Application - Lot 100 SP202702 - 72-76 Masons Road Kuranda - Ante and Anica Salinovic  
**Attachments:** 201810311156.pdf

Please find attached opposition to subdivision 72 - 76 Masons Road Kuranda lodged by Graham Fowles, 66a Masons Road, Kuranda.

Thank You

Kuranda Library

Mareeba Shire Council

Phone: 1300 308 461 | Direct: 07 4093 9185 | Fax: 07 4093 9561  
 Email: [kurandal@msc.qld.gov.au](mailto:kurandal@msc.qld.gov.au) | Website: [www.msc.qld.gov.au](http://www.msc.qld.gov.au)  
 65 Rankin Street, Mareeba | PO Box 154, Mareeba, Queensland, Australia, 4880

-----Original Message-----

From: [ricohscans@msc.qld.gov.au](mailto:ricohscans@msc.qld.gov.au) <[ricohscans@msc.qld.gov.au](mailto:ricohscans@msc.qld.gov.au)>  
 Sent: Wednesday, 31 October 2018 11:56 AM  
 To: Kuranda Library <[KurandaL@msc.qld.gov.au](mailto:KurandaL@msc.qld.gov.au)>  
 Subject: Message from "KUR-LIB-Ricoh-01"

This E-mail was sent from "KUR-LIB-Ricoh-01" (Aficio MP C3002).

Scan Date: 31.10.2018 11:56:23 (+1000)  
 Queries to: [ricohscans@msc.qld.gov.au](mailto:ricohscans@msc.qld.gov.au)

Dear Sir

My Concern with the Proposal for this subdivision is that it will cause a precedent in the immediate area for future small block divisions which is no way in keeping with the ambience or zoning of the area.

Our choice to live on acreage blocks between Kuranda village and the end of Masons road will be affected and from what I can read is not in keeping with the town plan. already Kuranda Springs and the Williamson drive exit to Masons rd causes heavy traffic issues at certain times of the day, extra traffic must surely attract road upgrades.

Much is written about wildlife corridors and conservation , all is pertinent in this subdivision, I can only urge that in applications such as this some consideration is given to encroachment into native habitat.

Whilst I can recognise the desire to maximise the site into small allotments I think that two blocks would be a more reasonable outcome.

Graham Fowles  
66A Masons rd  
grf@westnet.com.au

*[Handwritten signature]*  
30/10/2018

*[Handwritten notes:]*  
Williamson / 1257  
190029  
MCMC p.d.gov.au

Submission to RAL180029 Reconfiguring a lot/subdivision of 1 lot into 9 lots - Lot 100 at SP202702 at 72-76 Masons Road, Kuranda

To the assessment manager

The land proposed for subdivision is zones general rural residential land and lies outside the rural residential land zones A, B and C.

The near new MSC2016 planning scheme allows precinct A to be subdivided into 4000 square metre lots. Precinct B allows subdivision into 1 hectare lots and precinct C into 2 hectare lots. Those subdivisions only require code assessment.

The general rural residential zoned areas, not really intended to be further subdivided under the MSC2016 plan, require impact assessment, if an application for subdivision is made.

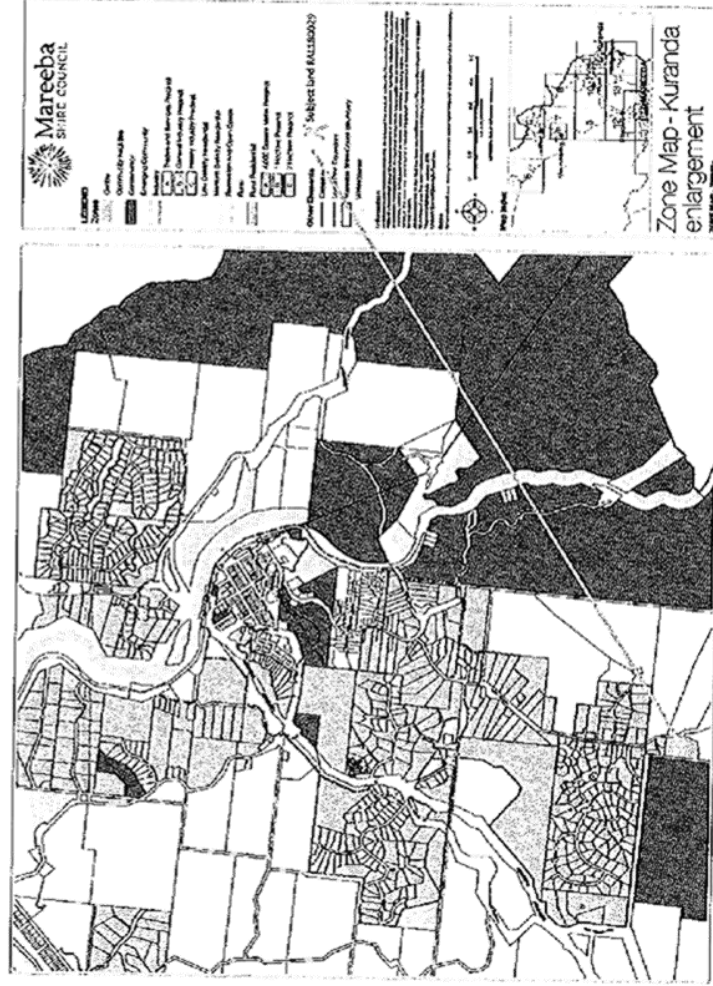
The subsequent land is bordered on the east by conservation land.

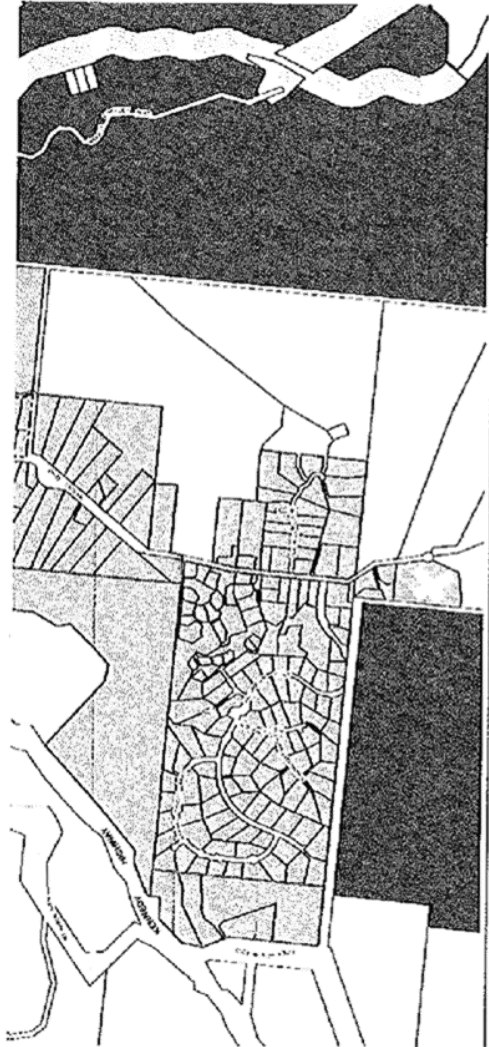
The south and west is bordered by rural zoned land.

While the north borders more general rural residential zoned land.

In fact 4 blocks of general rural residential zoned land lie between the subsequent land and the next rural zoned A and B lots.

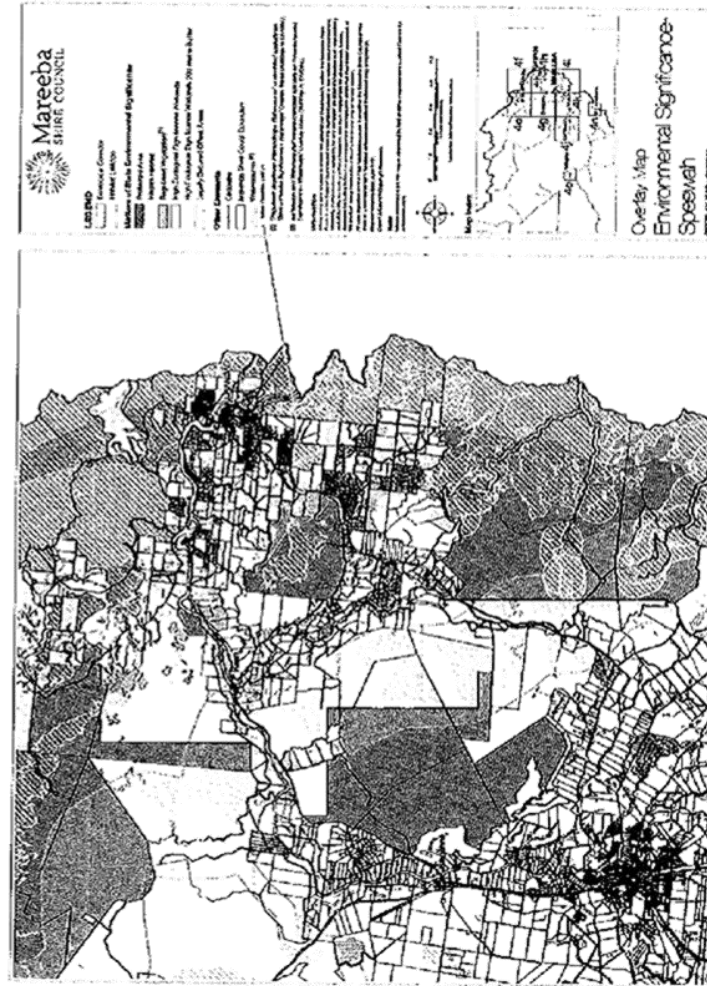
There appears to be no logical reason why subdivision into small parcels, consistent with the rural residential A zoned land, should be allowed in the general rural residential zone.





*Enlarged section of MSC2016 zoning map with a red cross marking the subject land*

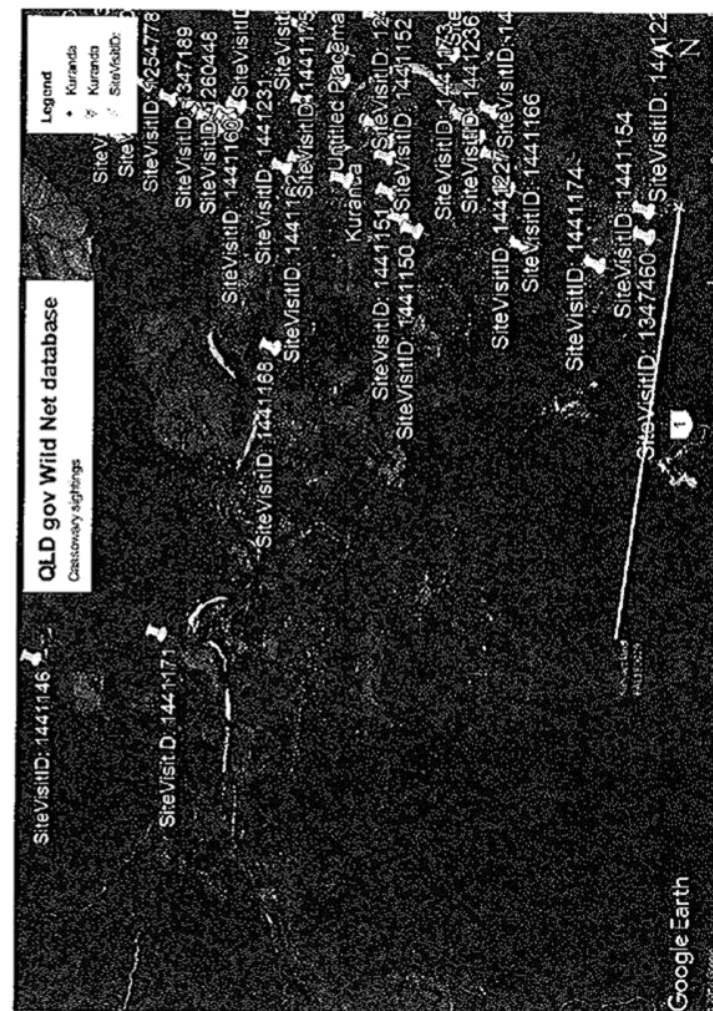
The land proposed for subdivision, lies entirely in an ecological corridor, as per MSC2016 plan environmental significant overlay code mapping. Due to its location and despite the property being cleared of trees, it is vitally important as a functioning ecological corridor.





*Enlarged section of MSC2016 environmental significance map with a red cross marking the subject land*

The property is bordered mostly by forested land, much of it mapped essential Cassowary habitat. The QLD gov WildNet mapping(see below), showing Cassowary sightings within a few hundred metres away from the property proves the above made points.



This includes ecological corridors and connectivity.

#### 8.2.4 Environmental significance overlay code

1.  $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$

- (\*) This code applies to assessing development where:
- (a) land the subject of development is affected by a constraint category identified on the Environmental significance overlay maps (OM-004a-z); and
  - (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Biodiversity and Water quality are appropriately reflected in Overlay Map 4 and is required to be mapped by State Government in response to Environment and Heritage State interests.

姓名	性别	年龄	职业	住址	联系电话
张三	男	35	教师	北京市朝阳区	13800138000
李四	女	28	医生	北京市海淀区	13900139000
王五	男	45	工程师	上海市浦东新区	13600136000
赵六	女	30	公务员	广州市天河区	13500135000
孙七	男	50	企业家	深圳市南山区	13400134000
周八	女	25	学生	北京市西城区	13300133000
吴九	男	40	律师	上海市黄浦区	13200132000
郑十	女	38	作家	浙江省杭州市	13100131000
冯十一	男	22	程序员	广东省深圳市	13000130000
陈十二	女	42	会计师	江苏省南京市	12900129000
林十三	男	33	销售经理	山东省济南市	12800128000
周十四	女	27	设计师	河南省郑州市	12700127000
吴十五	男	48	教授	四川省成都市	12600126000
郑十六	女	31	护士	湖北省武汉市	12500125000
冯十七	男	24	记者	湖南省长沙市	12400124000
陈十八	女	41	翻译	安徽省合肥市	12300123000
林十九	男	29	产品经理	福建省厦门市	12200122000
周二十	女	36	心理咨询师	江西省南昌市	12100121000
吴二十一	男	43	银行经理	广东省广州市	12000120000
郑二十二	女	26	市场专员	浙江省宁波市	11900119000
冯二十三	男	39	IT支持	江苏省苏州市	11800118000
陈二十四	女	34	人力资源	山东省青岛市	11700117000
林二十五	男	21	实习生	河南省开封市	11600116000
周二十六	女	44	财务总监	四川省绵阳市	11500115000
吴二十七	男	32	项目主管	湖北省宜昌市	11400114000
郑二十八	女	23	数据分析师	湖南省岳阳市	11300113000
冯二十九	男	46	法律顾问	安徽省芜湖市	11200112000
陈三十	女	37	运营经理	福建省福州市	11100111000
林三十一	男	20	应届毕业生	江西省赣州市	11000110000
周三十二	女	47	退休教师	广东省佛山市	10900109000
吴三十三	男	30	自由职业者	浙江省温州市	10800108000
郑三十四	女	29	自媒体博主	江苏省扬州市	10700107000
冯三十五	男	49	大学教授	山东省淄博市	10600106000
陈三十六	女	35	企业高管	河南省洛阳市	10500105000
林三十七	男	25	游戏设计师	四川省自贡市	10400104000
周三十八	女	40	营养师	湖北省十堰市	10300103000
吴三十九	男	33	产品经理	湖南省衡阳市	10200102000
郑四十	女	27	市场专员	安徽省蚌埠市	10100101000
冯四十一	男	45	IT经理	福建省莆田市	10000100000
陈四十二	女	31	人力资源	江西省景德镇市	09900099000
林四十三	男	22	实习生	广东省珠海市	09800098000
周四十四	女	41	财务总监	浙江省绍兴市	09700097000
吴四十五	男	36	项目主管	江苏省镇江市	09600096000
郑四十六	女	28	数据分析师	山东省威海市	09500095000
冯四十七	男	43	法律顾问	河南省新乡市	09400094000
陈四十八	女	34	运营经理	福建省泉州市	09300093000
林四十九	男	24	应届毕业生	江西省上饶市	09200092000
周五十	女	46	退休教师	广东省中山市	09100091000
吴五十一	男	30	自由职业者	浙江省嘉兴市	09000090000
郑五十二	女	29	自媒体博主	江苏省南通市	08900089000
冯五十三	男	49	大学教授	山东省泰安市	08800088000
陈五十四	女	35	企业高管	河南省濮阳市	08700087000
林五十五	男	25	游戏设计师	四川省泸州市	08600086000
周五十六	女	40	营养师	湖北省恩施州	08500085000
吴五十七	男	33	产品经理	湖南省邵阳市	08400084000
郑五十八	女	27	市场专员	安徽省黄山市	08300083000
冯五十九	男	45	IT经理	福建省龙岩市	08200082000
陈六十	女	31	人力资源	江西省鹰潭市	08100081000
林六十一	男	22	实习生	广东省江门市	08000080000
周六十二	女	41	财务总监	浙江省衢州市	07900079000
吴六十三	男	36	项目主管	江苏省泰州市	07800078000
郑六十四	女	28	数据分析师	山东省日照市	07700077000
冯六十五	男	43	法律顾问	河南省焦作市	07600076000
陈六十六	女	34	运营经理	福建省宁德市	07

- The purpose of the Environmental significance overlay code is to identify and protect matters of environmental significance, which include matters of state environmental significance (MSES) as defined under the state planning policy.

The Environmental significance overlay code ensures that:

- (a) waterways and high ecological significance wetlands are protected and enhanced to maintain ecosystem services and hydrological processes and provide aquatic habitat for flora and fauna; and

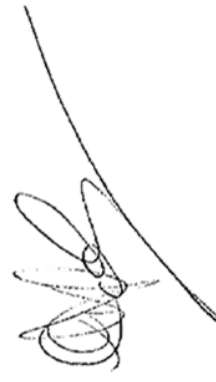
- (b) provide aquatic habitat for roe and herring; and the environmental values of regulated vegetation, wildlife habitat, protected areas and legally secured offset areas are protected and managed.

- 2) The purpose of the code will be achieved through the following overall outcomes:

- the riparian zone or its source are managed through the following overall outcomes:  
the biodiversity values, ecosystem services and climate change resilience of areas of environmental significance are protected, managed, enhanced and rehabilitated;
- the biodiversity values of protected areas and legally secured offset areas are protected from development unless overriding community need is demonstrated;
- development is located, designed and managed to minimise the edge effects of development on areas of regulated vegetation and wildlife habitat;
- areas of regulated vegetation and wildlife habitat are managed to minimise biodiversity losses;
- development maintains, protects and enhances a regional network of vegetated corridors that assist in wildlife movement and contribute to the maintenance of habitat and biological diversity;
- development is appropriately setback from waterways and high ecological significance wetlands to minimise direct and indirect impacts on water quality and biodiversity; and
- riparian vegetation and vegetation associated with high ecological significance wetlands is protected and enhanced to improve water quality and natural

Document Set ID: 3468553  
Version: 1 Version Date: 31/10/2018

Performance outcomes	Acceptable outcomes
<b>Ecological corridors and Habitat linkages</b>	
<b>PO8</b>	<b>AO8</b>
Development located: (a) in the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone or Rural residential zone; and (b) within an 'Ecological corridor' or a 'Habitat linkage' identified on the Environmental Significance Overlay Maps (OM-004a-o)	No acceptable outcome is provided
does not compromise the provision of habitat connectivity of the corridor/linkage, having regard to: (a) the environmental values of the area of the site identified in the 'Ecological corridor' or 'Habitat linkage'; (b) the environmental values of adjoining and nearby land within the 'Ecological corridor' or 'Habitat linkage'; (c) the extent of any modification proposed to the natural environment including (but not limited to) vegetation and topography; (d) the location and design of proposed improvements that may impact on the functions of the 'Ecological corridor' or 'Habitat linkage' including (but not limited to) buildings, structures, fences, lighting, vehicle movement areas and infrastructure services; and (e) the ability for the 'Ecological corridor' or 'Habitat linkage' to be enhanced to improve ecological connectivity.	
<p><small>Note—A supporting Ecological Assessment Report prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports may be appropriate to demonstrate compliance with PO8.</small></p>	

*Grisham Tindles*  
 Full name: *Grisham Tindles* Date: *30/10/2018*  
 Address: *601 Murrumbidgee St, Cam. AU*  
 E-mail: *grt@westnet.com.au*  
 Signature if possible: 



**From:** Jo Martin  
**Sent:** 31 Oct 2018 12:27:51 +1000  
**To:** Info (Shared); 'Kuranda Region Planning Group'  
**Subject:** RAL/18/0029 - Jo Martin submits Ecological Appraisal - 72-76 Masons Road  
Kuranda - Ante and Anica Salinovic  
**Attachments:** ECOLOGICAL-APPRAISAL-FOR-MSC-RAL180029.pdf

Hi MSC,

Please find attachment for RAL/18/0029.

I would appreciate if you could forward on to Councillors who may be interested in this information.

Thanks very much.

Kind regards,

jo

--

Jo Martin  
For Kuranda Region - Planning Group  
p. 0401 423 573  
e. [info@kurandaregion.org](mailto:info@kurandaregion.org)



Virus-free. [www.avast.com](http://www.avast.com)





# ECOLOGICAL APPRAISAL

PREPARED FOR MAREEBA SHIRE COUNCIL



DATE: 31 OCTOBER 2018

<b>MSC CODE: RAL/18/0029</b> APPLICANT: A & A Salinovic C/- Brazier Motti Pty Ltd DESCRIPTION: ROL (1 into 9 Lots in two stages) ADDRESS: 72-76 Masons Road KURANDA <a href="#">DOCUMENTS: RAL180029 - Confirmation Notice</a> 647.75 KB <a href="#">RAL180029 - New DA - A and A Salinovic</a> 15.85 MB	<b>FILING CODE: KRPG-MA072</b> SITE MAPPING SUPPLIED: <ul style="list-style-type: none"> <li>MSC2016 ZM0011, ENVIRONMENTAL SIGNIFICANCE OVERLAY</li> <li>SITE PLAN</li> <li>EPBC species</li> <li>Matters of State Significance</li> </ul>
---	---

 <b>Cassowary Sightings</b> - sightings within 250m of site	 <b>Kuranda Tree Frog records</b> - within 2700m of site
 <b>Ecological Corridor</b> - Envirolink, site <i>central</i> in critical freehold corridor - site within 2500m of Barron River	 <b>MSES Buffered Streams</b> - yes, on site

## COMMENTARY BY JO MARTIN

**MAP 1** shows the site in relation to MSC2016 planning scheme zone map and shows the site outside of **Zone A 4,000 sqm, Zone B 1 Hectare and Zone C 2 Hectares** precincts. \*The site is not zoned to be subdivided under MSC2016.

**MAP 2** shows the submitted plan with proposed lot sizes of:

PROPOSED LOT 1 AREA **6,505 sqm**  
 PROPOSED LOT 1 AREA **5,456m<sup>2</sup>**  
 PROPOSED LOT 2 AREA **3,689m<sup>2</sup>**  
 PROPOSED LOT 3 AREA **3,687m<sup>2</sup>**  
 PROPOSED LOT 4 AREA **3,664m<sup>2</sup>**  
 PROPOSED LOT 5 AREA **4,832m<sup>2</sup>** (EXISTING RESIDENCE)  
 PROPOSED LOT 6 AREA **5,690m<sup>2</sup>**  
 PROPOSED LOT 7 AREA **3,874m<sup>2</sup>**  
 PROPOSED LOT 8 AREA **3,776m<sup>2</sup>**  
 PROPOSED LOT 9 AREA **9,590m<sup>2</sup>**

The proposed lot sizes are *not in accordance with the MSC2016 zone*.

**MAP3** shows the site in relation to EPBC threatened species, in particular the Cassowary and Kuranda Tree Frog. The end of Mason Road is known habitat for local cassowaries as the rainforest has recovered on much on the rural freehold corridor in the past decades.

**MAP4** and **MAP5** show the site in relation to Matters of State Significance (MSES) ESSENTIAL HABITAT and WILDLIFE HABITAT. The site is in a critical position in the Kuranda Envirolink corridor. Conservation efforts require less density/lots approved by council and native revegetation restored outside of building envelopes, in the best case scenario.

**MAP6** shows the site in relation to the MSC 2016 Environmental Overlay. The site falls within the Ecological Corridor and defined Habitat Linkage route proximate.

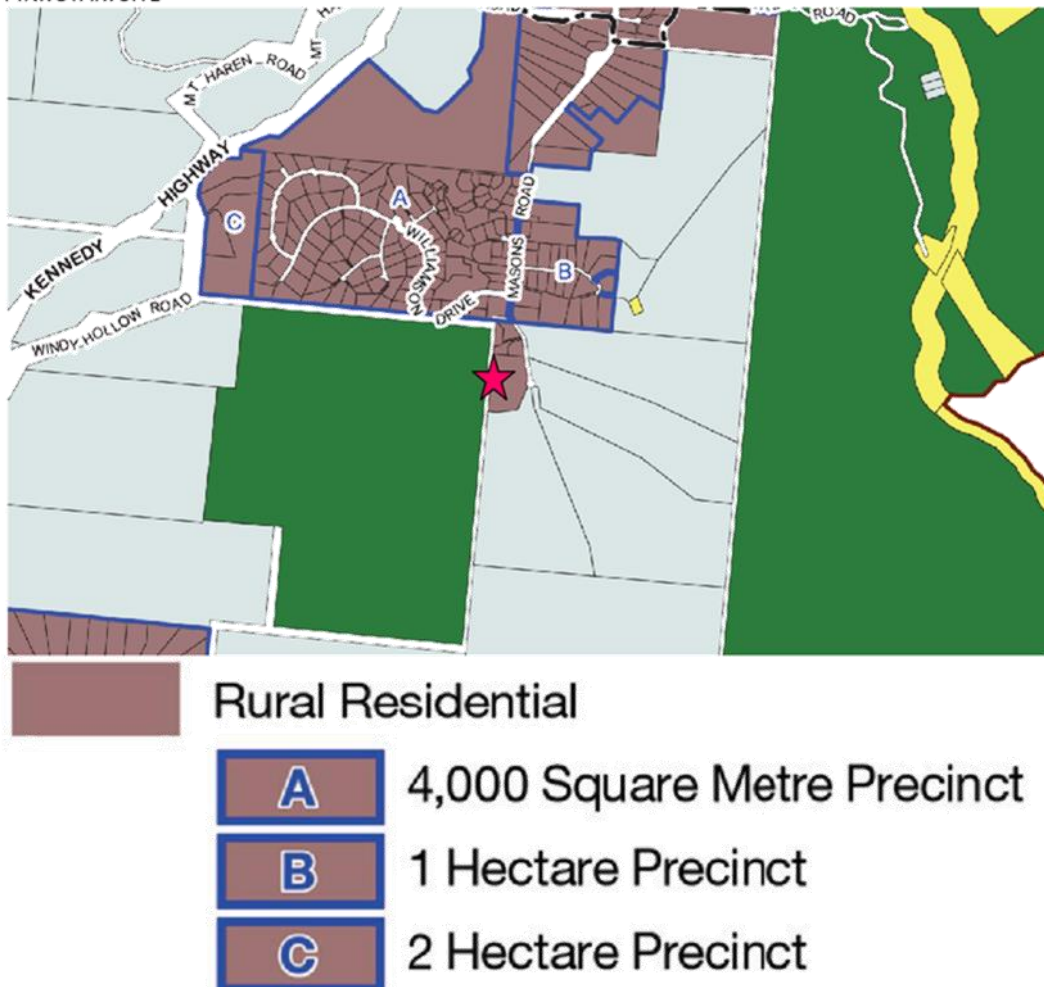
**RECOMMENDATION** Site is **general Rural Residential** and lies outside Rural Residential land zones A,B and C. Due to the sensitive position in the freehold section of the Kuranda Envirolink corridor intensification of land use should **not be permitted by council and the application declined**.

Alternatively, the landowner could consider a design that is sympathetic to the high ecological values of the land, which borders forest reserve on one side and two sides bordered by conservation covenant (on MSES waterway –

see MAP 4 red shading). This design would reconfigure the lot into 2 lots and include revegetation outside described building envelopes. Revegetation can be provided by community nursery organisations. The land would be returned to 'Bush Blocks', as per the goals to enhance canopy cover through the Envirolink Corridor.

**MAP 1 MAREEBA SHIRE COUNCIL PLANNING SCHEME ZONE MAP – KURANDA ZM0011**

PINK STAR: SITE



**CONVERSION TABLE**

PRECINCT	SQUARE METRES	HECTARES
A	4,000	0.4
B	10,000	1
C	20,000	2

**MAP 2** PROPOSED LOT 1 AREA 5,456m<sup>2</sup>, PROPOSED LOT 2 AREA 3,689m<sup>2</sup>, PROPOSED LOT 3 AREA 3,687m<sup>2</sup>, PROPOSED LOT 4 AREA 3,664m<sup>2</sup>, PROPOSED LOT 5 AREA 4,832m<sup>2</sup> (EXISTING RESIDENCE), PROPOSED LOT 6 AREA 5,690m<sup>2</sup>, PROPOSED LOT 7 AREA 3,874m<sup>2</sup>, PROPOSED LOT 8 AREA 3,776m<sup>2</sup>, PROPOSED LOT 9 AREA 9,590m<sup>2</sup>

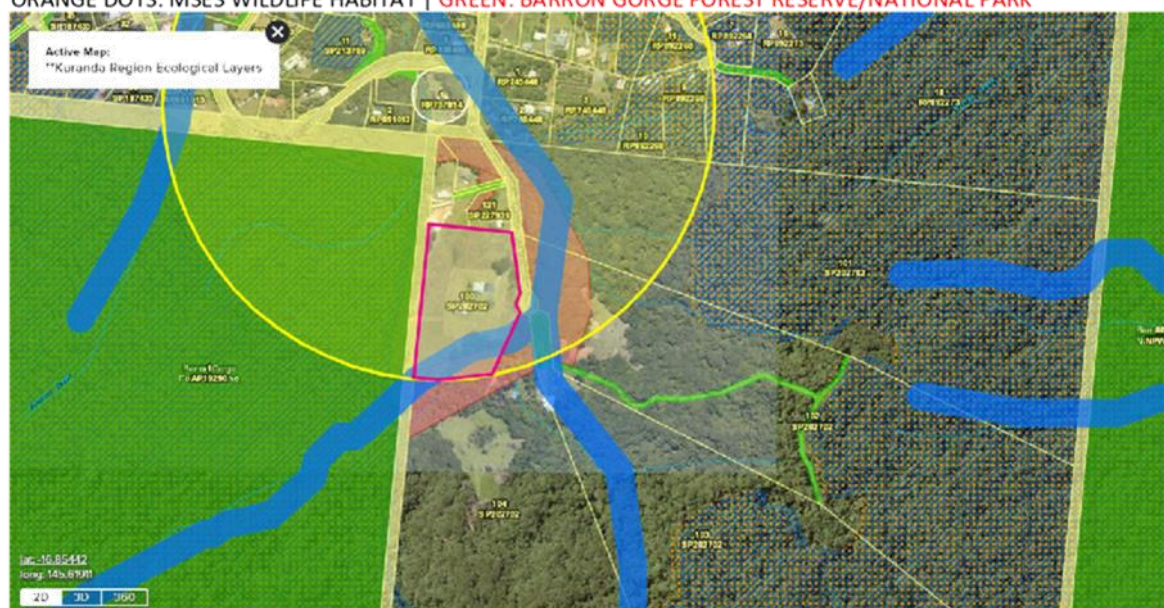




**MAP 3 PINK: SITE | YELLOW CIRCLES: CASSOWARY EXTENT 500M BUFFER | ORANGE CIRCLES: KURANDA TREE FROG RECORDS 100M BUFFER**

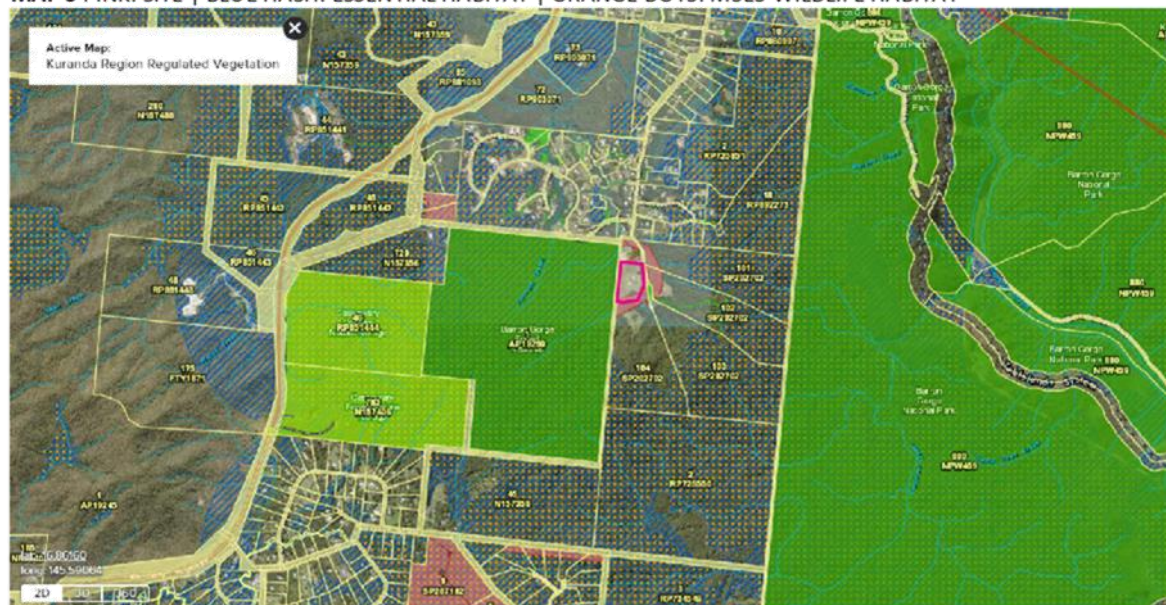


**MAP 4 PINK: SITE | BLUE: BUFFERED STREAMS, CONSERVATION SIGNIFICANCE | BLUE HASH: ESSENTIAL HABITAT | ORANGE DOTS: MSES WILDLIFE HABITAT | GREEN: BARRON GORGE FOREST RESERVE/NATIONAL PARK**

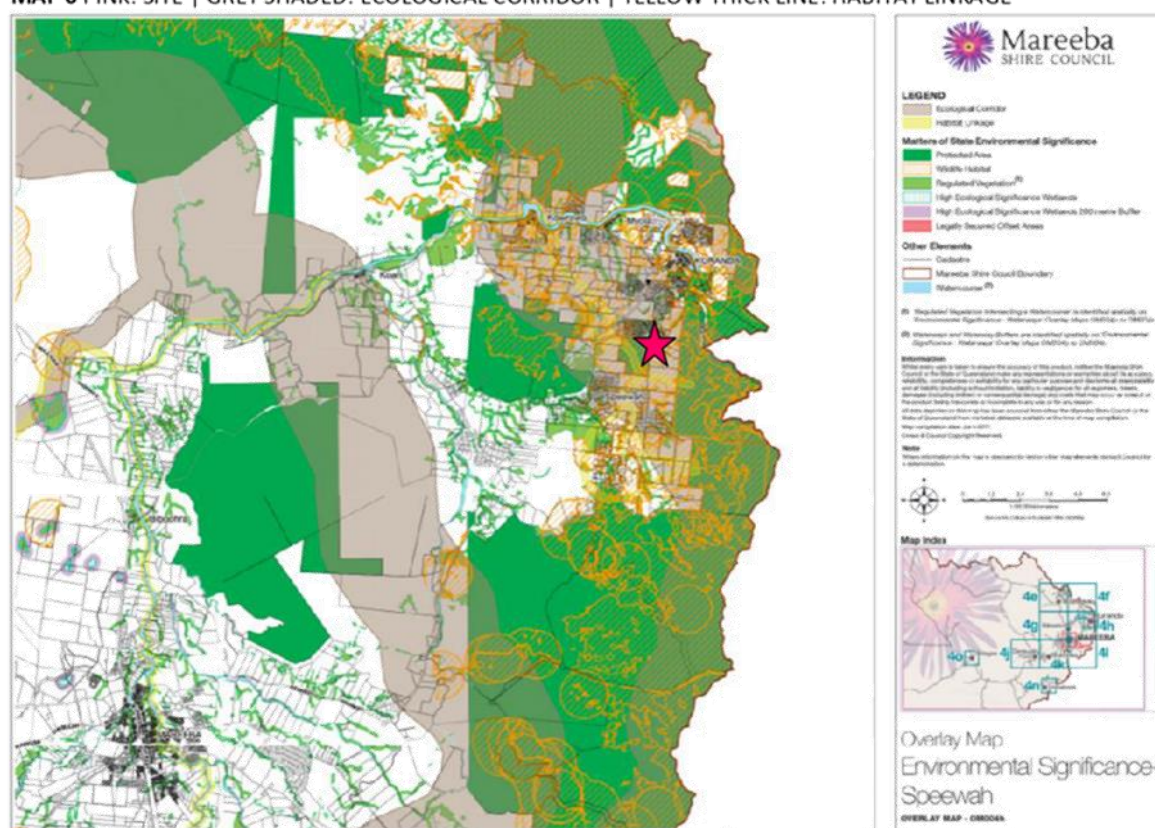




**MAP 5 PINK: SITE | BLUE HASH: ESSENTIAL HABITAT | ORANGE DOTS: MSES WILDLIFE HABITAT**



**MAP 6 PINK: SITE | GREY SHADED: ECOLOGICAL CORRIDOR | YELLOW THICK LINE: HABITAT LINKAGE**



**From:** Sarah Isaacs  
**Sent:** 31 Oct 2018 19:03:21 +1000  
**To:** Info (Shared)  
**Subject:** RAL/18/0029 - New Submission - Sarah Isaacs - Lot 100 SP202702 - 72-76  
Masons Road Kuranda

**Submission to RAL180029 Reconfiguring a lot/subdivision of 1 lot into 9 lots - Lot 100 at SP202702 at 72-76 Masons Road, Kuranda**

To the assessment manager

I object to this submission for the following reasons:

- The land proposed for subdivision lies entirely in an ecological corridor, as in MSC2016 plan environmental significant overlay code mapping. Due to its location, despite the property being cleared of trees, it is vitally important it remains as a functioning ecological corridor. Indeed the environmental significance overlay code in the 2016 planning scheme requires that development in rural residential zoned land protects and *enhances* matters of environmental significance. This includes ecological corridors and connectivity as in Environmental Significance Overlay 8.2.4.2.e below .
- There appears to be no logical reason why subdivision into small parcels, consistent with the rural residential A zoned land, should be allowed in the general rural residential zone especially as this land is not surrounded by development and lies at the end of a road.
- The property is bordered mostly by forested land, much of it mapped essential Cassowary habitat. The QLD gov WildNet mapping shows Cassowary sightings within a few hundred metres of the property.
- I understand that close neighbours object to the development and are putting in submissions

I am also disappointed that, despite the property being located in an environmentally sensitive area, there is no supporting ecological assessment report supplied.

Under these circumstances, I request that, at the most, subdivision into two equally sized blocks be allowed- and that it is conditioned:

1. to exclude fencing except around the house envelope
2. so no cats and dogs or any other domestic animals are allowed
3. to make revegetation of at least 75% of the blocks mandatory.

Full name: Sarah Isaacs Date: 31.10.2018

Address: 345 Fantin Rd Koah Qld 4881

E-mail: [sarahi3451@gmail.com](mailto:sarahi3451@gmail.com)

ph 07 4085 0054

Document Set ID: 3468792  
Version: 1 Version Date: 01/11/2018

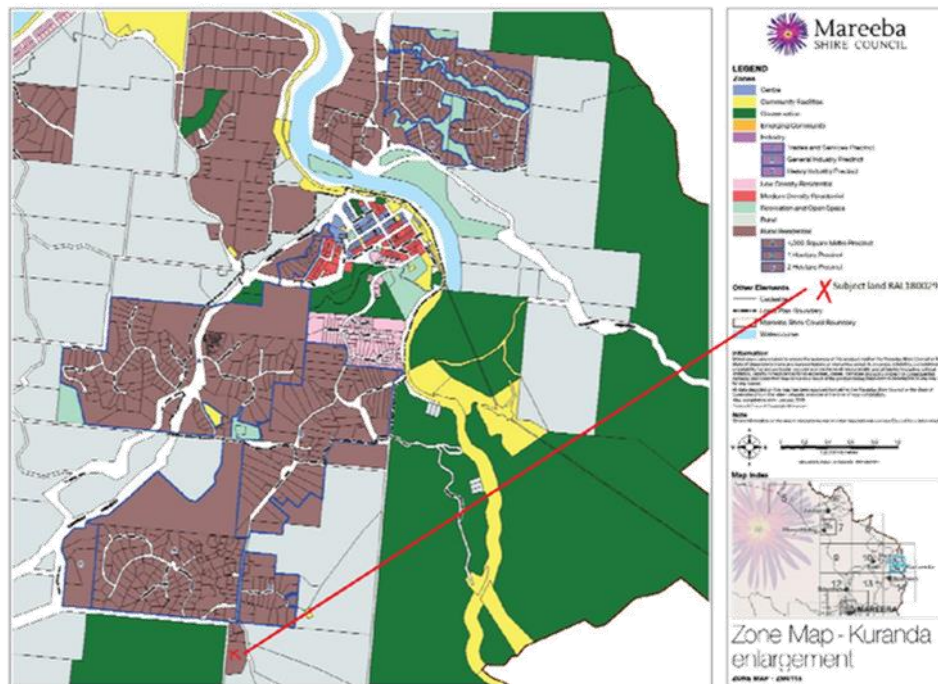


**From:** cathy retter  
**Sent:** 31 Oct 2018 21:52:58 +1000  
**To:** Info (Shared)  
**Subject:** RAL/18/0029 - New Submission - Cathy Retter - Lot 100 SP202702 - 72-76  
Masons Road Kuranda  
**Attachments:** 2018 10 31 Submission RAL180029.doc

Good morning.  
Please accept my attached submission for RAL 180019.  
Cathy Retter  
Kuranda Envirocare  
0419624 940

To the Assessment Manager,  
Mareeba Shire council

Re: Submission to RAL180029 - Reconfiguring a lot/subdivision of 1 lot into 9 lots - Lot 100 at SP202702 at 72-76 Masons Road, Kuranda



The land proposed for subdivision is zoned General Rural residential land, under the MSC 2016 Planning scheme, and lies outside the rural residential land zones A,B and C which would allow subdivision to the proposed level under code assessment.

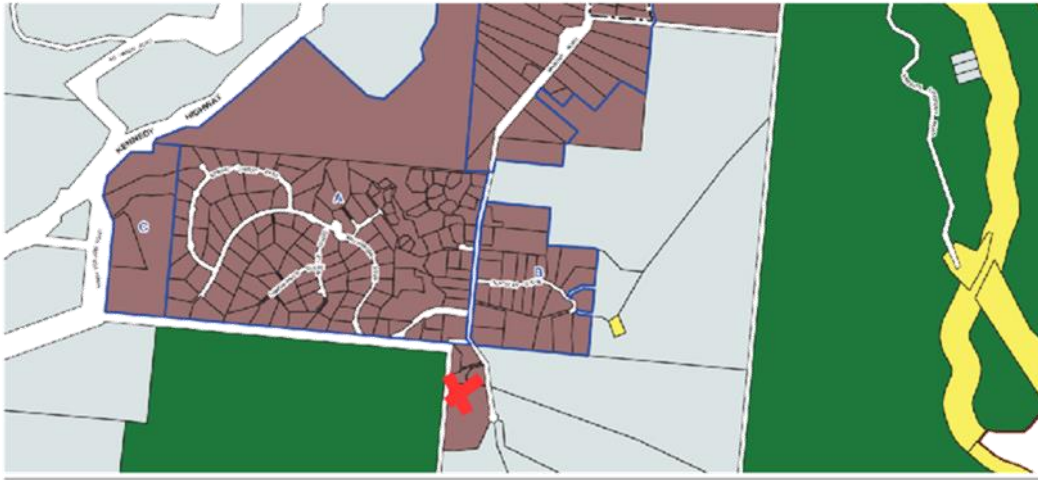
Hence this subdivision requires Impact assessment as there is no intention for this land to be further subdivided.

The proposed subdivision land was part of a larger undivided lot and had been already subdivided into 4 lots in recent years.

It is bordered on the west and east by Conservation land. To the south, over a ridge line, there is rural zoned land. In the north there is further General rural residential zoned land.

In fact the subject block has 4 blocks of general rural residential zoned land between it and the nearest rural zoned A and B lots.

There does not appear to be any valid reason given why this small parcel subdivision should be allowed in the general rural residential zone. It would become inconsistent with surrounding land zoning.

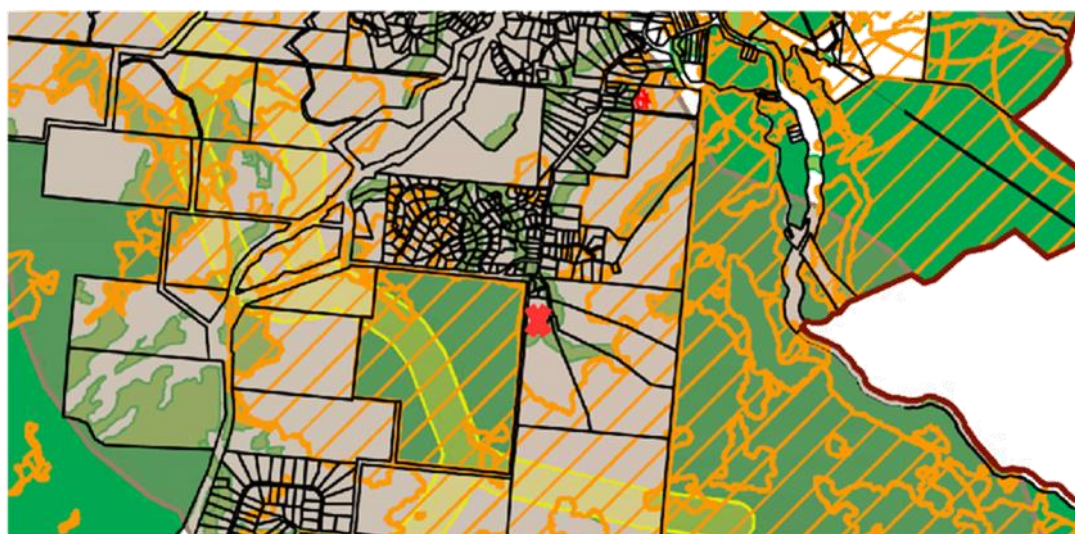
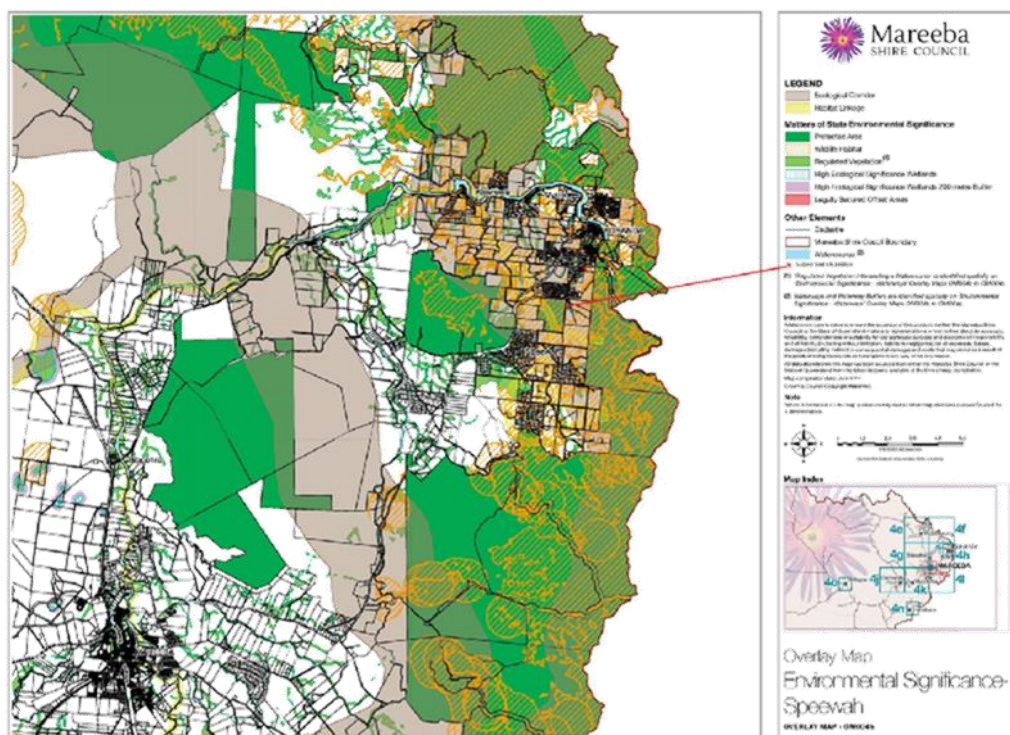


*Enlarged section of MSC2016 zoning map with a red cross marking the subject land*

The land proposed for subdivision, lies entirely in an ecological corridor, as per MSC2016 plan environmental significant overlay code mapping.

Despite the property being located in an environmentally sensitive area, within the environmental significant overlay code mapping, no request for a supporting ecological assessment report has been made and no reason has been given.

Due to its location and despite the property being cleared of trees, it is vitally important as part of a functioning ecological corridor.

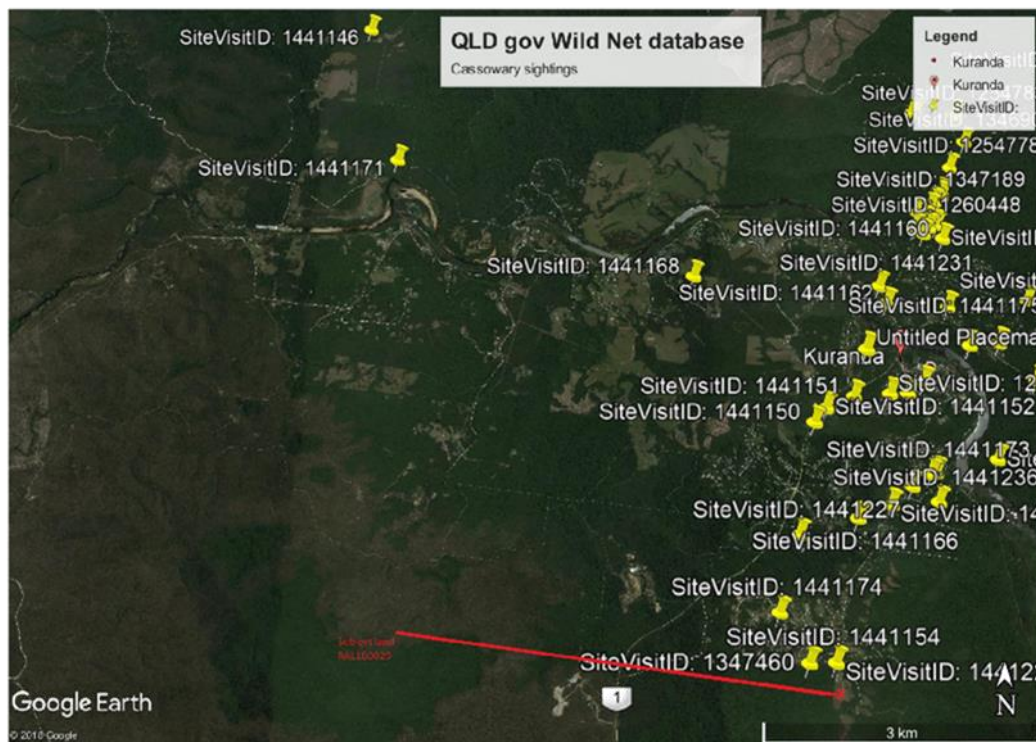


Enlarged section of MSC2016 environmental significance map with a red cross marking the subject land



The property is bordered mostly by forested land, much of it mapped essential Cassowary habitat.

The QLD gov WildNet mapping(see below), showing Cassowary sightings within a few hundred metres of the property proves the mapping of the area is correct..



### In conclusion

Based on the above information, I request that the subdivision is restricted to two equally sized blocks as per the current zoning. This size is more appropriate for the general rural residential zoned land.

I also urge Council to use the opportunity and condition this approval to include re-vegetation of the land. Further conditions should include boundary fencing being limited to the building envelopes and no dogs and cats allowed.

These conditions are consistent with the MSC2016 plan, where the environmental significance overlay code requires that development in rural residential zoned land protects and enhances matters of State environmental significance. This includes ecological corridors and connectivity. Refer to 8.2.4 Environmental significance overlay code and P08 Ecological corridors and Habitat linkages.

In addition, the impact on threatened species in the area, namely Southern cassowary and the Kuranda tree frog will need to be assessed under the EPBC Act.

Full name: Cathy Retter

Date: 31/10/2018

Address: PO Box 494, Kuranda Q4881

E-mail: cathy.retter.kuranda@gmail.com

Signature if possible:

**From:** Jax  
**Sent:** 1 Nov 2018 15:21:31 +1000  
**To:** Peter Franks;Info (Shared)  
**Subject:** RAL/18/0029 - Objection to subdivision - Jax Bergersen  
**Attachments:** Salinovic subdiv Mason Road Nov18.docx

--

Document Set ID: 3469026  
Version: 1 Version Date: 02/11/2018





**KURANDA**  
**conservation**  
**COMMUNITY NURSERY** Inc

- 1 Pademelon Lane, Kuranda Qld 4881
- Phone: (07) 4093 8834
- email: [kurandaconservation@hotmail.com](mailto:kurandaconservation@hotmail.com)
- ABN: 87 584 487 289
- [www.kurandaconservation.org](http://www.kurandaconservation.org)

Document Set ID: 3469026  
Version: 1 Version Date: 02/11/2018

**KURANDA****conservation****COMMUNITY NURSERY Inc**

- 1 Pademelon Lane, Kuranda Qld 4881
- Phone: (07) 4093 8834
- email: kurandaconservation@hotmail.com
- ABN: 87 584 487 289
- www.kurandaconservation.org

1 November 2018

Mareeba Shire Council  
Town Planning**RAL180029 RECONFIGURING A LOT AT SP202702, 72-76 MASON ROAD, KURANDA  
A SALINOVIC**

I hereby submit my objection to the referenced subdivisional application on the following grounds:

The subject site does not fall within any of the nearby residential zones A, B or C. The land in which this lot lies has already been subdivided into rural lots. This occurred due to the rural nature of the large site and should not now be re-subdivided. To subdivide it into the smallest rural residential lot size of 4000m<sup>2</sup> is a further offence. It is also noted that 5 of the 9 lots are under the minimum 4000 m<sup>2</sup> which compounds the offence. **I submit that while I do not support any re-subdivision of the subject land, no lot should be less than the minimum even taking into account the balance of larger lots.** Just as a speed over a zone limit of 60kph is unlawful, so too is a lot size below the minimum prescribed and can be challenged in court.

The subject land is directly adjacent to known cassowary habitat. This makes subdivision a Matter of National Significance as cassowaries are a threatened species under the EPBC Act. **I submit that for this reason, no further subdivision of this rural land should be allowed and if it is, it can then be challenged.**

I trust these matters will be considered in relation to the application to subdivide.

Jax Bergersen  
Secretary/Co-ordinator*Innovation in Conservation*

Innovators are leaders, not followers

Document Set ID: 3469026  
Version: 1 Version Date: 02/11/2018



**8.2 APPLICATION FOR RENEWAL OF TERM LEASE 237606 - LOT 166 ON HG622, LOCALITY OF ARRIGA**

**Date Prepared:** 26 November 2018

**Author:** Senior Planner

**Attachments:** 1. DNRME letter of 21 November 2018 [↓](#)

---

**EXECUTIVE SUMMARY**

The Department of Natural Resources, Mines and Energy (DNRME) is considering the renewal of Term Lease 237606 over land described as Lot 166 on HG622, situated at 2332 Mareeba-Dimbulah Road, Arriga.

Term Lease 237606 is held by Rosella Sub TC Pty Ltd owners of adjoining Lot 156 on SP202896. The current lease is issued for grazing purposes and the renewed lease will be for the same purpose.

DNRME seeks Council's views on the renewal of the term lease.

**RECOMMENDATION**

That Council advise the Department of Natural Resources, Mines and Energy that Council has no objection to the renewal of Term Lease 237606 for grazing purposes over land described as Lot 166 on HG622, situated at 2332 Mareeba-Dimbulah Road, Arriga.

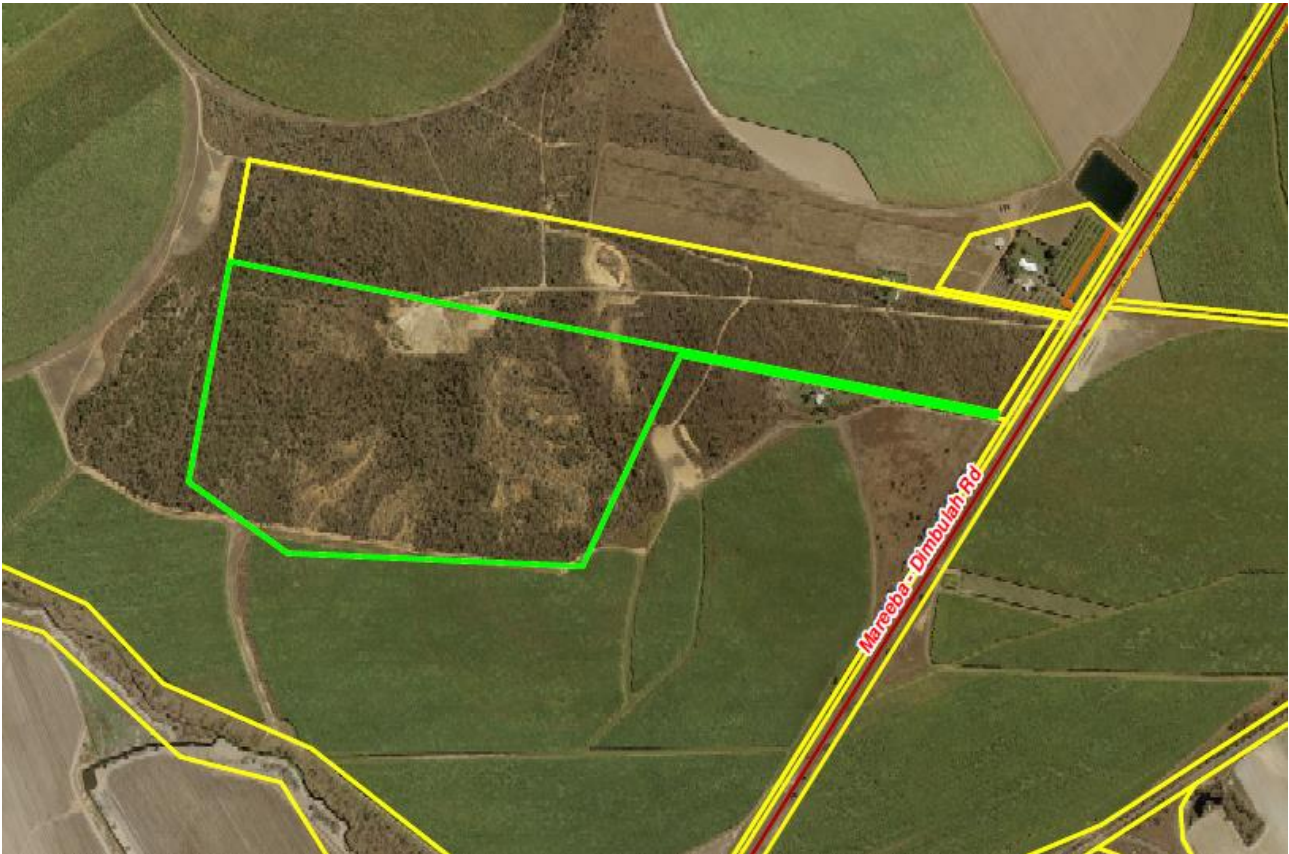
**BACKGROUND**

DNRME is currently considering the renewal of Term Lease 237606 over land described as Lot 166 on HG622, situated at 2332 Mareeba-Dimbulah Road, Arriga.

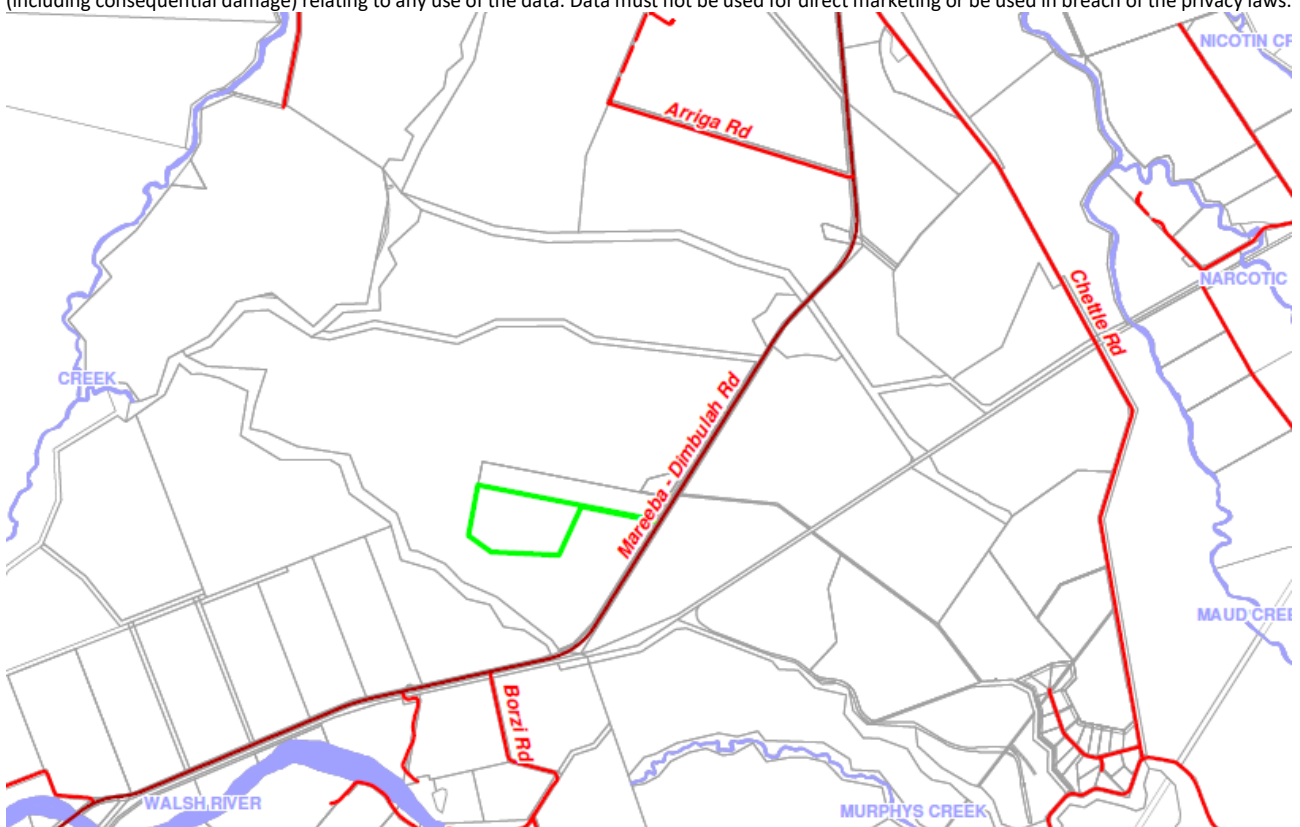
Lot 166 on HG622 has an area of 39.95 hectares and is situated on the Mareeba-Dimbulah Road approximately 3.3 kilometres south-west of Arriga Road. Lot 166 on HG622 is part of Reserve 23138, being for gravel purposes.

The current lease is issued for grazing purposes and the renewed lease will be for the same purpose.

DNRME seeks Council's views on the renewal of the term lease for grazing purposes.



Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) (2009). In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.



Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) (2009). In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.

**RISK IMPLICATIONS**

Nil

**LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

The subject land is zoned Rural under the Mareeba Shire Council Planning Scheme 2016.

The continued use of the subject land for grazing purposes is consistent with the subject land's rural zoning.

**FINANCIAL AND RESOURCE IMPLICATIONS*****Capital***

Nil

***Operating***

Nil

**LINK TO CORPORATE PLAN**

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**IMPLEMENTATION/COMMUNICATION**

The Department of Natural Resources, Mines and Energy will be informed of Council's decision by letter.

Author Taylah Hopper  
File / Ref number 2017/003543  
Directorate / Unit State Land Asset Management  
Phone (07) 4222 5427



**21 November 2018**

Mareeba Shire Council  
PO Box 154  
Mareeba, QLD 4880

email via [info@msc.qld.gov.au](mailto:info@msc.qld.gov.au)

Dear Sir/Madam,

**Application for renewal of Term Lease 237606 described as Lot 166 on HG622 (lease issued over part of RES. 23138, being for gravel purposes)**

The department has received the above application for renewal of Term Lease 237606.

Copies of documents supporting the application are enclosed for your information. The enclosed Smartmap shows the subject land and the surrounding locality.

Please advise the Department of your views or requirements that the department should consider when assessing this application. Objections to the application, and any views or requirements that may affect the future use of the land should be received by close of business on **19 December 2018**. If you offer an objection to the application, a full explanation stating the reason for the objection should be forwarded to this Office.

**Note** - If land is required for a public purpose, it can be acquired at any time by negotiation and where necessary acquisition.

If you wish to provide a response but are unable to do so before the due date, please contact the author before the due date to arrange a more suitable timeframe. If a response is not received by the due date and no alternative arrangements have been made, it will be assumed you have no objections or requirements in relation to this matter.

This information has been provided to you in confidence for the purpose of seeking your views on this matter. It is not to be used for any other purpose, or distributed further to any person, company, or organisation, without the express written permission of the department unless required.

If you wish to discuss this matter, please contact Taylah Hopper on (07) 4222 5427.

**Postal :**  
DNRME Cairns  
PO Box 5318  
Townsville QLD 4810

**Telephone :** (07) 4222 5427



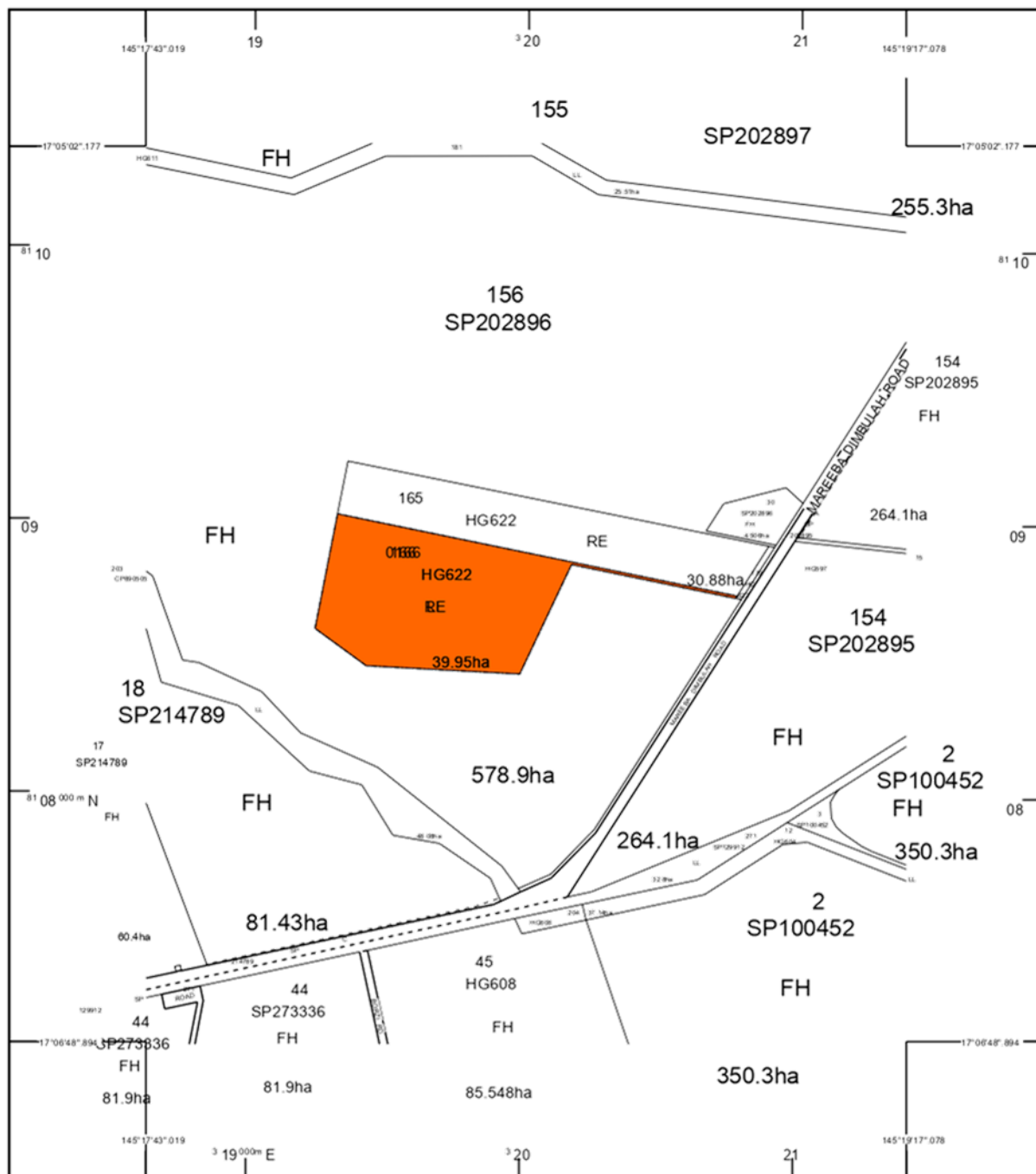
All future correspondence relative to this matter is to be referred to the contact Officer at the address below or by email to [Townsville.SLAMS@dnrme.qld.gov.au](mailto:Townsville.SLAMS@dnrme.qld.gov.au). Any hard copy correspondence received will be electronically scanned and filed. For this reason, it is recommended that any attached plans, sketches or maps be no larger than A3-sized.

Please quote reference number 2017/003543 in any future correspondence.

Yours sincerely



Taylah Hopper  
Land Administration Officer  
State Land Asset Management – North Region



STANDARD MAP NUMBER  
7963-14321

0 400 800 1200 1600 2000 m  
HORIZONTAL DATUM GDA94 ZONE 55 SCALE 1 : 20000

MAP WINDOW POSITION &  
NEAREST LOCATION



#### SUBJECT PARCEL DESCRIPTION

DCDB  
Lot/Plan 166 HG622  
Area/Volume 39.95ha  
Tenure RESERVE  
Local Government MAREEBA SHIRE  
Locality ARRIGA  
Segment/Parcel 21386/87

#### CLIENT SERVICE STANDARDS

PRINTED (dd/mm/yyyy) 12/11/2018  
For additional information regarding this SmartMap see page 2.  
Shading Rules have been applied.

DCDB 11/11/2018 (Lots with an area less than 3000m<sup>2</sup> are not shown)

Users of the information recorded in this document (the Information) accept all responsibility and risk associated with the use of the Information and should seek independent professional advice in relation to dealings with property.

Despite Department of Natural Resources, Mines and Energy (DNRM)'s best efforts, DNRM makes no representations or warranties in relation to the Information, and, to the extent permitted by law, exclude or limit all warranties relating to correctness, accuracy, reliability, completeness or currency and all liability for any direct, indirect and consequential costs, losses, damages and expenses incurred in any way (including but not limited to that arising from negligence) in connection with any use of or reliance on the Information.

For further information on SmartMap products visit <http://lnw.qld.gov.au/property/mapping/blinmap>

**SmartMap**


An External Product of  
SmartMap Information Services  
Based upon an extraction from the  
Digital Cadastral Data Base



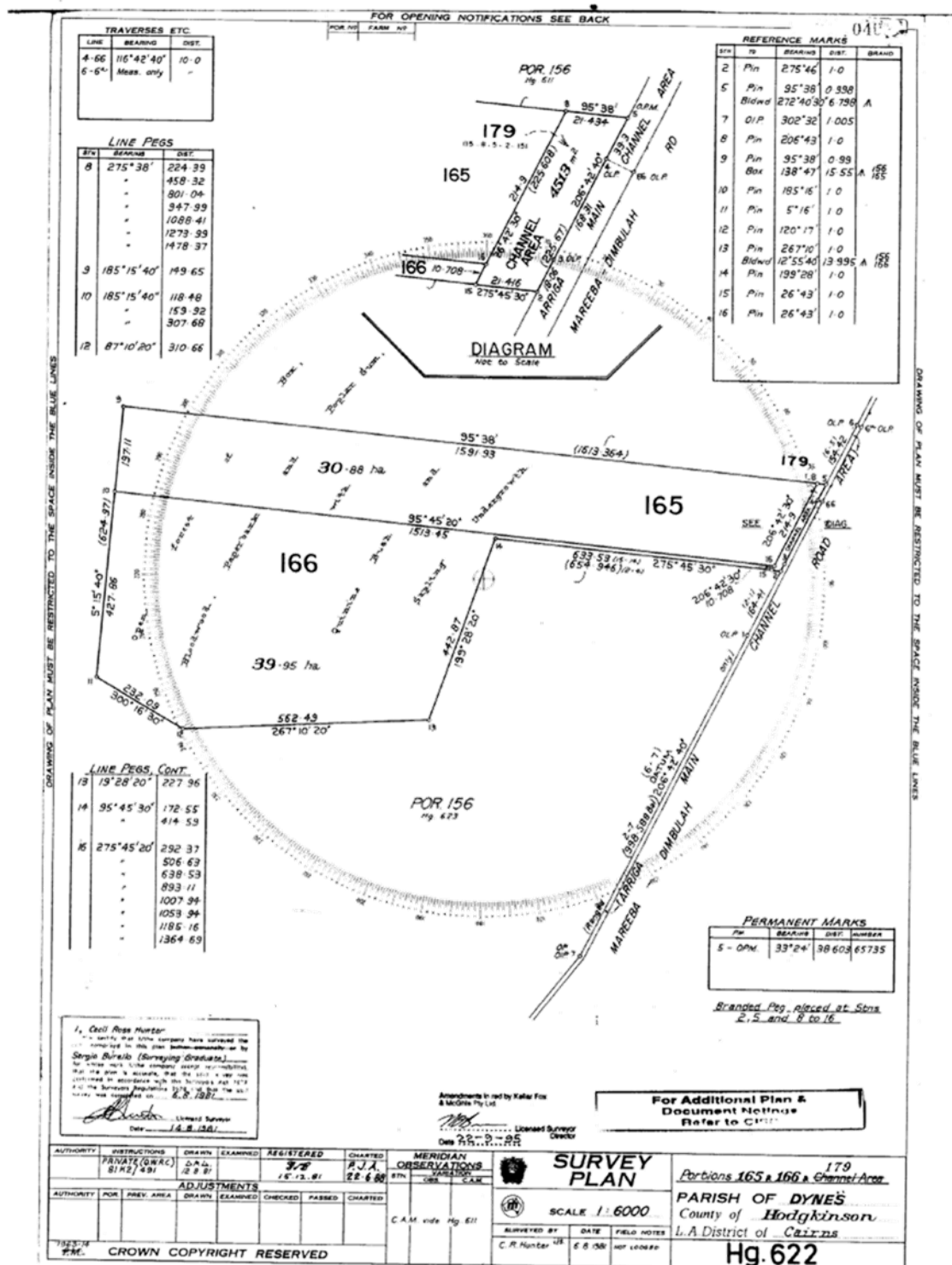
(c) The State of Queensland,  
(Department of  
Natural Resources,  
Mines and Energy) 2018.

## **Additional Information Page**

### **Shading Rules**

 Lot Number = 166 and Plan Number = HG622

HG622 V0 Page 1 of 1 Not To Scale



Copyright protects the plan/s being ordered by you. Unauthorised reproduction or amendments are not permitted.

**8.3 DELEGATIONS UPDATE DECEMBER 2018**

**Date Prepared:** 3 December 2018

**Author:** Manager Development and Governance

**Attachments:** 1. Tables of Delegable Powers [↓](#)

---

**EXECUTIVE SUMMARY**

As part of the monthly delegations update service provided by MacDonnells Law, Council is advised of amendments to various pieces of legislation that require amendments to existing delegations or new delegations to be made by Council.

**RECOMMENDATION**

That

1. Council delegates the exercise of the powers contained in the attached Tables of Delegable Powers and Instruments of Delegation to the Chief Executive Officer, with such powers to be exercised subject to any limitations; and
2. Any prior delegations of power relating to the same matters are revoked.

**BACKGROUND**

Council have delegated to the Chief Executive Officer the necessary statutory powers under various pieces of legislation to enable him to effectively perform the requirements of his role and efficiently manage the operations of the Council. All delegations are made subject to the limitations on the attached documentation.

This report and the recommended delegations of power to the CEO if executed by resolution of Council, will provide a base for good decision making and accountability while maintaining statutory compliance by the Mareeba Shire Council.

Council subscribes to a monthly delegation's update service provided by MacDonnells Law, under which MacDonnells review the myriad pieces of legislation that provide statutory powers to local government and they then advise the subscribing Councils of any changes to legislation that require amendment of existing delegations or new delegations to be made by Council.

The attached Tables of Delegable Powers display the legislation recently reviewed by MacDonnells and the amendments or additions to be made as a result thereof. If you require the Table of Delegable Powers in its entirety, please contact Manager Development and Governance.

**Local Government Act 2009 ('LGA')**

The LGA will be amended by the Local Government Electoral (Implementing Stage 1 of Belcarra) and Other Legislation Amendment Act 2018 No. 9 and Local Government (Councillor Complaints) and Other Legislation Amendment Act 2018 No. 8 as a result of a proclamation commencing the last of the changes resulting from those acts.

The amendment has resulted in changes to the rights and obligations of Council in dealing with complaints made against Councillors, and changes to the keeping of Councillor registers.

**Mineral Resources Act 1989 ('MIRA')**

The MIRA has been amended by the Mineral, Water and Other Legislation Amendment Act 2018 No. 24. The amendment has resulted in changes to the way Council, as owners of land, may give consent to access to land, enter into compensation agreements and place conditions on entry to land.

**Water Act 2000 ('WATA')**

The WATA has been amended by the Mineral, Water and Other Legislation Amendment Act 2018 No. 24. The amendment has resulted in changes to the rights and obligations that Council has, in particular when responding to requests and directions by the Chief Executive, and the power to request certain proposed changes be referred to a referral panel.

**LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

There are legal implications for local government if management is not aware of the delegated powers and powers of authorised persons that are required for their sections to operate efficiently.

The statutory powers of employees, whether delegated to their position by the Chief Executive Officer or obtained as a result of an appointment as an authorised person under particular statutes, will be invalid if they cannot be supported by an instrument documenting the particulars.

In the case where Council is challenged on an action taken or a decision made by its employees, there needs to be proof that the employee held the powers required to do so. Such documentation is known as the instrument and is required for delegations, sub-delegations and appointments. Section 260 requires the CEO to establish and maintain a register of delegations and make it available to the public.

**FINANCIAL AND RESOURCE IMPLICATIONS*****Capital***

Nil

***Operating***

Nil

**LINK TO CORPORATE PLAN**

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

Nil

## Delegable Powers under the Local Government Act 2009 ("LOGA")

### CHAPTER 5A – COUNCILLOR CONDUCT

#### Part 3 – Dealing with inappropriate conduct, misconduct and corrupt conduct

##### Division 2 – Complaints about councillor conduct

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Local Government	150P	In the specified circumstances, the power to refer a complaint to the assessor and to give the assessor all information held by the entity that relates to the complaint.				

##### Division 3 – Local government duties to notify assessor about particular conduct

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Local Government	150S(2)	In the specified circumstances, the power to give the assessor a notice about the councillor's conduct and all information held by the local government that relates to the conduct.				



**Division 5 – Referral of conduct to local government**

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Local Government	150AF(1)	In the specified circumstances, the power to investigate the conduct of the councillor.				
Local Government	150AF(4)	In the specified circumstances, the power to give information to the assessor for further investigation and take no further action in relation to the conduct.				

**Division 6 – Application to conduct tribunal about misconduct**

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Local Government	150AK(3)	In the specified circumstances, the power to give to the councillor a copy of the application.				

**Part 4 – Investigation and enforcement powers**  
**Division 2 – Entry of place by investigators**  
**Subdivision 1 – Power to enter**

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Occupier at a place	150BI(1)(a)	In the specified circumstances, the power to consent to the entry of an investigator to a place.				

***Subdivision 2 – Entry by consent***

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Occupier at a place	150BM(1)	In the specified circumstances, the power to sign an acknowledge of the consent to allow an investigator entry to a place.				

**Division 3 – General powers of investigators after entering places**

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Occupier at a place	150BV(1)	In the specified circumstances, the power to provide reasonable help to an investigator to exercise a general power.				

**Division 4 – Seizure by investigators**

***Subdivision 3 – Safeguards for seized things***

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of seized thing	150CD(1)	In the specified circumstances, the power to inspect the seized thing, and if it is a document, copy the document.				
Owner of seized thing	150CE(3)	In the specified circumstances, the power to apply to the assessor for return of the seized thing.				

**Division 7 – Review**

***Subdivision 1 – Internal review***

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of seized thing	150CO(2)	In the specified circumstances, the power to apply to the assessor for a review of the decision.				

***Subdivision 2 – External review***

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Applicant of a Review Decision	150CR	In the specified circumstances, the power to apply to QCAT for a review of the review decision.				

**Part 5 – Administration**

**Division 2 – Councillor Conduct Tribunal**

**Part 6 – Miscellaneous**

**Division 1 – Councillor conduct register**

Entity power given to	Section of LOGA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Local Government	150DX(1)	The power to keep an up-to-date register about the specified matters.				
Local Government	150DX(2)(a)	The power to publish the register on the local governments website.				
Local Government	150DX(2)(b)	The power to make the register publicly available for inspection and to sell copies of				

		an entry in the register, at the local government's public office.				
--	--	--	--	--	--	--

## **CHAPTER 6 – ADMINISTRATION**

### **Part 2 – Councillors**

#### **Division 6 – Conduct and performance of councillors**

## **CHAPTER 7 – OTHER PROVISIONS**

### **Part 12 – Traditional provisions for the Local Government (Councillor Complaints) and Other Legislation Amendment Act 2018**

<b>Entity power given to</b>	<b>Section of LOGA</b>	<b>Description</b>	<b>Delegation to the CEO / Date of Resolution</b>	<b>Sub-Delegation to Officers</b>	<b>Date of Sub-Delegation</b>	<b>Limitations and Conditions</b>
Entity Holding Information	317(3)	In the specified circumstances, power to give information to the assessor.				
Entity Holding Information	319(3)	In the specified circumstances, power to give information to the assessor.				

## **Delegable Powers under the Mineral Resources Act 1989 ("MIRA")**

## **CHAPTER 2 – PROSPECTING PERMITS**

### **Part 2 – Other Provisions About Prospecting Permits**

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of Land or Agent	46(1)	In the specified circumstances, the power to ask that a person purporting to enter or be upon land under the authority of a prospecting permit, produce the prospecting permit.,				

### CHAPTER 3 – MINING CLAIMS

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Interested Party	85(4)	In the specified circumstances, the power to apply in writing to the Land Court.				

### CHAPTER 4 – EXPLORATION PERMITS

#### Part 4 – Other Provisions About Exploration Permit

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of Land or Agent	167(1)	In the specified circumstances, the power to ask that a person purporting to enter or be on land under the authority of an exploration permit to produce the exploration permit or a copy of the exploration permit.				

### CHAPTER 5 – MINERAL DEVELOPMENT LICENCES

#### Part 1 – Mineral Development Licences Generally

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of Land	167(1)	In the specified circumstances, the power to ask that a person purporting to enter or be on land under the authority				

		of a mineral development licence to produce the mineral development licence or a copy of the mineral development licence.				
--	--	---	--	--	--	--

## CHAPTER 6 – MINING LEASES

### Part 1 – Mining Leases Generally

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of Restricted Land	275A(2)(a)	In the specified circumstances, the power to consent in writing to an application to include the surface of restricted land for the mining lease in the mining lease.				
Person who could be party to an agreement under section 279 or 280	281(1)	In the specified circumstances, the power to apply in writing to the Land Court to have the Land Court determine compensation.				

## CHAPTER 13 – ADMINISTRATION AND JUDICIAL FUNCTIONS

### Part 4 – Access to abandoned mines and final rehabilitation sites

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of Land	345(1)(a)	In the specified circumstances, the power to enter into a compensation agreement with the holder of an environmental authority who is authorised under section 344A(3) to enter land.				
Owner of Land	345(3)	Power to apply in writing to the Chief Executive to have the Land Court decide				



		the amount of compensation and the terms, conditions and times of its payment payable under section 345(1)(a)				
--	--	---	--	--	--	--

**SCHEDULE 1 – CONDITIONS OF CARRYING OUT ACTIVITY  
FOR BOUNDARY DEFINITION PURPOSES**

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Owner of Reserve	4	Power to impose reasonable and relevant conditions on entry by a person under section 86V to the surface of a reserve.				

**Delegable Powers under the  
Water Act 2000 ("WATA")**

**CHAPTER 2 – MANAGEMENT AND ALLOCATION OF WATER**  
Part 3 – How State authorises take or interference with Water  
Division 3 – Water Permits

Entity power given to	Section of WATA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Person	137(1)	Power to apply for a water permit.				
Applicant	137A(1)(a)	Power to give additional information to the Chief Executive upon request, within the reasonable period stated in the requirement.				

Applicant	137A(1)(b)	Power to verify by statutory declaration any information included in the application or any additional information required under section 137A(1)(a).				
-----------	------------	---	--	--	--	--

**Division 5 – Resource operations licences and distribution operations licences**  
**Subdivision 2 – Granting or amending resource operations licence or distribution operations licence**

Entity power given to	Section of MIRA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Holder of a Resource Operations Licence	183(5)	In certain circumstances, power to ask the Chief Executive, in writing, to refer the proposed change to the rules of a resource operations licence to a referral panel.				
Holder of a Resource Operations Licence or Distribution Operations Licence	184(6)	In certain circumstances, power to ask the Chief Executive, in writing, to refer to the proposed changes to the rules of a resource operations licence to a referral panel.				

**Division 5A – Minister of chief executive may give direction to take action about water quality issue**

Entity power given to	Section of WATA	Description	Delegation to the CEO / Date of Resolution	Sub-Delegation to Officers	Date of Sub-Delegation	Limitations and Conditions
Relevant Entity	203B	In certain circumstances, the power to take stated reasonable action or not to take the stated action within or for a stated reasonable period.				Non-compliance with a direction without reasonable excuse is an

						offence under section 203D.
Relevant Entity	203G(4)	Power to give to the official information the official reasonably requires for preparing the report required under section 203G(2)				

**8.4 FINANCIAL STATEMENTS PERIOD ENDING 30 NOVEMBER 2018****Date Prepared:** 7 December 2018**Author:** Manager Finance**Attachments:** 1. Budgeted Income Statement by Fund [↓](#)**EXECUTIVE SUMMARY**

The purpose of this report is to provide Council with an overview of financial matters for the period 1 July 2018 to 30 November 2018.

**RECOMMENDATION**

That Council note the financial report for the period ending 30 November 2018.

**BACKGROUND**

Each month, year to date financial statements are prepared in order to monitor actual performance against budgets.

For the period ending 30 November 2018, the actual results are in line with the year to date budget.

The budgeted figures reflect the 2018/19 Budget as adopted by Council at the 20 June 2018 meeting. There are no issues or concerns to discuss or highlight at this stage.

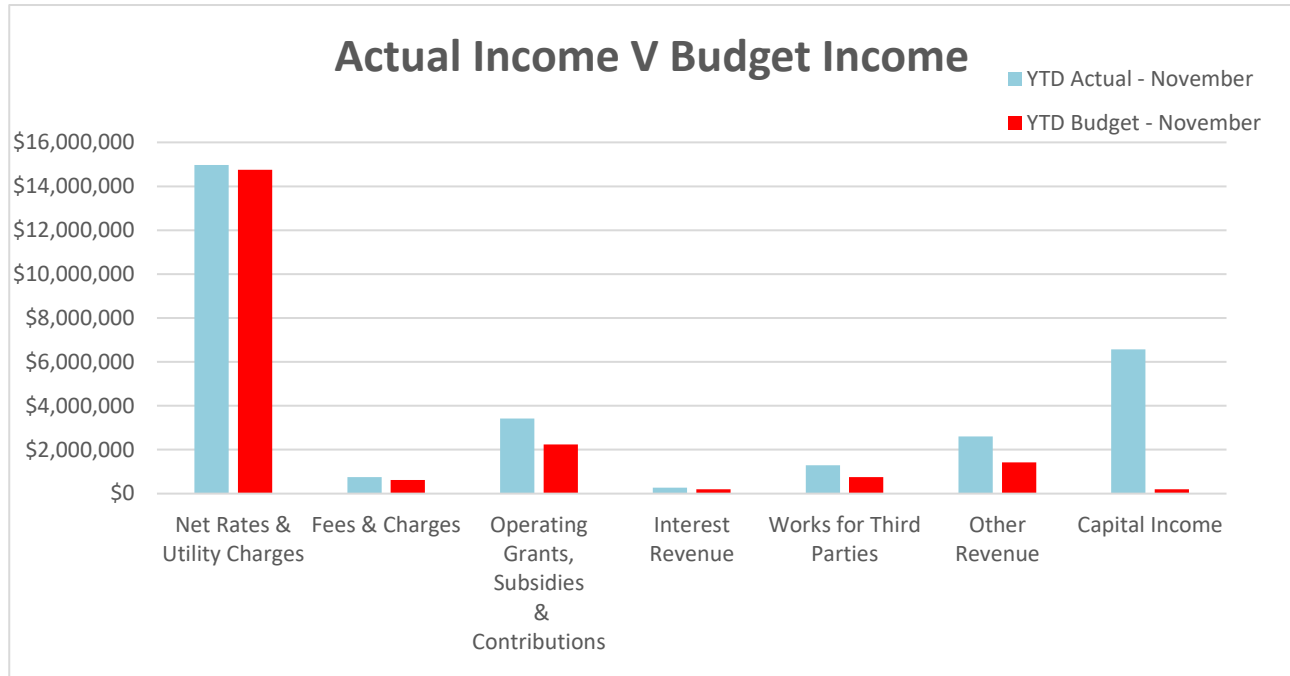
***Snapshot***

Total Operating Income	\$	23,312,426
Total Operating Expenditure	\$	16,942,498
Operating Surplus/(Deficit)	\$	6,369,928
Total Capital Income (grants, developer contributions)	\$	6,563,605
<b>Net Result - Surplus/(Deficit)</b>	<b>\$</b>	<b>12,933,533</b>

### Income Analysis

Total income (including capital income of \$6,563,605) for the period ending 30 November 2018 is \$29,876,031 compared to the YTD budget of \$20,189,269.

The graph below shows actual income against budget for the period ending 30 November 2018.



	Actual YTD	Budget YTD	Note
Net Rates & Utility Charges	14,965,770	14,756,777	
Fees & Charges	758,226	626,742	<b>1</b>
Operating Grants, Subsidies & Contributions	3,421,376	2,235,355	<b>2</b>
Interest Received	264,827	193,958	
Works for Third Parties	1,292,604	755,417	<b>3</b>
Other Revenue	2,609,623	1,423,520	<b>4</b>
Capital Income	6,563,605	197,500	<b>5</b>

#### Notes:

1. Higher than anticipated revenue from a range of areas with the majority offset by associated expenses.
2. The variance relates to the 2018 NDRRA restoration works of which \$1.3M has been received as a prepayment. Over the coming months there will be expenditure to offset this. There is no budget allocated to revenue and expenditure apart from the trigger amount

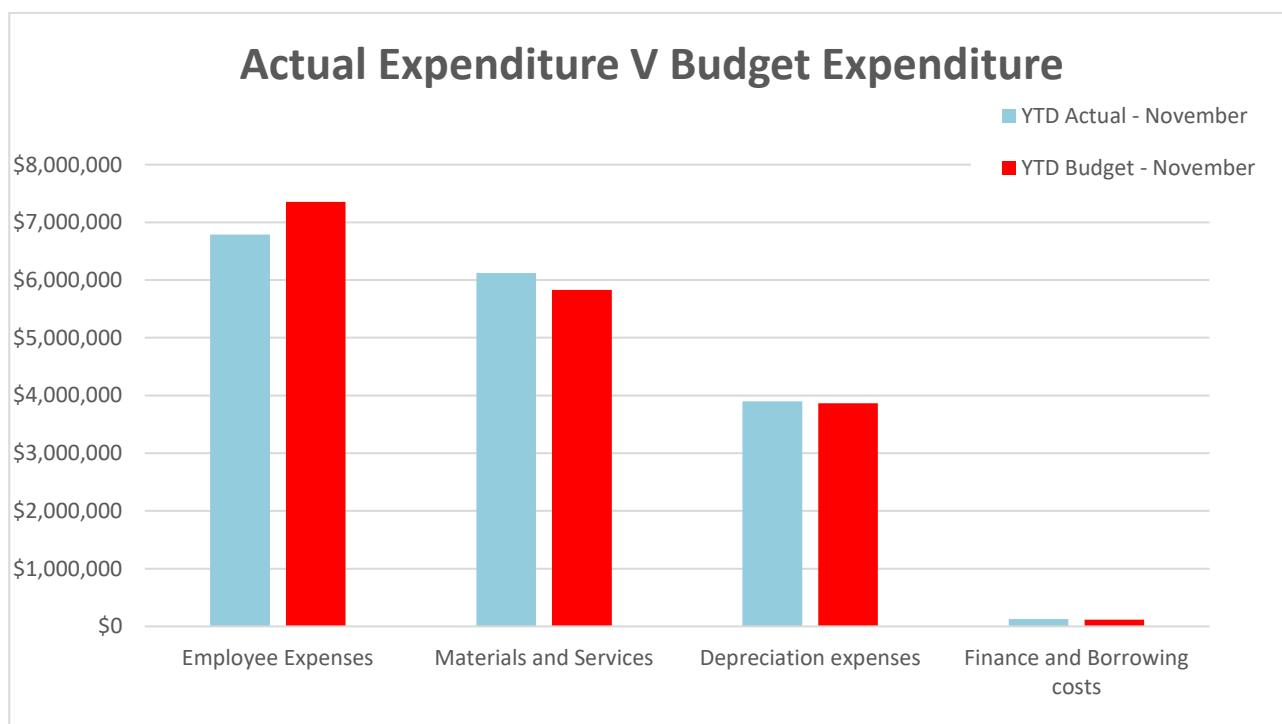
(\$115k) as we were not aware of the details when the budget was prepared. The trigger amount is the amount Council must contribute to be eligible for funding.

3. A portion of the favourable variance relates to how the budget has been allocated for RMPC works, which is equally apportioned over 12 periods however actual works does not reflect this same trend. This will also be the same for expenditure. The rest of the favourable variance is due to the additional 3<sup>rd</sup> party works which was not originally budgeted for. The associated costs form part of the operational expenses which were also not budgeted. The net impact of these additional works is likely to be small surplus and will be reported on at the completion of works.
4. Favourable result due to the balance of payments for sale of land at the Mareeba and Chillagoe Industrial Estates (\$880k) and sale of scrap metal (\$88k). Lease and rental income (\$156k) currently above budget due to annual invoices raised however budget has been apportioned equally over 12 periods.
5. Council has received \$6.4M in capital grants (W4Q2, R2R, TIDS, Mareeba Airport) and \$158k in developer contributions which are not reflected in budget.

#### Expenditure Analysis

Total expenses for the period ending 30 November 2018 is \$16,942,498 compared to the YTD budget of \$17,163,974

The graph below shows actual expenditure against budget for the period ending 30 November 2018.







The total rates and charges payable as at 30 November 2018 is \$1,738,181 which is broken down as follows;

Status	30 November 2018		30 November 2017	
	No. of properties	Amount	No. of properties	Amount
Valueless land	16	460,330	72	1,993,163
Payment Arrangement	226	121,297	206	132,771
Collection House	377	807,473	371	754,905
Exhausted – awaiting sale of land	10	104,753	8	78,294
Sale of Land	6	77,004	8	93,976
Other (includes current rates)	210	167,324	430	38,744
<b>TOTAL</b>	<b>845</b>	<b>1,738,181</b>	<b>1,095</b>	<b>3,091,853</b>

The Rates Notices for the period ending 31 December 2018 were issued on 10 August 2018 with the discount due date being 14 September 2018. Total Gross Rates and Charges levied for this six (6) month period totalled \$16,645,878.

Collection House collected \$243,213 for the month of November 2018.

Council has officially acquired the 61 properties previously identified as valueless land at the September 2017 Council Meeting. The acquisition was processed in accordance with Section 151 of the Local Government Regulation 2012.

#### Sundry Debtors

The total outstanding for Sundry Debtors as at 30 November 2018 is \$1,096,543 which is made up of the following:

Current	30 days	60 days	90 + days
\$327,555	\$76,490	\$665,505	\$26,993
30%	7%	61%	2%

#### **Procurement**

There were no emergency orders for the month.

#### **RISK IMPLICATIONS**

Nil

#### **Legal/Compliance/Policy Implications**

Section 204 of the Local Government Regulation 2012 requires the financial report to be presented to local government if the local government holds its ordinary meetings more frequently (than once per month) - to a meeting in each month.

**FINANCIAL AND RESOURCE IMPLICATIONS**

Nil

**LINK TO CORPORATE PLAN**

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

Nil

**Budgeted Income Statement by Fund 2018/19 Budget**

**Consolidated**

	Actual YTD	Budget YTD	2018/19 Budget
<b>Revenue</b>			
Rates and utility charges	15,899,760	15,705,965	<b>31,411,930</b>
Less Discounts and Pensioner Remissions	(933,989)	(949,188)	<b>(1,898,375)</b>
Net Rates and Utility Charges	14,965,770	14,756,778	<b>29,513,555</b>
Fees and Charges	758,226	626,742	<b>1,144,760</b>
Operating Grants and Subsidies	2,940,623	2,009,702	<b>7,000,458</b>
Operating Contributions	480,754	225,653	<b>902,610</b>
Interest Revenue	264,827	193,958	<b>465,500</b>
Works for Third Parties	1,292,604	755,417	<b>1,813,000</b>
Other Revenue	2,609,623	1,423,520	<b>3,428,100</b>
<b>Total Operating Revenue</b>	<b>23,312,426</b>	<b>19,991,769</b>	<b>44,267,983</b>
<b>Expenditure</b>			
Employee Expenses	6,790,194	7,352,207	<b>17,726,398</b>
Materials and Services	6,124,402	5,831,248	<b>12,919,811</b>
Depreciation expense	3,899,105	3,865,972	<b>9,451,936</b>
Finance and Borrowing costs	128,796	114,548	<b>330,190</b>
<b>Total Operating Expenses</b>	<b>16,942,498</b>	<b>17,163,974</b>	<b>40,228,335</b>
<b>Operating Surplus/(Deficit)</b>	<b>6,369,928</b>	<b>2,827,795</b>	<b>3,839,649</b>
<b>Capital Income</b>			
Capital Contributions	158,196	-	<b>-</b>
Capital Grants and Subsidies	6,405,410	197,500	<b>4,843,000</b>
Profit/(Loss) on Sale of Asset	-	-	<b>-</b>
<b>Total Capital Income</b>	<b>6,563,605</b>	<b>197,500</b>	<b>4,843,000</b>
<b>Net Result</b>	<b>12,933,533</b>	<b>3,025,295</b>	<b>8,682,649</b>

**Budgeted Income Statement by Fund 2018/19 Budget**

**General**

	Actual YTD	Budget YTD	2018/19 Budget
<b>Revenue</b>			
Rates and utility charges	8,735,301	8,609,609	17,219,218
Less Discounts and Pensioner Remissions	(933,989)	(949,188)	(1,898,375)
Net Rates and Utility Charges	7,801,312	7,660,422	15,320,843
Fees and Charges	747,586	618,408	1,124,760
Operating Grants and Subsidies	2,940,623	2,009,702	7,000,458
Operating Contributions	-	-	-
Interest Revenue	179,569	120,833	290,000
Works for Third Parties	1,233,589	736,667	1,768,000
Other Revenue	1,923,448	714,979	1,727,600
<b>Total Operating Revenue</b>	<b>14,826,126</b>	<b>11,861,011</b>	<b>27,231,661</b>
<b>Expenditure</b>			
Employee Expenses	6,192,375	6,615,269	15,939,758
Materials and Services	2,753,688	2,094,206	4,259,217
Depreciation expense	2,640,432	2,621,436	6,291,449
Finance and Borrowing costs	93,691	80,000	192,000
<b>Total Operating Expenses</b>	<b>11,680,186</b>	<b>11,410,911</b>	<b>26,682,423</b>
<b>Operating Surplus/(Deficit)</b>	<b>3,145,940</b>	<b>450,099</b>	<b>549,237</b>
<b>Capital Income</b>			
Capital Contributions	137,670	-	-
Capital Grants and Subsidies	6,249,246	197,500	3,493,000
Profit/(Loss) on Sale of Asset	-	-	-
<b>Total Capital Income</b>	<b>6,386,916</b>	<b>197,500</b>	<b>3,493,000</b>
<b>Net Result</b>	<b>9,532,856</b>	<b>647,599</b>	<b>4,042,237</b>

**Budgeted Income Statement by Fund 2018/19 Budget**

**Waste**

	Actual YTD	Budget YTD	2018/19 Budget
<b>Revenue</b>			
Rates and utility charges	1,852,330	1,833,003	3,666,006
Less Discounts and Pensioner Remissions	-	-	-
<b>Net Rates and Utility Charges</b>	<b>1,852,330</b>	<b>1,833,003</b>	<b>3,666,006</b>
Fees and Charges	-	-	-
Operating Grants and Subsidies	-	-	-
Operating Contributions	-	-	-
Interest Revenue	6,368	20,833	50,000
Works for Third Parties	-	-	-
Other Revenue	616,142	674,583	1,619,000
<b>Total Operating Revenue</b>	<b>2,474,840</b>	<b>2,528,420</b>	<b>5,335,006</b>
<b>Expenditure</b>			
Employee Expenses	155,201	150,177	362,994
Materials and Services	1,508,833	1,662,685	3,982,893
Depreciation expense	70,052	59,900	143,760
Finance and Borrowing costs	-	-	-
<b>Total Operating Expenses</b>	<b>1,734,087</b>	<b>1,872,762</b>	<b>4,489,647</b>
<b>Operating Surplus/(Deficit)</b>	<b>740,753</b>	<b>655,658</b>	<b>845,359</b>
<b>Capital Income</b>			
Capital Contributions	-	-	-
Capital Grants and Subsidies	-	-	-
Profit/(Loss) on Sale of Asset	-	-	-
<b>Total Capital Income</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net Result</b>	<b>740,753</b>	<b>655,658</b>	<b>845,359</b>



**Budgeted Income Statement by Fund 2018/19 Budget**

**Wastewater**

	Actual YTD	Budget YTD	2018/19 Budget
<b>Revenue</b>			
Rates and utility charges	2,394,267	2,388,762	4,777,524
Less Discounts and Pensioner Remissions	-	-	-
<b>Net Rates and Utility Charges</b>	<b>2,394,267</b>	<b>2,388,762</b>	<b>4,777,524</b>
Fees and Charges	10,640	8,333	20,000
Operating Grants and Subsidies	-	-	-
Operating Contributions	-	-	-
Interest Revenue	28,864	35,417	85,000
Works for Third Parties	14,338	-	-
Other Revenue	35,156	4,167	10,000
<b>Total Operating Revenue</b>	<b>2,483,266</b>	<b>2,436,679</b>	<b>4,892,524</b>
<b>Expenditure</b>			
Employee Expenses	174,849	246,936	597,079
Materials and Services	578,605	770,874	1,724,062
Depreciation expense	605,800	601,260	1,443,024
Finance and Borrowing costs	35,105	34,548	138,190
<b>Total Operating Expenses</b>	<b>1,394,358</b>	<b>1,653,617</b>	<b>3,902,355</b>
<b>Operating Surplus/(Deficit)</b>	<b>1,088,908</b>	<b>783,062</b>	<b>990,169</b>
<b>Capital Income</b>			
Capital Contributions	6,771	-	-
Capital Grants and Subsidies	156,164	-	450,000
Profit/(Loss) on Sale of Asset	-	-	-
<b>Total Capital Income</b>	<b>162,935</b>	<b>-</b>	<b>450,000</b>
<b>Net Result</b>	<b>1,251,842</b>	<b>783,062</b>	<b>1,440,169</b>

**Budgeted Income Statement by Fund 2018/19 Budget**

**Water**

	Actual YTD	Budget YTD	2018/19 Budget
<b>Revenue</b>			
Rates and utility charges	2,755,742	2,713,049	5,426,097
Less Discounts and Pensioner Remissions	-	-	-
<b>Net Rates and Utility Charges</b>	<b>2,755,742</b>	<b>2,713,049</b>	<b>5,426,097</b>
Fees and Charges	-	-	-
Operating Grants and Subsidies	-	-	-
Operating Contributions	-	-	-
Interest Revenue	24,822	10,417	25,000
Works for Third Parties	44,677	18,750	45,000
Other Revenue	28,172	14,583	35,000
<b>Total Operating Revenue</b>	<b>2,853,413</b>	<b>2,756,799</b>	<b>5,531,097</b>
<b>Expenditure</b>			
Employee Expenses	228,861	303,819	739,190
Materials and Services	1,171,356	1,188,939	2,683,432
Depreciation expense	540,389	540,856	1,471,655
Finance and Borrowing costs	-	-	-
<b>Total Operating Expenses</b>	<b>1,940,606</b>	<b>2,033,614</b>	<b>4,894,277</b>
<b>Operating Surplus/(Deficit)</b>	<b>912,808</b>	<b>723,185</b>	<b>636,820</b>
<b>Capital Income</b>			
Capital Contributions	13,755	-	-
Capital Grants and Subsidies	-	-	900,000
Profit/(Loss) on Sale of Asset	-	-	-
<b>Total Capital Income</b>	<b>13,755</b>	<b>-</b>	<b>900,000</b>
<b>Net Result</b>	<b>926,563</b>	<b>723,185</b>	<b>1,536,820</b>

**Budgeted Income Statement by Fund 2018/19 Budget**

**Benefited Area**

	Actual YTD	Budget YTD	2018/19 Budget
<b>Revenue</b>			
Rates and utility charges	162,119	161,543	323,085
Less Discounts and Pensioner Remissions	-	-	-
Net Rates and Utility Charges	162,119	161,543	323,085
Fees and Charges	-	-	-
Operating Grants and Subsidies	-	-	-
Operating Contributions	480,754	225,653	902,610
Interest Revenue	25,204	6,458	15,500
Works for Third Parties	-	-	-
Other Revenue	6,705	15,208	36,500
<b>Total Operating Revenue</b>	<b>674,781</b>	<b>408,862</b>	<b>1,277,695</b>
<b>Expenditure</b>			
Employee Expenses	38,909	36,007	87,377
Materials and Services	111,920	114,544	270,206
Depreciation expense	42,433	42,520	102,048
Finance and Borrowing costs	-	-	-
<b>Total Operating Expenses</b>	<b>193,262</b>	<b>193,070</b>	<b>459,630</b>
<b>Operating Surplus/(Deficit)</b>	<b>481,519</b>	<b>215,792</b>	<b>818,065</b>
<b>Capital Income</b>			
Capital Contributions	-	-	-
Capital Grants and Subsidies	-	-	-
Profit/(Loss) on Sale of Asset	-	-	-
<b>Total Capital Income</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net Result</b>	<b>481,519</b>	<b>215,792</b>	<b>818,065</b>

**8.5 COMMUNITY HOUSING CAPITAL WORKS 2018/19**

**Date Prepared:** 4 December 2018

**Author:** Senior Community Wellbeing Officer

**Attachments:** 1. Barang Street Kuranda - Engineer's Report [↓](#)

---

**EXECUTIVE SUMMARY**

The purpose of this report is for Council to consider capital works at the community housing properties at 2 Barang Street, Kuranda. The works were identified under the Community Housing Asset Management Plan 2018 - 2023.

**RECOMMENDATION**

That Council approve the capital project to be completed at 2 Barang Street, Kuranda during the financial year ending 2019. These works will be funded through the Community Housing Reserve.

**BACKGROUND**

Council is a Long-Term Community Housing provider, registered with the Queensland State Regulatory System for Community Housing. With 108 properties across the Shire, Council provides a valued housing service to tenants on the Age Pension, or those over 55 years of age and receiving a Disability Support Pension.

As a registered provider, Council manages housing assets in accordance with the *Housing Act 2003*, Department of Housing and Public Works (the Department) funding agreements and the State's Maintenance Management Framework.

The management of community housing assets aligns with Council's approach to the management of all asset classes where the investment in capital renewals ensures that services are sustainable through the provision of assets which are fit for purpose and meet required standards.

**Community Housing Asset Management Plan**

The Community Housing Asset Management Plan 2018 - 2023 was endorsed by Council in April 2018.

This Plan was informed by a series of condition assessments which were conducted by a suitably qualified building inspector. The condition data from the assessments is being utilised to prioritise works at the properties including planned maintenance, reactive maintenance and capital works. These have been prioritised in accordance with Council's Risk Management Framework, financial implications, level of urgency and staff capacity to complete the works.

A suitably qualified Council officer will conduct condition assessments on the properties which were not inspected during the development of the Asset Management Plan.

**Department of Housing and Public Works**

The Department has an interest in the Barang St units by way of Capital Assistance and Capital Funding Agreements, and Council is required to seek departmental approval of upgrade works where the cost is greater than \$10,000.

**Barang Street, Kuranda**

The Barang Street property features 3 duplexes known as 2A, 2B, 2C, 2D, 2E and 2F. The units at 2C and 2F were assessed by the building inspector who recommended that an engineer be engaged to conduct a structural engineering site inspection of all the units to scope the works required at the site. The engineer's report (attached) specifies structural works which are typical across all units, as well as additional site findings for certain units.

**Project Cost & Funding Source**

The RPEQ report provided information from which Council officers have estimated the cost of the renewals to be in the region of \$80,000 but the actual cost will depend on quotes from suitably qualified contractors. These works are to be fully funded by the Community Housing Reserve, with no funds required from other internal or external sources.

**RISK IMPLICATIONS****Financial**

No capital projects for community housing were approved for funding in the 2018/19 capital budget because the Asset Management Plan was still under development at the time of capital works planning. Accordingly, this project is not budgeted for, however, the works will be fully-funded through the Community Housing Reserve.

The balance of the Community Housing Reserve is expected to cover the cost of works on other properties which will be identified during future condition assessments. It is unlikely that there are any other properties requiring this level of repair.

**Infrastructure and Assets**

These works will return the properties to the standards defined in Council's Community Housing Asset Management Plan.

**Political and Reputational**

The supply of quality housing stock to seniors in the Shire is a recognised community priority.

**Legal and Compliance**

The Department of Housing and Public Works requires all Long-Term Community Housing providers to implement an Asset Management Plan.

**FINANCIAL AND RESOURCE IMPLICATIONS****Capital**

New capital project estimated to cost up to \$80,000 but will depend on quotes.

***Is the expenditure noted above included in the current budget?***

No.

***If not you must recommend how the budget can be amended to accommodate the expenditure***

These works are estimated to cost \$80,000 pending quotes from registered builders. This project will be fully funded by the Community Housing Reserve which has sufficient funds to complete the works.

**Operating**

These works will reduce the likelihood of reactive maintenance at the property and will have a minimal impact on depreciation expense. It is anticipated that the reduction in reactive maintenance will mitigate any increase in depreciation.

***Is the expenditure noted above included in the current budget?***

No. The depreciation expense in the current budget is based on existing asset values.

***If not you must recommend how the budget can be amended to accommodate the expenditure***

The depreciation expense is predicted at less than \$250 per unit which will be reflected in future operational budgets.

**LINK TO CORPORATE PLAN**

**Financial Sustainability:** A council that continuously looks for savings and opportunities while managing council's assets and reserves to ensure a sustainable future in a cost-effective manner.

**Community:** An engaged community which supports and encourages effective partnerships to enhance the liveability of the shire and the wellbeing of residents in communities which are resilient and prepared for unforeseen events.

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

Pending approval by the Department of Housing and Public Works, a contractor will be selected in accordance with Mareeba Shire Council's Procurement Policy.



# AKTIV ENGINEERING.

*Structural Design, Drafting & Consulting Services*

Phone: 0429 805 068  
Email: AktivEng@Outlook.com  
ABN: 23451595939

Reference: JDP-431-R1

**150 Harvey Road  
REDLYNCH, QLD, 4870**

Wednesday 22<sup>nd</sup> August 2018

Dear Cristina Aloia,

I would like to confirm that I conducted a Structural Engineering Site Inspection on Friday 3<sup>rd</sup> August 2018 of the external areas to the following properties:

**2A/B/C/D/E/F Barang Street, Kuranda, QLD, 4881**

The following image depicts the 6x residences inspected:



## Scope of works:

The scope of works for the Structural Engineering Site Inspection was to inspect the external structure of the above mentioned properties for structural issues and to provide recommendations on remedial works.

*Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881*

*Pg 1 of 14*

**Site Findings:**

Refer to the following images and associated comments relating to site findings.

**Typical structural issues all units, sample of photos shown for reference:**

Corrosion to base of columns. No steel work should be in contact with soil. Refer recommendations for rust treatment & install concrete surround to steelwork, fall to shed water.



Corrosion to end plates, treat as noted in recommendations and replace corroded bolts with new galvanized Gr 8.8/S matching size bolts.



Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881

Pg 2 of 14



**Typical structural issues all units, continued:**

Corroded end plates to be treated as noted.



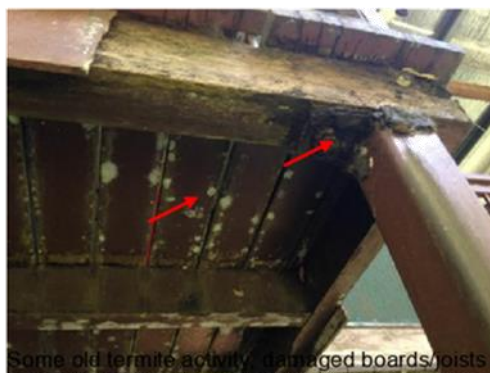
Remove and replace severely corroded end plates



Corroded stair stringers & cleats to be replaced with new proprietary stringers & cleats all complying with NCC 3.9.1.



Replace rotted decking boards, fascias & joists as required.



Some old termite activity, damaged boards/joists to be replaced. Ensure pest controller inspects for active termites and treats accordingly.



Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881

Pg 3 of 14

**Typical structural issues all units, continued:**

Re-support stair stringers, recommend installing 100x50x3 RHS with fully welded end plates, stringers welded to face, use galv steel packers if required, typical.



In adequate stringer to landing connection via coach bolt into fascia & inadequate edge distance to bottom of joist. Upgrade with 100x50x3 RHS tie beam as noted adjacent.



Inadequate fixing of balustrade to deck, presently 900mm high, should be 1000mm min. and corrosion to rails & connections. Presently both a safety & structural concern, recommend installing with new balustrading complying with NCC 3.9.2 and certified by the manufacturer including fixing details.



*Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881*

*Pg 4 of 14*



**Typical structural issues all units, continued:**

Corroded hand rails to balustrade.



Corroded and inadequate baluster post fixing to decking board instead of to joist or bearer.



Timber rot & decay to decking boards, replace with new boards.



Joists presently skew nailed to bearers, recommend 2/Triple grip fix installed with 4/3.05dia galv flat head galv nails each leg to better resist uplift & shear forces in cyclonic winds.



Damaged & decayed decking boards to be replaced.



Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881

Pg 5 of 14

**Typical structural issues all units, continued:**

Loose hold down connections, tighten.



Note, on units 2A & 2B there didn't appear to be hold down bolts extending through verandah roof beams. Recommend confirming trusses are adequately anchored.

Corroded masonry anchors and inadequate thread length thru nut on some units (particularly 2A/B). Recommend installing additional intermediate M12 galv epoxy/chemical anchors, 110mm embed to corefilled blocks, complete with 50sq.x5 PL washer.



Expansion joint presently not filled. Recommend installing closed cell polyethylene backing rod and fill with 10mm deep bead of polysulfide flexible sealant.



**Additional site findings – 2A/B:**

Confirm existing structure is approved & certified. Typically we would try to avoid fixing to existing fascia as imposed wind load can result in failure. Wood rot of posts & beams, replace all & make good or replace with new approved structure.



Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881





**Additional site findings - 2C:**

Existing carport, large span of roof sheeting which far exceeds capacity without intermediate support. Also wood rot to base of some columns, recommend replacing with new approved carport.



Subsidence of existing foundations, resulting in cracking to structural wall (and planter box). Recommend improving bearing capacity & support through expanding structural resin injection. More details in recommendations.



For subsidence control, refer additional recommendations following.

Cracking to main house blockwork as result of foundation subsidence.



*Pg 7 of 14*



**Additional site findings - 2C, continued:**

Confirm if the existing covered deck extension was approved. Member sizes and connection details appear light for cyclonic areas.



Posts below deck extension require proprietary end caps or fully welded end caps to prevent ingress of water. Also columns are presently in contact with soil which significantly increases rate of corrosion.

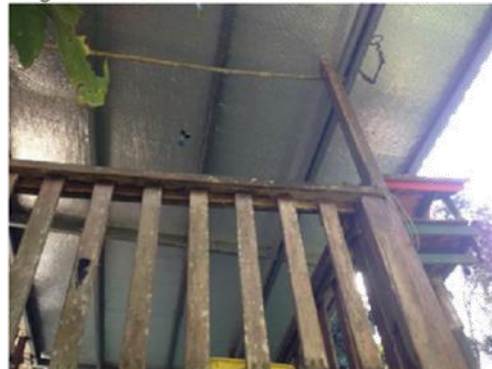


*Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881*

65x35 RHS cantilevered roof beam looks too light as does the connection to the timber post. Note the timber post is bolted to the baluster corner post which hasn't been designed for the imposed uplift loads. Recommend upgrading as required.



Per other properties, balustrade is of insufficient height.



**Additional site findings - 2C, continued:**

Ensure water tank stand is properly designed for imposed load or remove.



Corrosion to water tank stand, repair/replace &/or rust treat as required.



Joist & stringer inadequately connected. Make good all connections. Recommend 125x75x3 RHS bearer welded between columns & connecting 100x50x3 RHS tie fully welded to the bearer & to the face of the existing stair stringers.





**Additional site findings – 2D:**

Wood rot to fascia & beam, repair/replace as required and make good.



Confirm new covered deck extension has been approved & certified. Some elements & connections appear light for applied loads. May have also expected to see some cross between ground floor columns since they are reasonable slender.



2A to 2F Darling Street, Kuranda, Qld, 4861

Excavation around existing footing reduces uplift capacity. Recommend replace with new column & footing. Refer minimum sizing in accompanying structural plans.



Posts in contact with soil. Recommend concrete upstand.



**Additional site findings – 2E/F:**

Severe undermining of existing house blockwork foundations. Recommend installing supporting blockwork wall. Also inadequate retaining wall, recommend installing new retaining with drainage discharging to stormwater. Refer to accompanying structural plans.



Recommend removing existing tree stump & excavating behind existing retaining wall. Signs of overstressing may indicate inadequate drainage & gravel backfill. Install if required.



Existing house wall foundations to be supported.



Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881

Pg 11 of 14



**Additional site findings – 2E/F:**

Down pipes generally discharging to ground, recommend connecting to storm water. Presently water discharging to ground has the effect of increasing rate of corrosion, reducing bearing capacity of the soil which can lead to subsidence and increases conditions more conducive to termite infestation and timber rot.



Suspect existing awning is unapproved & not certified. Recommend removing to prevent induced structural damages to building.



Pavers fall back towards house. Recommend re-laying pavers to fall min. 1:100 away from house & into drain.



**Recommendations:**

Recommendations should be read in conjunction with site findings. The following recommendations provide further detail on items identified in the body of the report.

**Corrosion to posts:**

- All posts should not be in contact with soil as this accelerates the rate of corrosion.
- A concrete cap should be poured over the existing footing to above ground level and sloped to shed water away from the steel column. Ensure the existing footing is thoroughly cleaned & apply bondcrete or similar approved product to the surface all to manufacturer's specifications. Refer accompanying structural details.
- Where applicable the remove soil, mechanically descale any surface rust & apply 150min. microns of zinc rich primer (eg. Parchem Nitoprime Zincrich or Inorganic Zinc Silicate)
  - NB. If more than 10-15% & < 50% of parent material has deteriorated along any face, upgrade with 75x6 fully welded galv angle & fixed to existing foundation with M16 epoxy anchor 150 emed. Refer accompanying Structural Details.
  - If >50% depletion of parent material for at least one face of column, then replace column like for like with the footing detail per accompanying Structural Details.

**Corrosion to cleats & bolted connections:**

- All corroded bolts to be replaced with matching size galv bolts in grade 8.8/S.
- Where applicable mechanically descale any surface rust to cleats & apply 150min. microns of zinc rich primer (eg. Parchem Nitoprime Zincrich or Inorganic Zinc Silicate)
  - NB. If more than 10-15% & < 40% of parent material has deteriorated to cleat, upgrade with 75x6 fully welded galv gusset both sides. Refer accompanying Structural Details.
  - If >40% depletion of parent material depletion, then replace with 75x10 plate cleat 6cfw.
  - Refer accompanying Structural Details.

**Subsidence to foundations on unit 2C:**

We noted significant subsidence to foundations on unit 2C. This has resulted in reduced bearing capacity to the footings under the blockwork wall leading to some cracking. The bearing capacity of the soil needs to be improved or existing footings re-supported.

In this instance we would recommend injection of expanding structural resin which increases bearing capacity under existing footings and can lift them back to their original location helping to close up cracks. We would recommend contacting Mainmark (formerly Uretek) direct to provide advice and a quote for this work (regional contact is Brendan Cheeseman, M. 0438 534 495). We have attached a couple of brochures for your reference.

Other options would include a hydrovac excavation under the footing and installing staged underpinning footings in a couple of locations. Note the existing building structure would need to be propped during works until the footing has been poured and cured. Also unless the design incorporates jacking, it would only act to reduce further likelihood of subsidence. This design would

*Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881*

*Pg 13 of 14*



also require a soil test within this vicinity to ascertain existing soil bearing capacity for bearing capacity design. We could provide details for this if required.

Cracks should be filled with an approved flexible sealant such as polyurethane to prevent ingress of water and corrosion of reinforcing bars to the wall.

***Undermining of foundations on 2F:***

We noted major undermining of the existing foundations to the ground level block wall on unit 2F. We would recommend tying this existing foundation into a supporting reinforced blockwork wall. In addition the existing ground adjacent to this unit should be retained. We would recommend drainage being incorporated to the rear of the retaining wall to reduce likelihood of water spilling over into the undercover carport area.

***Uncertified structures:***

Although outside of scope of works, there were structures identified on site that appeared not to be upto code requirements. We would be happy to assist with preparing Certified Structural Plans for new complying structures if required.

Please advise if you would like for us to provide a fee proposal to undertake further exploratory works on-site and to prepare structurally certified plans or upgrading works.

Should you have any queries please do not hesitate to contact us.

Yours Faithfully,



**Daniel Post**

Principal Structural Engineer,  
RPEQ 15242, NT Reg. 199592ES, CPEng, MIEAust, NER

***AKTIV Engineering***

M: 0429 805068

E: AktivEng@outlook.com

W: www.aktivengineering.com.au

**Important Information:**

1. This report is not an all-encompassing report dealing with the building from every aspect. It is a reasonable attempt to identify any obvious or significant structural defects apparent at the time of the inspection. No guarantee can be given for the structural sufficiency of the existing structures.
2. This report was produced for the use of the Client. The Consultant is not liable for any reliance placed on this report by any third party.
3. This report does not include the inspection & assessment of matters outside the scope of the requested inspection & report.
4. This report is limited to those areas and sections of the property fully accessible & visible to the inspector on the date of inspection. The inspection did not include areas that were inaccessible, not readily accessible or obstructed at the time of inspection. Obstructions are defined as any condition or physical limitation which inhibits or prevents inspection and may include – but are not limited to – existing structures, builder's debris, vegetation, pavements or earth.

Structural Engineering Inspection of,  
2A to 2F Barang Street, Kuranda, Qld, 4881

Pg 14 of 14



## 9 INFRASTRUCTURE SERVICES

### 9.1 TRAFFIC ADVISORY COMMITTEE - MINUTES OF MEETING HELD 4 DECEMBER 2018

**Date Prepared:** 10 December 2018

**Author:** Director Infrastructure Services

**Attachments:** 1. Minutes of the Traffic Advisory Committee Meeting held 04 December 2018 [↓](#)

---

#### EXECUTIVE SUMMARY

The purpose of this report is to present the Minutes of the Mareeba Shire Council Traffic Advisory Committee Meeting held on Tuesday 4 December 2018 for Council's information.

The action items presented in the minutes of the Traffic Advisory Committee (TAC) are recommendations to Council. Council's endorsement or contrary view of the recommendations is required.

#### RECOMMENDATION

That Council receives the minutes of the Traffic Advisory Committee Meeting held Tuesday, 04 December 2018.

#### BACKGROUND

The Traffic Advisory Committee (TAC) is a consultative committee of Council established to raise community and other representative body concerns in relation to the traffic conditions with Council and the Department of Transport and Main Roads.

#### RISK IMPLICATIONS

##### Financial

There are ongoing costs associated with investigation of traffic matters to ensure a safe road environment for our community. In most cases, any safety improvements on Council roads determined from these investigations will be funded from operational budgets or referred for consideration in future capital budget deliberations.

#### LEGAL/COMPLIANCE/POLICY IMPLICATIONS

Nil

#### FINANCIAL AND RESOURCE IMPLICATIONS

##### *Capital*

Nil

##### *Operating*

Internal resources for investigation and follow up actions.

***Is the expenditure noted above included in the current budget?***

Nil

**LINK TO CORPORATE PLAN**

**Community:** An engaged community which supports and encourages effective partnerships to enhance the liveability of the shire and the wellbeing of residents in communities which are resilient and prepared for unforeseen events.

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

Nil



**TRAFFIC ADVISORY COMMITTEE MEETING**  
**MAREEBA BOARDROOM, 65 RANKIN STREET, MAREEBA**  
**TUESDAY, 04 DECEMBER 2018**  
**9:30AM TO 10:11AM**

## **MINUTES**

### **PRESENT:**

Transport and Main Roads (TMR) - Principal Engineer - Civil  
 Transport and Main Roads (TMR)  
 Queensland Police Service (QPS) - Sergeant  
 Queensland Police Service (QPS) - Sergeant  
 Mareeba Chamber of Commerce  
 Mareeba Shire Council (MSC) - Councillor  
 Mareeba Shire Council (MSC) - Councillor  
 Mareeba Shire Council (MSC) - Manager Works  
 Mareeba Shire Council (MSC) - Minutes Secretary

Darryl Jones  
 Dave Hamilton  
 Alf Grigg  
 John Ridgway  
 Sam Musumeci  
 Kevin Davies (Chair)  
 Lenore Wyatt  
 Andrew Foster  
 Marjorie Anthony

### **APOLOGIES:**

Mareeba Shire Council (MSC) - Mayor  
 Mareeba Shire Council (MSC) - Councillor  
 Mareeba Shire Council (MSC) - Councillor  
 Mareeba Shire Council (MSC) - Councillor  
 Mareeba Shire Council (MSC) - Manager Technical Services  
 Mareeba Shire Council (MSC) - Director Infrastructure Services  
 Transport and Main Roads (TMR) (Transport Services Division)  
 Queensland Police Service (QPS) - Constable  
 Transport and Main Roads (TMR) - Transport Inspector

Tom Gilmore  
 Alan Pedersen (Chair)  
 Cr Angela Toppin  
 Cr Mary Graham  
 Sam Wakeford  
 Glenda Kirk  
 Philip Donnelly  
 Derek Garner  
 Ian Wiltshire

### **1. MINUTES**

#### **Tuesday 18 September 2018**

Minutes of the Mareeba Shire Council Traffic Advisory Committee Meeting held on Tuesday, 18 September 2018 were ratified by Council at their Ordinary Meeting of 24 October 2018.

TMR Representatives (Darryl Jones and Dave Hamilton) joined the meeting via telephone link to discuss TMR matters which were dealt with first.

Telephone link up ended at 9:43AM; all other matters were then discussed.

*Minutes of the MSC Traffic Advisory Committee Meeting, Mareeba Boardroom, 65 Rankin Street, Mareeba  
 Tuesday, 04 December 2018, commencing at 9:30am*

2. BUSINESS ARISING FROM PREVIOUS MEETING

Item	Organisation	Issue	Recommendation / Follow Up Action	Action Required by	Action Due Date
16.03-03	Traffic Management Study Mareeba CBD	Council seeks to undertake a full traffic management study for the Mareeba CBD area, including vehicle and pedestrian movements, disability access and parking	<p>Letter to TMR 27/01/2016</p> <p>TMR interested in cost sharing agreement</p> <p>Draft Brief prepared and under review</p> <p>MSC provided TMR (Darryl Jones) draft hard copy of Brief, electronic draft copy to follow via email</p> <p>MSC met with DTMR on 09/09/2016 to finalise tender documents, minor changes required, waiting advice from TMR on cost sharing arrangement</p> <p>Letter from TMR offering contribution of up to \$55k (+GST) matching Council's funding allocation</p> <p>Tender responses received by MSC / TMR, pending evaluation: commencing week of 12/12</p> <p>Tender awarded to AECOM, cameras installed on 21/02/2017 at 9 intersections for 24 hours, data currently being analysed. Expected completion date is 05/2017</p> <p>Meeting with QPS scheduled for 22/03/2017 to review data, It is anticipated a draft report will be ready early April with the final report expected May 2017</p> <p>Workshopped with Council and QPS, final report due end of June</p> <p>Report to Council Mtg of 20/12/2017 adopting the MSC traffic network projects in future Capital works planning</p> <p>TMR seeking funding through safer roads sooner, funding to be identified early next year (2018)</p> <p>TMR has received funding through Safer Roads Sooner to install traffic lights at the intersection of Byrnes / Rankin Streets in 2018/19</p> <p>MSC to consult with businesses regarding temporary road management trials near Walsh / Rankin; Target / Coles Herberton / Constance</p> <p>Meetings with relevant businesses completed; survey currently open to the public seeking feedback by COB 22/06/2018;</p> <p>Meeting with Chamber on 18/06/2018</p> <p>Chamber supportive of proposal;</p> <p>detailed design &amp; funding opportunities next step;</p> <p>TMR advised the Rankin / Byrnes Streets traffic lights are funded and currently in detailed design phase</p> <p>TMR consultation will be undertaken once detailed design complete for Stage 1 (Traffic Lights) MSC consultation of study complete</p> <p>Design forecast to be completed June / July - consultation early next financial year</p> <p>Construction programmed for 2019/20</p>	MSC	

Minutes of the MSC Traffic Advisory Committee Meeting, Mareeba Boardroom, 65 Rankin Street, Mareeba  
Tuesday, 04 December 2018, commencing at 9:30am



Item	Organisation	Issue	Recommendation / Follow Up Action	Action Required by	Action Due Date
16.06-04	QPS (Insp Rolf Straatemeier)	What is required for "High Crash Zone" signs to be placed between Mareeba and Kuranda	QPS to liaise with TMR as to locations for low cost solutions QPS checking crash rates, will review in 2 months QPS to advise TMR of suggested locations based on statistics Since upgrade at Brickworks Road, statistics have improved Upgrades subject to funding availability on Kennedy Highway TMR waiting advice on location, funding sought, assessment being undertaken on the Kuranda Range Road to Smithfield TMR to liaise with QPS identifying locations for high crash zone signage TMR suggested between Gold Mine Creek to Emerald Creek or Tinaroo Creek Road for high crash zone signs, "head on" design preferred option. TMR to liaise with QPS to identify sites for signage, sites to be determined after TMR complete study TMR advised study will be completed June / July 2018 Study completed pending sign off and funding, QPS to liaise with TMR TMR advised funding being sought Pending advice on funding	QPS / TMR	TBC
17.03-01	Councillor (Nipper Brown)	Mulligan Highway - Request for signage on the northern entry into Mareeba (near Mary Andrews Park) prior to the Dimbulah Road turnoff stating all road trains must turn right. There have been instances where road trains did not turn and ended up in Byrnes Street, issued raised by trucking company	TMR to investigate TMR designing sign, TMR to provide wording TMR advised this is a work in progress, wording currently being sorted Design & wording underway by TMR; it was suggested a similar sign to that on the Ootann Road Turnoff could be used New sign currently being designed by TMR Signs approved by TMR and order placed for signage Programmed for early new year	TMR	09/2018
17.12-09	QPS (Dave Saul)	Request for additional speed signage from Desailly Range through to Mt Molloy	TMR to review signage guidelines and provide update TMR will investigate and report back if additional 100kph repeater signs are required between bottom of range and Mt Carbine TMR advised there are no repeater signs required for 100 zone, but will consider the installation of a target board on the existing sign to improve drivers' visibility / attention of change in speed Pending advice from TMR re installation of target board No further action required by this Committee, resolved to remove from the minutes	TMR	
18.04-05	MSC (Glenda Kirk)	Barron River Bridge on Anzac Avenue (John Doyle Bridge) Renewal	Bridge renewal programmed for August 2018; full closure required for approx. 6 weeks; temporary traffic lights to be used to manage congestion during peak times Renewal will restore load limit to 44t Survey complete, design in progress To manage traffic flow, it is proposed temporary traffic lights will be used in two locations; Anzac Ave / Kennedy Hwy and Kennedy Hwy intersection south of the Heritage Centre; closing the Mareeba Connection Road to		

Minutes of the MSC Traffic Advisory Committee Meeting, Mareeba Boardroom, 65 Rankin Street, Mareeba  
Tuesday, 04 December 2018, commencing at 9:30am

Item	Organisation	Issue	Recommendation / Follow Up Action	Action Required by	Action Due Date
			through traffic; changed traffic conditions are subject to the finalization of the TMP Consultants engaged to undertake design Pending final design Construction proposed for after June next year		
18.06-02	MSC	TMR are requested to consider placement of street lights / flashing amber lights at the Sandy Creek Bridge, Dimbulah to slow traffic; the speed limit is 60 kph; can QPS monitor	TMR to review location of the 60kph sign with a view to relocating the sign to improve visibility TMR to assess and advise Relocation of signage being considered by TMR No further action required by this Committee, resolved to remove from the minutes	TMR	18/09/2018
18.06-07	MSC (Cr Wyatt)	Reported two ladies had a fall recently whilst trying to cross the highway in front of the Jackaroo Motel; there is a significant height difference between the recent resheeting works and the original road surface	Resurfacing carried out by TMR TMR will raise the matter through RMPC for rectification Defect listed on RMPC register Works will be undertaken as and when funds become available TMR / MSC approved and on programme for completion Works completed, no further action required No further action required by this Committee, resolved to remove from the minutes		
18.09-02	MSC (Cr Kevin Davies)	TMR stock pile, near Martin Avenue	MSC and TMR to inspect following the TAC meeting of 18/09/2018 TMR to follow up		
18.09-03	QPS (John Ridgway)	Parking issues at St Thomas's Catholic School; vehicles are parking on crossing on Hastie Street or on the centre island; there is a general lack of parking in school zone; no drop and go zone; bus parking zone is long; request redesign	MSC to review parking and discuss with St Thomas's School CRM/18/11854 Short term solutions to be investigated and optional designs to be considered		
18.09-04	QPS (John Ridgway)	Installation of 50 kph signs on Walsh street, public seem generally confused that it is not a 60 zone	MSC to review CRM/18/11853 Reminder to be put placed on MSC social media as to speed limit in built up areas is 50kph unless signed		
18.09-05	QPS (John Ridgway)	Poor lighting on pedestrian crossing between IGA and TMR on Walsh Street; no light on TMR side of road	MSC to review CRM/18/11850		
18.09-08	TMR (Ian Wiltshire)	An inspection of trucks parking at Speewah carried out and it was noted there is a stock pile currently located in the vicinity	On-going use of site pending completion of TMR freight study No further action required by this Committee, resolved to remove from the minutes		

### 3. NEW BUSINESS FOR CONSIDERATION (Incoming Correspondence / Requests)

*Minutes of the MSC Traffic Advisory Committee Meeting, Mareeba Boardroom, 65 Rankin Street, Mareeba  
Tuesday, 04 December 2018, commencing at 9:30am*

Item	Organisation	Issue	Recommendation / Follow Up Action	Action Required by	Action Due Date
18.12-01	MSC (Cr Alan Pedersen)	McLeod River Bridge: Works have been completed speed limit is still 60kph, can this be increased to 80kph?	TMR to inspect and advise		
18.12-02	MSC (Glenda Kirk)	Bike Bus Program - This program is an initiative of the Qld Government where children ride to school with qualified adult volunteers one day a week. The bus follows a route approved by Council and the school which meets the needs of the children.	Noted		
18.12-03	MSC (Glenda Kirk)	Pre-wet season preparations	Noted		

#### 4. GENERAL BUSINESS

Item	Organisation	Issue	Recommendation / Follow Up Action	Action Required by	Action Due Date
18.12-04	TMR (Phillip Donnelly)	State Wide Safe Holiday Op commenced 3 December for two weeks. This campaign is focusing on mechanical safety around light vehicles and educating drivers leading up to the busy holiday period. Teams will be seen out and about the region.	Noted, no further action required		
18.12-05	MSC (Cr Lenore Wyatt)	Requests a reduction of speed limit at Bibbohra to 80kph; slip lane requested on both right turns	TMR to review and advise		
18.12-06	TMR	Tablelands Heavy Vehicle Management Strategy	TMR advised AECOM engaged to undertake freight study; with a view of the study being completed within 6-8 months (late 2018) Study currently underway		

#### 5. 2019 MEETING DATES

Tuesday, 19 March  
Tuesday, 18 June  
Tuesday, 17 September  
Tuesday, 03 December

#### 6. CLOSURE

10:11AM



**9.2 REEF COUNCILS MAJOR INTEGRATED PROJECTS PROGRAM ENDORSEMENT**

**Date Prepared:** 5 December 2018

**Author:** Senior Environmental Officer

**Attachments:** 1. LGAQ Reef Councils Major Integrated Projects Proposal [↓](#)

---

**EXECUTIVE SUMMARY**

The Local Government Association of Queensland (LGAQ) is seeking endorsement of the Reef Councils Major Integrated Projects (MIP) proposal.

The MIP has been developed by LGAQ in conjunction with the Great Barrier Reef Marine Park Authority and Reef Guardian Councils in recognition that local government is a major partner in achieving water quality improvements under the Reef 2050 Plan and the Reef 2050 Water Quality Improvement Plan.

This report recommends endorsement of the MIP given the relevance of the identified initiatives to Mareeba Shire Council and the benefits of the potential outcomes of the program. It is also noted that the program recognises the burden of high costs associated with asset upgrades or transition to new practices for smaller Councils such as Mareeba Shire Council.

**RECOMMENDATION**

That Council endorses the Reef Councils Major Integrated Projects proposal.

**BACKGROUND**

Councils are identified as a significant partner contributing to aspects of the Commonwealth's Reef 2050 Plan and the Queensland Government's Reef 2050 Water Quality Implementation Plan 2017 - 2022. These plans collectively outline aims, objectives, management measures and monitoring up until 2050.

In 2016, LGAQ hosted the first Reef Councils Roundtable where it was agreed by councils participating in the Reef Guardian Program (Reef Councils) that a coordinated set of prioritised projects should be developed for targeted investment in response to the Reef Plan 2050. LGAQ then developed the Reef Councils' Major Integrated Projects (MIP) proposal in partnership with Reef Councils and GBRMPA.

The Reef Councils MIP is a three-year program detailing the most effective initiatives for Reef Councils to deliver accelerated progress in achieving water quality targets and to inform ongoing investment across reef catchments. The MIP aims to:

- define excellence in selected areas of council services achieving water quality outcomes;
- identify measures and practices to achieve these standards; and
- scope the levels of investment and resourcing required.

The Reef Councils MIP has been developed through identification of work that Councils are already undertaking and opportunities to consolidate and accelerate progress. Three (3) overarching initiatives were selected:

- Wastewater stewardship
- Fish friendly councils
- Best practice erosion and sediment control on unsealed roads

During the program, it is proposed that councils will work together to develop, pilot, trial and refine the initiative activities. At the end of the proposed three-year MIP 'core' program, the participating councils will have adopted new 'business as usual' practices that are proven to deliver better water quality outcomes. It is proposed that the MIP program is immediately followed by a four-year accelerated implementation program where the refined practices are established widely across the remainder of councils in the Reef catchment.

The benefits of the MIP generally include attracting and directing investment to sustainable approaches that will continue the provision of local government services to the community whilst optimising water quality, financial and social outcomes.

Specifically, Mareeba Shire Council has one (1) Sewage Treatment Plant and a significant network of unsealed roads that drain to the Barron River and ultimately the reef lagoon. Any asset upgrades or transition to new practices required as a result of new reef protection regulations in the future would come at a high cost to Mareeba Shire ratepayers. The MIP recognises that a number of Reef Councils have a limited opportunity raise capital for such upgrades and provides a coordinated Reef Council response and a scientifically based platform for advocacy to seek external funding into the future.

LGAQ now seeks formal endorsement of the MIP after a period of extensive consultation and drafting. The MIP documentation is essentially an investment prospectus designed to attract external investment to support the initiatives and Council's endorsement will be represented by the use of Council's logo in the MIP documentation. At the November Steering Committee meeting all Reef Councils gave in principle support and it was likely that all would formally endorse the MIP.

It is important to note that endorsement of the MIP prospectus does not commit Council to participation in the trials. However, there may be capacity for Council to provide data and assist in the best practice erosion and sediment control on unsealed roads initiative.

Council may also have the opportunity to contribute to the wastewater stewardship initiative subject to the results of the parallel nitrification-denitrification (PND) trial being undertaken at the Mareeba Wastewater Treatment Plant where new technology is being trialled to improve effluent water quality and operating costs.

## **RISK IMPLICATIONS**

### **Financial**

By endorsing the MIPP, there is no obligation to become a participating council where Council would contribute 30% of the project cost. It is intended that if Council elected to become a participating Council, the 30% contribution would be an in-kind contribution only i.e. officer time and data as part of normal operations.

### **Political and Reputational**

Mareeba Shire Council is a Reef Guardian Council and endorsing the MIPP would be consistent with that program's mission and objectives. The MIPP provides a collective response to the Reef 2050 Plan and the Reef 2050 Water Quality Improvement Plan for local government.



**Legal and Compliance**

The outcome of the MIP may offer strategic compliance planning for the Kuranda STP in response to any tightening of reef regulations should they occur in the future.

**LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

As above.

**FINANCIAL AND RESOURCE IMPLICATIONS*****Capital***

Nil.

***Is the expenditure noted above included in the current budget?***

NA.

***If not you must recommend how the budget can be amended to accommodate the expenditure***

NA.

***Operating***

Council would contribute officer time and data in accordance with the available operational budget.

***Is the expenditure noted above included in the current budget?***

Yes.

***If not you must recommend how the budget can be amended to accommodate the expenditure***

NA.

**LINK TO CORPORATE PLAN**

**Financial Sustainability:** A council that continuously looks for savings and opportunities while managing council's assets and reserves to ensure a sustainable future in a cost-effective manner.

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

A letter will be written to LGAQ outlining Mareeba Shire Council's endorsement of the proposed MIP.



## Reef Councils Major Integrated Project Proposal

**PREPARED BY:**

Huelin Consulting

**DATE:** 07 November 2018

Version: Final

Authors: Leesa Huelin/Dorean Erhart

November 18

Dorean Erhart

## Executive Summary

In 2014/15, Reef catchment councils were the single largest investor in actions that contribute to the conservation of the Great Barrier Reef. In the 2014/15 financial year, the investment of just 15 of the 32 local governments within the reef catchment is conservatively estimated to have totalled more than \$228 million in activities that directly benefited the Reef<sup>1</sup>.

Councils are identified as a significant partner, contributing to important aspects of the Reef 2050 Plan and the Reef 2050 Water Quality Implementation Plan 2017-2022 execution. This role is not reflected in the limited funding available to local government for projects delivering improved outcomes to Reef health. Councils want to do more, and this is demonstrated through examples of innovation across many Reef catchment councils with small scale trials of new technology and partnerships with universities and industry to find new ways of delivering infrastructure and services that improve Reef outcomes.

Recognising the importance of local governments' ongoing role in protecting the Reef, the work being undertaken already and the opportunities to consolidate and accelerate progress, the Local Government Association of Queensland (LGAQ) sponsored the development of a Reef Councils Major Integrated Project (MIP) proposal. The Great Barrier Reef Marine Park Authority's Reef Guardians Program provided support through funding travel for a council representative to attend a MIP development workshop in Brisbane.

The MIP focuses on improved water quality entering the Great Barrier Reef (GBR) lagoon by identifying 3 overarching initiatives that enable community engagement, improved understanding of priorities and opportunities, trialling and implementation of innovative approaches and improving practices in council management of infrastructure and delivery of services.

The program is divided into a three-year MIP 'core' program, where leading councils will work collaboratively to develop, pilot, trial and refine the initiative activities. At the end of the proposed three-year MIP 'core' program, participating councils will have adopted new 'business as usual' that are proven to deliver better water quality outcomes. It is proposed that the 'core' program is immediately followed by a four-year accelerated implementation program where the refined practices are established widely across councils in the Reef catchment.

## MIP Development

A consultative process that incorporated council elected representatives and senior officers, Great Barrier Reef Marine Park Authority, Office of the Great Barrier Reef, *qldwater*, Department of Environment and Science, Regional NRM groups and Healthy Land and Water was used to identify MIP initiatives.

Three initiatives were shortlisted and refined according to the principles developed at the first workshop (shown in Table 1 below). Proposed initiatives align with relevant objectives and actions of the Reef 2050 and the Reef 2050 Water Quality Improvement Plans.

---

<sup>1</sup> Australian Government, Queensland Government, June 2015, [Reef 2050 Plan – Investment Baseline](#)



Table 1: Principles for initiative selection and development

Principle	Description
Flexible and scalable	Initiatives need to be flexible in their application to suit the varied environments existing across Reef council areas.
Quantifiable and integrated	Understanding the return on investment and adopting an adaptive management approach relies on monitoring and evaluation. The MIP initiatives are grounded in effective monitoring across Reef councils utilising a consistent approach and common platform.
Innovation	Applying and evaluating new approaches and/or applying new approaches proven elsewhere (implemented as leading edge practice by other Reef councils) to a wider range of Reef councils to deliver improved urban water quality outcomes.
Grounded in whole of catchment/system knowledge	Initiative builds on whole of system knowledge and research so implementation occurs where highest impact for improving water quality and delivering Reef 2050 outcomes can be achieved.
Complementary	Initiative complements work being undertaken by other government, stakeholder and research agencies and aligns to local government's realm of influence and responsibility to deliver improved water quality and Reef outcomes.
Builds community ownership and capacity	Initiative builds capacity for improved practice for local government, industry or the general community and the sense of responsibility and ownership of roles in improving water quality and protecting Reef health.
Value for money	Initiative offers value for money in relation to return on investment in delivering water quality and Reef outcomes.

## Initiative outlines

### Initiative one: Wastewater Stewardship

There are nearly 120 council-owned sewerage treatment plants (STPs) in the Reef's catchments which provide essential services to protect public and environmental health. Even the most advanced STPs produce a residual nitrogen (and phosphorus) load. Nutrients (particularly nitrogen) significantly contribute to poor health of the GBR. Increased nutrient removal is usually directly linked to higher cost and greater energy use.

According to a *qldwater* discussion paper, to upgrade all remaining plants within 50km of the coast to tertiary treatment would require a \$719 million investment in new infrastructure and a further \$33 million per year for ongoing operational costs.<sup>2</sup> The cost for STPs in smaller councils is disproportionately higher, and with no economies of scale and a smaller rate base, they are least able to afford it. The prohibitive costs of providing STPs must also be balanced with the needs of populations and economic growth, such as tourism. There are innovative, practical and cost-effective alternatives to tertiary treatment that can be suitable, particularly for small STPs and where development requires new infrastructure.

This initiative will:

- consider STP discharge from a local and whole of catchment perspective to prioritise and manage Reef water quality impacts and identify and adopt where appropriate, innovative, pollutant mitigation approaches;
- create a rigorous framework to explore and trial innovative approaches which offer improved outcomes at less cost than traditional STP upgrades; and

<sup>2</sup> *qldwater* (2017) Sewage treatment plants in Great Barrier Reef catchments, Industry Discussion Paper (March 2017)



4

- provide a decision-making structure to balance costs and risks and facilitate the delivery of the right wastewater management strategy for the location.

The benefits of the proposed initiative include:

- assurance that investment is directed to approaches that will optimise water quality and ecological, social and economic outcomes;
- addressing the question of how GBR councils can best manage their STPs to balance environmental (particularly greenhouse and nutrient) outcomes with local social and financial costs and benefits; and
- innovative approaches that in some circumstances could decrease or offset operating costs and provide improved whole of life asset costs to local government.

#### **Initiative two: Fish Friendly Councils**

Fish Friendly Councils is a suite of activities aimed at maintaining or restoring connectivity between catchment, coastal and marine ecosystems to deliver multiple social, environmental and economic outcomes. These will be delivered under a single umbrella and framed through the lens of fish species' lifecycles and habitat needs. Activities in this initiative include:

- Fish Friendly Habitats with two sub-projects:
  - Fish barrier identification and prioritisation of legacy barriers to fish migration to provide a prioritised list of sites for remediation to deliver greatest benefit to native fish populations; and
  - Fish Friendly infrastructure and operational delivery to support improving aquatic ecosystem health. Eligible projects would include fishways and fish ladders installation, hard drain naturalisation, riparian revegetation and off-site solutions.
- Be 'Fish Friendly' community campaign to increase awareness and encourage communities to adopt 'fish friendly' practices at a household and individual level.
- Be 'Fish Friendly' industry campaign to increase awareness and encourage industry to adopt 'fish friendly' practices to improve compliance to erosion and sediment control requirements.
- 'WSUD that works for everyone' which focusses on the design and implementation of Water Sensitive Urban Design (WSUD) that is regionally appropriate. The project will include several pilot sites and will demonstrate WSUD that responds to local characteristics.

#### **Initiative three: Best Practice Erosion & Sediment Control for Unsealed Roads**

Local government manages thousands of kilometres of unsealed road within the Reef catchment representing significant areas of exposed earth that is prone to erosion particularly over the wet season, contributing to gully erosion and increased sediment loads in waterways. On average, unsealed pavements lose the top 25mm of pavement material per year. This loss can vary depending on traffic volumes (particularly heavy vehicle movements), material and weather. A considerable sediment load is potentially generated when this tonnage / km is equated to the lineal kilometres of unsealed roads that report to the GBR catchments in Queensland.

Many of these roads will remain unsealed as they do not attract the volume of traffic to justify sealing. These roads are subject to regular maintenance and grading that requires access to gravel from the nearby environment and the movement of materials to improve road conditions. Traffic movement distributes dust from the road surface and heavy rain can wash out road surfaces. More frequent extreme weather events associated with climate change increases the risk of significant damage to unsealed roads with environmental, economic and community connectivity impacts.

This initiative will improve understanding of unsealed roads and their impact on water quality through:

- establishing a base line and monitoring program at selected indicative sites
- developing a suite of best practice measures
- on the ground implementation and evaluation of measures
- capacity building training and information to enable road managers to better address ESC in the design and maintenance of unsealed roads





5

This initiative will also consider how water quality benefits can be considered in the cost benefit assessment of roads under consideration for sealing.

### Funding required

The MIP is designed with an initial three-year core stage to trial new approaches and refine and develop capacity (\$13.042 million) followed by a four-year accelerated implementation program (\$44.603 million) at a total cost of \$57.645 million over 7 years. A breakdown of the funding for each initiative is shown in the table below.

Activity	Year 1	Year 2	Year 3	Core Stage Total	Years 4-7	TOTAL
Wastewater Stewardship	\$253,000	\$833,000	\$2,613,000	\$3,699,000	\$20,432,000	\$24,131,000
Fish Friendly	\$796,000	\$1,346,000	\$1,666,000	\$3,808,000	\$3,464,000	\$7,272,000
Unsealed Roads ESC	\$753,000	\$398,000	\$4,243,000	\$5,394,000	\$20,507,000	\$25,901,000
Program costs	\$50,000	\$50,000	\$50,000	\$150,000	\$200,000	\$350,000
<b>TOTALS</b>	<b>\$1,852,000</b>	<b>\$2,618,000</b>	<b>\$8,572,000</b>	<b>\$13,042,000</b>	<b>\$44,603,000</b>	<b>\$57,645,000</b>





6

## Contents

Executive Summary .....	2
MIP Development     2	
Initiative outlines   3	
Initiative one: Wastewater Stewardship .....	3
Initiative two: Fish Friendly Councils .....	4
Initiative three: Best Practice Erosion & Sediment Control for Unsealed Roads .....	4
Funding required     5	
Introduction     8	
What is a Major Integrated Project?   8	
Why this approach?   8	
Strategic context     9	
Reef 2050 Long Term Sustainability Plan     9	
Reef 2050 Water Quality Improvement Plan 2017-2022 10	
Local government's contribution to Reef health   12	
Principles for initiative selection and development 13	
Introduction     14	
MIP development methodology   14	
Introduction     19	
Implementation considerations   19	
Project governance   19	
Supporting activities   19	
Resourcing   20	
Local government .....	20
Other agencies and stakeholders .....	20
Program assumptions for delivery   20	
Initiative one: Wastewater Stewardship Initiative   21	
Description   21	
Objectives .....	21
Outcomes .....	21
Rationale   22	
Alignment with Reef 2050 Plan actions .....	22
Alignment with Reef WQIP actions .....	23
Activities   24	
Strategic assessment .....	25
Decision-making framework .....	26
Innovation trials: .....	26





## Introduction

The Local Government Association of Queensland (LGAQ) sponsored the development of a Reef Councils Major Integrated Project (MIP) proposal. The Great Barrier Reef Marine Park Authority's Reef Guardians Program provided support through funding travel for a council representative to attend a MIP development workshop in Brisbane.

The MIP focuses on improved water quality entering the Great Barrier Reef (GBR) lagoon by identifying initiatives that enable community engagement, improved understanding of priorities and opportunities, trialling and implementation of innovative approaches and improving practices in council management of infrastructure and delivery of services. At the end of the proposed three + four-year MIP program, councils will have adopted new 'business as usual' approaches that are proven to deliver better water quality outcomes.

## What is a Major Integrated Project?

A MIP is defined by the Great Barrier Reef Water Science Taskforce<sup>3</sup> (GBRWST), as a collaborative demonstration of all the Taskforce's recommendations in high risk areas. MIPs integrate and evaluate the combined effectiveness of a range of tools and innovative approaches. The selection of the most effective initiatives and their widespread implementation can deliver accelerated progress to the water quality targets and inform ongoing investment across Reef catchments.

## Why this approach?

Although the GBRWST identified the need to deliver MIPs in two 'hotspot' catchments (Wet Tropics and Burdekin) targeting broadscale landuses, the LGAQ and Reef councils see the value in applying this approach to the urban landscape.

Local government already contribute significantly to improving the quality of water entering the Reef. The MIP approach provides the opportunity to extend and improve on the good work delivered by councils to achieve better outcomes for Reef protection, while at the same time, foster and build upon our collective knowledge on what initiatives work and where.

Reef Councils are varied in terms of geography, population, development and industry. By taking a collective approach in identifying and piloting initiatives across small and large urban settings, Reef councils will contribute to a shared knowledge of on the ground implementation considerations providing practical learnings that can inform investment in the right initiatives in the right locations.

The proposed MIP initiatives align with relevant objectives and actions of the Reef 2050 and the Reef 2050 Water Quality Improvement Plans.

The LGAQ sought participation from all 32 Reef Catchment Councils. Additionally, the project engaged critical stakeholders to ensure awareness of other projects in the catchment area and this was an important input to the proposal's design.

The Great Barrier Reef Marine Park Authority (GBRMPA) Reef Guardians program is a key partner in the project.

---

<sup>3</sup> The Great Barrier Reef Water Taskforce and the Office of the Great Barrier Reef, (2016). [Final Report – Great Barrier Reef Water Science Taskforce May 2016 Clean Water for a healthy reef](#)



## Part A: Background and overview

### Strategic context

#### Reef 2050 Long Term Sustainability Plan

The Great Barrier Reef is a multi-use area that supports more than 64,000 full time jobs and is worth \$6.4 billion a year to the Australian economy. It is a \$56 billion asset.<sup>4</sup> The overarching vision of the Reef 2050 Long-Term Sustainability Plan (Plan) is to ensure the Great Barrier Reef continues to improve on its Outstanding Universal Value every decade between now and 2050 to be a natural wonder for each successive generation to come.<sup>5</sup>

The Plan was developed by the Australian and Queensland governments to respond to a 2011 request of the World Heritage Committee for a coordinated and comprehensive long-term plan. The plan provides an overarching strategy for the Reef's management, responding to the challenges facing the Reef with actions to protect its values, health and resilience. Figure 1 shows the Reef 2050 outcomes framework and demonstrates the interrelationships between the vision of the Reef and 2050 outcomes as well as the key themes that support achievement of the vision.

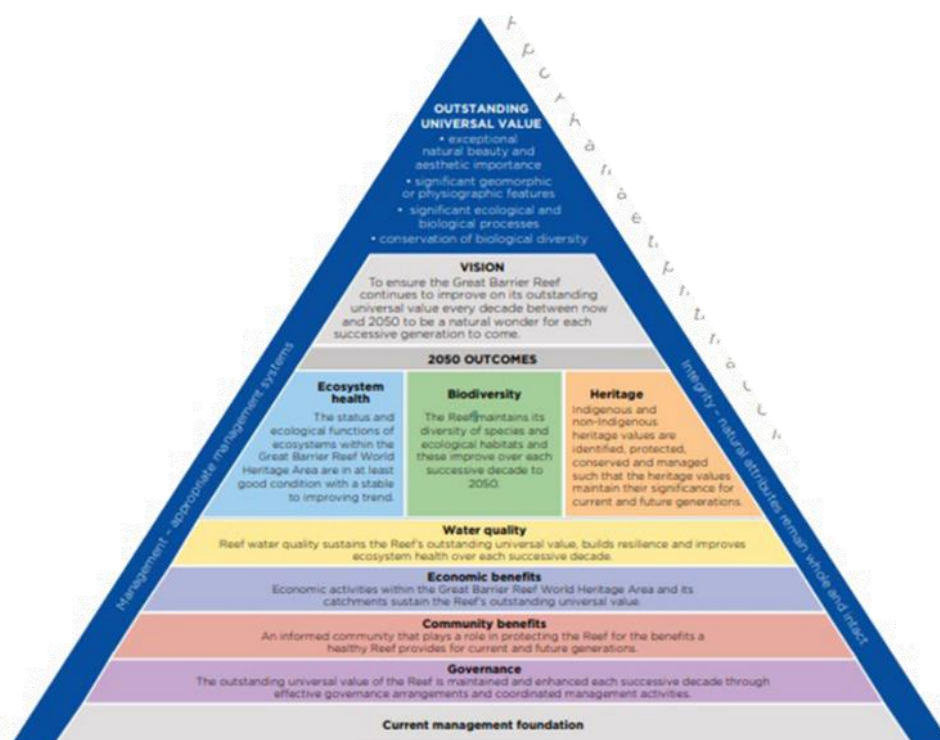


Figure 1 Reef 2050 outcomes framework (Source: Reef 2050 Long-Term Sustainability Plan, July 2018)

<sup>4</sup> Deloitte, (2017). <https://www2.deloitte.com/au/en/pages/economics/articles/great-barrier-reef.html>

<sup>5</sup> Commonwealth of Australia, (2018). Reef 2050 Long-Term Sustainability Plan, p1

10

Implementation of the plan is supported by State and Federal funding with water quality improvement a key focus. The Plan also acknowledges the contribution of local government through land use planning, improving sewage treatment and water quality, rehabilitating waterways and coastal areas, managing the impacts of climate change, managing vegetation and pests, sustainable agricultural initiatives and local community education and awareness activities.

A revised Plan was released July 2018 after a mid-term review. It has further defined activities and programs that are 'foundational' to the achievement of specific actions and includes new actions for immediate attention between now and 2020. Actions continue to be grouped under the themes of Ecosystem Health, Biodiversity, Heritage, Water Quality, Economic Benefits, Community Benefits and Governance with many identifying local government as partners in delivery.

### Reef 2050 Water Quality Improvement Plan 2017-2022

The five-year Reef 2050 Water Quality Improvement Plan<sup>6</sup> (the Reef WQIP) aligns with the Reef 2050 Long-Term Sustainability Plan 2018 (Plan). The desired outcome of the Reef WQIP is to ensure that 'Good water quality sustains the Outstanding Universal Value of the Great Barrier Reef, builds resilience, improves ecosystem health and benefits communities.' The Reef WQIP aims to improve the water quality flowing from the catchments adjacent to the Reef and builds upon previous Reef water quality plans to:

- include all sources of land-based water pollution: agriculture, industry, urban and public lands, while recognising that most water pollution still arises from agricultural activities
- incorporate the human dimensions of change. These include social, cultural, institutional and economic factors: from the aspirations and capacities of landholders, industries and communities, to their stewardship practices, and broader governance of the reef.
- setting separate targets for reducing water pollution from each catchment, to enable better prioritisation of where action needs to be taken.

Figure 2 provides an overview of the Reef WQIP outcome, objectives and targets. The MIP proposed initiatives align to the outcome, objectives and targets set out in the Reef WQIP through contributing to its actions. The MIP initiatives also incorporate the adaptive management approach outlined in the Reef WQIP, where management actions are regularly monitored to gain new knowledge about how well these actions are working, so they can be continuously modified and improved. In taking this approach the MIP initiatives include a clear planning, implementation and evaluation cycle and foster a culture of information sharing and knowledge development between participating councils. This approach is shown in Figure 3.

---

<sup>6</sup> Queensland Government, 2018, [Reef 2050 Water Quality Improvement Plan 2017-2022](#)





11

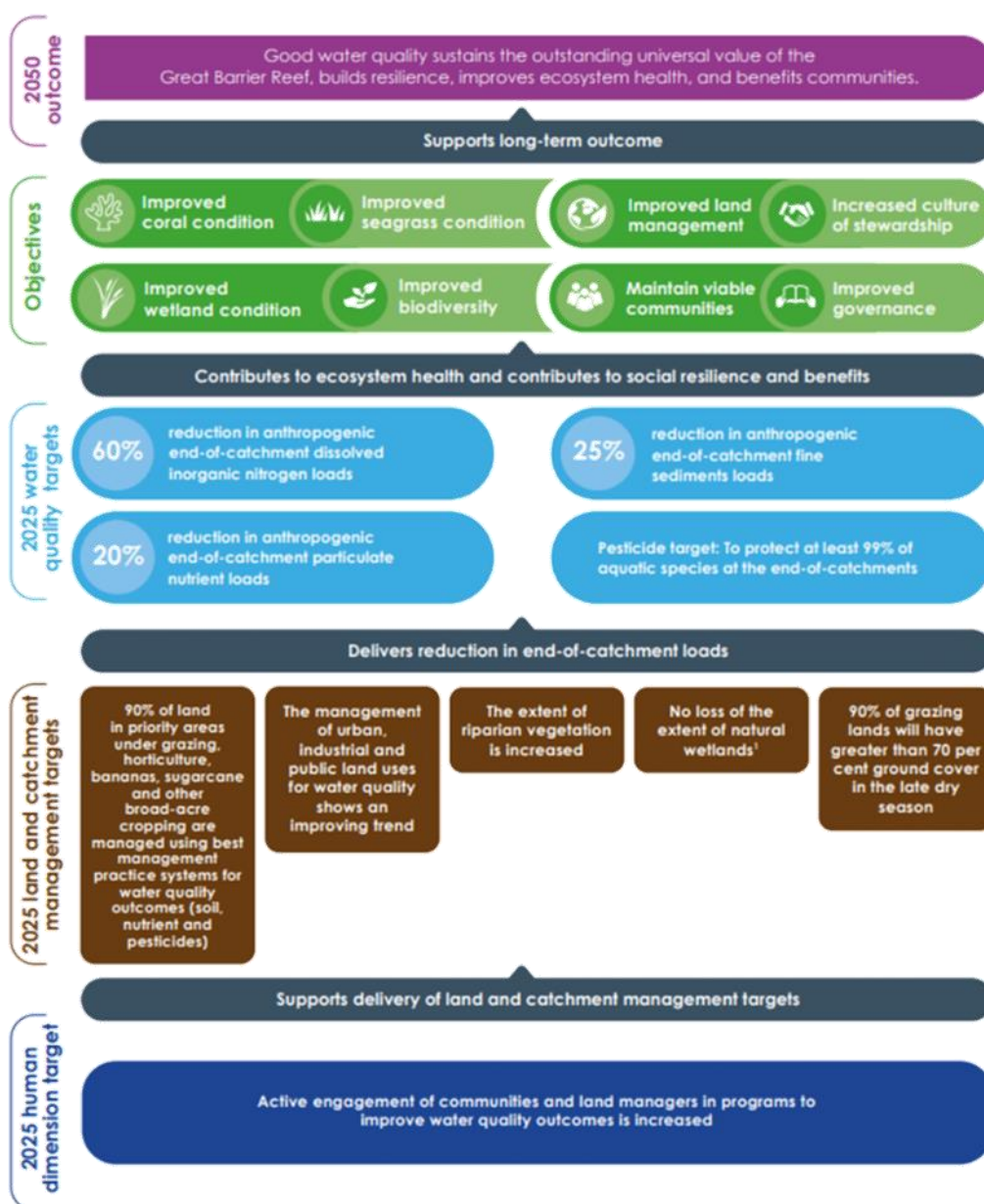


Figure 2: summary of WQIP outcome, objectives and targets (Source: Reef 2050 WQIP)



12

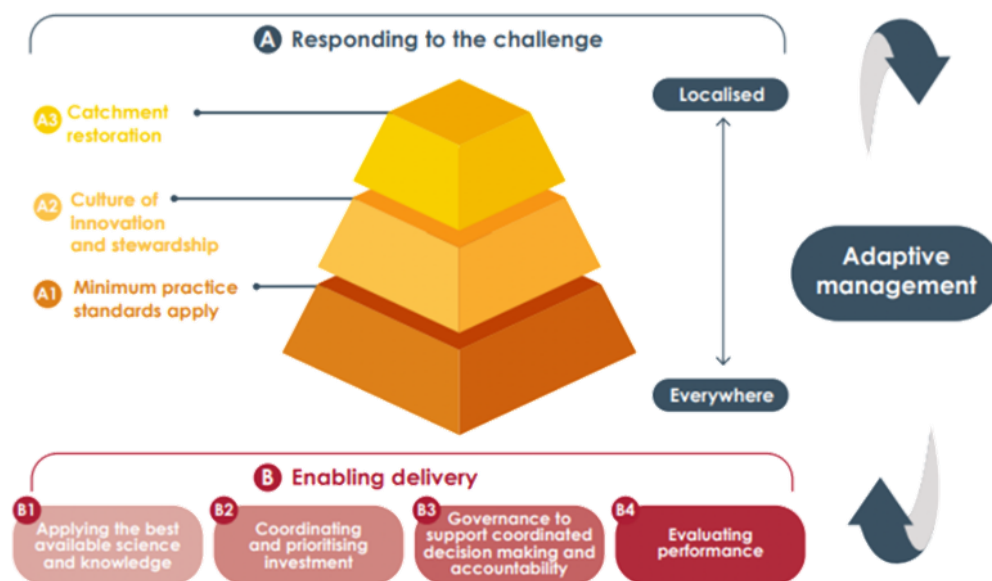


Figure 3: Adaptive management approach to implementing WQIP (Source: Reef 2050 WQIP)

## Local government's contribution to Reef health

In 2014/15, Reef catchment councils were the single largest investor in actions that contributed to the conservation of the Great Barrier Reef. In the 2014/15 financial year, the investment of just 15 of the 32 local governments within the reef catchment is conservatively estimated to have totalled more than \$228 million in activities that directly benefited that Reef.

Councils are identified as a significant partner, contributing to important aspects of the Reef 2050 Plan and the Reef 2050 WQIP 2017-2022 delivery. As such, the LGAQ recognises the need for Federal and State Governments to engage with and support councils' activities to implement relevant actions in the plans.

A Reef Councils Roundtable, including mayors, deputy mayors, councillors and senior local government officers met in July 2016 to consider activities within the Reef 2050 Plan for local government implementation. The participants identified that a single program, with a primary focus on improving water quality from urban and point sources, could be designed to deliver a range of secondary opportunities such as ecosystem health, renewable energy generation and community benefits. The group stressed this idea was a starting point requiring further work to develop specific actions for implementation.

The MIP development process has enabled Reef catchment councils to collectively identify a range of possible projects at local and regional level that will further local government's existing contribution toward the Reef 2050 Long-Term Sustainability Plan.

The MIP provides an 'investment prospectus' for sourcing additional funding to support and accelerate the delivery of activities.



## Principles for initiative selection and development

The following table outlines the principles that have guided the short listing and development of initiatives proposed in the MIP. These were developed through a criteria and short list workshop with technical stakeholders from Reef Councils, GBRMPA, Healthy Land and Water, Regional NRM groups and the Department of Environment and Science.

*Table 2: Principles for initiative selection and development*

Principle	Description
Flexible and scalable	Initiatives need to be flexible in their application to suit the varied environments existing across Reef council areas.
Quantifiable and integrated	Understanding the return on investment and adopting an adaptive management approach relies on monitoring and evaluation. The MIP initiatives are grounded in effective monitoring across Reef councils utilising a consistent approach and common platform.
Innovation	Applying and evaluating new approaches and/or applying new approaches proven elsewhere (implemented as leading edge practice by other Reef councils) to a wider range of Reef councils to deliver improved urban water quality outcomes.
Grounded in whole of catchment/ system knowledge	Initiative builds on whole of system knowledge and research so implementation occurs where highest impact for improving water quality and delivering Reef 2050 outcomes.
Complementary	Initiative complements work being undertaken by other government, stakeholder and research agencies and aligns to local government's realm of influence and responsibility to deliver improved water quality and Reef outcomes.
Builds community ownership and capacity	Initiative builds capacity for improved practice for local government, industry or the general community and the sense of responsibility and ownership of roles in improving water quality and protecting Reef health.
Value for money	Initiative offers value for money in relation to return on investment in delivering water quality and Reef outcomes.



14

## Part B Initiative Development

### Introduction

This section overviews the process undertaken to identify and scope MIP initiatives and ensure appropriate participation from Reef catchment councils.

### MIP development methodology

The MIP has been developed through a consultative process to identify and scope projects that align to State and Federal government policies and actions while informing, supporting and building upon what councils are already doing to varying extents on the ground. Identifying direct correlations between projects and the desired actions and outcomes of Reef 2050 Plan and the Reef WQIP provides justification for funding from State and Federal sources. A high-level methodology for the development of the MIP is shown in Figure 4 and described in Table 3.

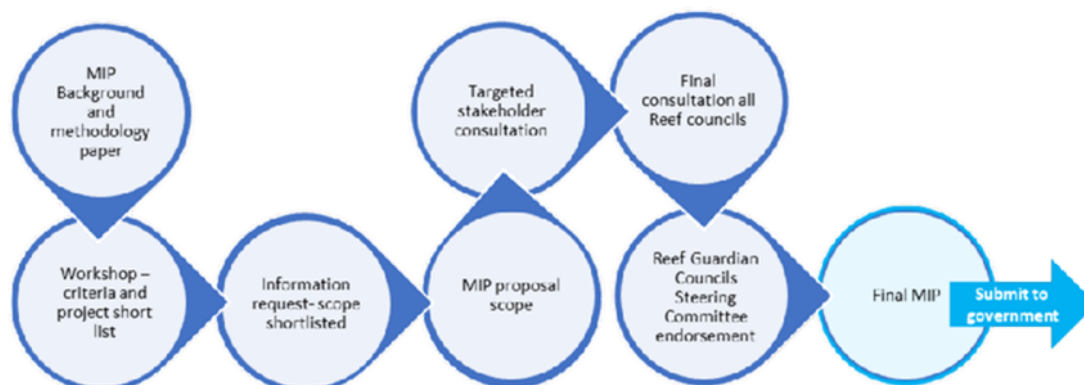


Figure 4: MIP development process





Table 3: Description of MIP development process steps and outcomes of these steps.

Process step	Description	Results
<b>MIP Background and methodology paper</b>	The strategic context and methodology sections of this report formed the pre-workshop paper and was distributed to set the scene for the development of the MIP and prepared participants for the first workshop.	The paper was sent with invitations to all Mayors and CEOs of the 32 Reef Catchment Councils with the pre-workshop paper to request participation and the nomination of a “suitably qualified” representative.
<b>Workshop: criteria and project long and short lists</b>	Participants brainstormed project ideas for inclusion in the MIP, workshopped and agreed on criteria for their assessment and shortlisted preferred projects for scoping. State, Regional NRM group and GBRMBA representation also attended.	The workshop was held on 24 April in Brisbane with 23 participants. The workshop resulted in selection criteria which were applied to the long list of initiatives to shortlist from 16 to 8. .
<b>Reef Councils Roundtable: Short list consultation</b>	An elected representative briefing was held following the workshop to inform and seek input. State and GBRMBA representation also attended.	A Reef Councils Roundtable was held on 26 April in Brisbane with 18 participants.
<b>Information request: scope shortlisted projects</b>	Workshop summary (see Appendix A) was distributed along with information requests to inform the scoping of the projects for inclusion in the MIP.	Further refinement of the shortlist was undertaken in consultation with stakeholders, in alignment with identified selection criteria and separating out innovations regarding governance and those not currently within the realm of council responsibility. This process refined the shortlist to 3 initiatives with several sub-projects.
<b>MIP proposal scope</b>	Project scope for MIP initiatives documented and distributed to Reef Councils for comment.	A matrix of the proposed shortlist was developed against selection criteria and is included in Table 4. A high-level draft of the MIP initiatives scope was distributed to councils with a request for feedback and input in the development of costs and timeframes. Nominations for participation in targeted meetings to seek this information was requested.
<b>Targeted stakeholder consultation</b>	Small group and individual meetings with state and local government officers and other key stakeholders, undertaken to prioritise and identify project delivery considerations for MIP projects proposed.	A series of stakeholder and small group teleconferences provided the details found in Part C: Initiative outlines section of this document.

November 18  
Dorean Erhart



16

<b>Final consultation: all Reef councils</b>	The draft MIP distributed to Reef councils and other key stakeholders for four weeks to seek comment and confirm support.	Draft MIP sent to Mayors and CEOs of all 32 Reef councils and other key stakeholders. Four-week consultation across October 2018.
<b>Final MIP</b>	The MIP finalised in consideration of feedback and submitted to the Reef Guardian Councils Steering Committee for endorsement and circulation to key potential investors.	02 November 2018

Table 4 identifies the three initiatives proposed in this MIP and their alignment to the criteria used to identify and develop initiatives.

Table 4: MIP initiatives assessment matrix

Principle	Wastewater Stewardship Initiative	Fish Friendly Councils	ESC Best Practice for Unsealed Roads
<b>Flexible and scalable</b>	The initiative will look at several innovative STP management approaches applicable to STPs of various scales and in a range of catchments.	Initiative has a set of sub initiatives that can be implemented individually or as a whole.	Explores a range of measures to manage the impact of maintenance and operation of unsealed roads on water quality.  Measures will be selected and applied to best suit the situation/environment.
<b>Quantifiable and integrated</b>	Monitoring and evaluation is a key element.	Integrated in terms of sub initiatives - common branding, focusses on action from multiple stakeholders and tied to a relatable outcome – fish friendly.  Monitoring of outcomes of new infrastructure.  Base line /evaluation of community and industry awareness and attitudes is part of the awareness and education aspect.	Monitoring and evaluation is a key element of the initiative to ensure the measures are effective and practical for implementation through regular maintenance in the first case but also infrastructure upgrades.
<b>Innovation</b>	New approaches will be trialled and assessed.	Innovation in packaging initiatives together to communicate the collective responsibility aspect of fostering fish friendly environments.  Implementation of new regionally specific WSUD guidelines.	Identifies, tests and enables the adoption of new unsealed road construction and maintenance approaches and infrastructure upgrades to improve ESC on unsealed roads.



17

Principle	Wastewater Stewardship Initiative	Fish Friendly Councils	ESC Best Practice for Unsealed Roads
<b>Grounded in whole of catchment/ system knowledge</b>	Provides an understanding of relative need and impact of STP projects across entire catchments to prioritise investment on those projects delivering greatest benefit to water quality.	Whole of system knowledge from Walking the Landscape to provide local and regionally specific information delivered with standard initiative messages.  Implementation of infrastructure focussed on where it will have greatest impact.  Identifies priorities for fish connectivity.	The roll out of measures outside of improved maintenance regimes will be prioritised based on system knowledge.
<b>Complementary</b>	Work with researchers/universities to trial innovative approaches.  Potential knowledge sharing with water quality trials currently underway through the other MIPs.  STPs are a key aspect of local government responsibility.	Packages a range of initiatives being delivered by some to varying levels for delivery by more councils.  Provides a vehicle to enhance delivery of ESC capacity building with industry, implement new WSUD guidelines and a community education and awareness program to focus on being fish friendly as a relatable concept.  Complements the Walking the Landscape process delivered by State in implementation.  Has linkages to work being undertaken with rural landholders through the other MIPs.	Provides the opportunity to demonstrate proactive management of ESC on assets under control of local government.  Complements the ESC work being done across other industries and MIPs.
<b>Builds community ownership and capacity</b>	Builds total water cycle awareness and understanding in the community through communication strategies raising awareness of the trials.	Community and industry ownership, education and capacity building is a key element of the initiative.	Will provide better awareness of impacts on unsealed roads on water quality and build capacity of road managers in mitigating these.
<b>Value for money</b>	Approaches trialled will be suitable for STPs unlikely to be upgraded to tertiary standard affordably. This initiative aims to provide value for money through applying affordable approaches to gain similar water quality outcomes.	Walking the Landscape and fish barrier prioritisation key to identifying and prioritising infrastructure elements - ensures the right measures implemented where greatest benefit can be delivered.  For the awareness and education, the development of resources that can be used	Considers best practice maintenance of unsealed roads and limited upgrades to infrastructure that deliver significant improvements to water quality.





18

Principle	Wastewater Stewardship Initiative	Fish Friendly Councils	ESC Best Practice for Unsealed Roads
		across all Councils and customised where environmental elements require, offers value for money in the development and roll out of the program.	Roads being assessed for sealing due to economic and community access reasons are to consider water quality benefits in business case.



## Part C: MIP Initiative outlines

### Introduction

This section outlines the three proposed initiatives and their implementation considerations including governance, resourcing and supporting activities. This section also provides a breakdown of activities and costings.

### Implementation considerations

#### Project governance

The LGAQ sponsored the development of the MIP through hosting the workshops and the engagement of Huelin Consulting to facilitate the process. The GBRMPA provided support through their Reef Guardians Program by assisting council representatives with travel expenses.

As requested by Reef councils in the 2016 Roundtable, the GBRMPA facilitated Reef Guardian Councils Steering Committee (Steering Committee) will consider adopting the role of providing strategic oversight of the implementation of the projects. The LGAQ is a member of the Steering Committee and the Reef Advisory Committee, providing a direct linkage between the two.

The day to day delivery of the MIP will be managed by two Initiative Coordinators funded by the MIP:

1. Fish Friendly Councils Initiative Coordinator;
2. Wastewater Stewardship and ESC Best Practice for Unsealed Roads Initiatives Coordinator.

The coordinators will work with the 32 Reef councils to coordinate, facilitate and support the delivery of the MIP initiatives.

The coordinators will report to the Steering Committee.

Project management and reporting requirements will be developed and tracked by the coordinators to ensure a consistent approach in the management and tracking of delivery and the outcomes achieved by participating councils.

It is proposed the coordinators be Brisbane based to facilitate cheaper travel across the Reef catchment.

#### Supporting activities

The MIP engagement identified required activities that inform and underpin the effectiveness of the proposed initiatives. Essential programs for understanding the baselines and tracking the effectiveness of the Reef councils MIP implementation include:

- A. **Walking the Landscape** (Queensland Wetlands Program, DES): a whole of system framework for understanding and mapping environmental processes and values. The primary aim of the process is to develop a whole-of-landscape understanding to improve evidence-based decision making for the sustainable management and restoration of ecological systems.<sup>7</sup>
- B. **Urban Water Quality Monitoring and Modelling** (DNRME, Healthy Waters Partnerships, DES, Townsville City Council and Cairns Regional Council)

For some catchments, the extent of catchment knowledge and monitoring is not sufficient to provide a baseline of current conditions or to inform decision making on where investment in activities will deliver greatest benefit. In delivering the MIP, the Walking the Landscape and Urban Water Quality and

<sup>7</sup> Australian Government Department of Environment and Energy, 2013, [Wetlands Australia National Wetlands Update February 2013](#)

20

Monitoring and Modelling programs will be engaged to assist in addressing knowledge gaps to provide adequate baselines.

### Resourcing

MIP initiatives will be supported by two full time initiative coordinators to manage cross council aspects and to support and coordinate local government delivery. These resources will manage delivery of 'all of program' aspects of the initiative:

- cross council investigations and prioritisation studies;
- engagement and alignment of projects with key stakeholder activities;
- development of marketing and communication plans;
- branding development;
- resource development for industry and community engagement;
- facilitating the development of training to be rolled out to councils; and
- monitoring and evaluation processes and reporting.

### Local government

Local governments participating in the initiatives will contribute funding to aspects that are customised and/or delivered within their area. For example, the cost of the development of the Fish Friendly campaign resources will be funded through the MIP, each council will contribute up to 30% of the cost of events held in their area. They will also be responsible for ensuring adequate resourcing to effectively manage projects/trials delivered in their area within required timeframes.

Local government's 30% contribution can take the form of funding or in-kind support. In-kind funding will be in terms of total contribution of council officer time to implementation, promotion of initiatives through council's communication channels and the quantification of value added outcomes and leveraging. An agreed framework to quantify in-kind contributions will be determined and used consistently across councils.

### Other agencies and stakeholders

Integration with the research and initiatives of other agencies and stakeholders will be sought where relevant to maximise reuse of data collected and research being undertaken and to ensure value for money in initiative delivery. Project management and stakeholder engagement plans will be developed for each initiative to identify related projects and key stakeholders and guide how initiatives will engage these to maximise the benefit of the initiative, council learning and overall benefit to Reef health.

### Program assumptions for delivery

- There will be a program management overhead that will be fully funded by the MIP funding partners to coordinate all three initiatives.
- The MIP initiatives will be delivered on a 70/30 funding partner/local government cost split for aspects implemented within an individual LG area.
- The MIP will be delivered via a three-year trial and capacity building phase followed by a four-year rolling implementation acceleration program.
- Aim to engage all 32 Reef Councils in the seven-year life of the program.
- By the end of the three-year core program participating councils will be upskilled to adopt these new ways of delivering improved water quality outcomes as a component of business as usual.
- The four-year implementation phase will provide the funding for councils to implement these new approaches, accelerating local government contribution to improving water quality, ecosystem health, stewardship and resilience in the Reef catchment.



21

## Initiative one: Wastewater Stewardship Initiative

### Description

Wastewater stewardship will be enhanced through a GBR-wide focus with increased knowledge sharing and collaboration across councils, and where relevant, with industry. Outcomes will be promoted through the Urban Stewardship components of the Healthy Waterways Partnerships Report Cards.

This initiative will:

- consider sewerage treatment plant (STP) discharge from a local and whole of catchment perspective to prioritise and manage Reef water quality impacts and identify and adopt where appropriate, innovative, pollutant mitigation approaches;
- create a rigorous framework to explore and trial innovative approaches which offer improved outcomes at less cost than traditional STP upgrades; and
- provide a decision-making structure to balance costs and risks and facilitate the delivery of the right wastewater management strategy for the location.

### Objectives

- A. Establish an evidence-based prioritisation of STPs requiring upgrade according to performance and risk to water quality entering the Reef lagoon;
- B. Provide a decision-making framework for the assessment of traditional and innovative wastewater management options to identify the right approach to deliver value for money to ratepayers while meeting environmental requirements and improving water quality entering the Reef lagoon;
- C. Identify a suite of cost effective and innovative, non-traditional approaches to improving water quality impacted by STPs;
- D. Optimal mix of non-traditional and traditional approaches at priority STPs within the Reef catchment will inform future investment in sewage treatment;
- E. Build state and local government knowledge of technical and operational implementation of alternative wastewater management approaches;
- F. Explore opportunities for resource recovery and reuse and creating new resources from waste;
- G. Explore opportunities to reduce emissions and contribute to the State's emissions reduction target;
- H. Build community understanding of total water cycle management and the role of wastewater (in partnership with existing activities by NRM, industry and agriculture peak bodies); and
- I. Allow for urban expansion in Reef catchment local government areas while minimising costs to ratepayers through the deployment of non-traditional approaches where appropriate.

### Outcomes

1. Make an equitable and proportionate contribution to meeting water quality targets in key catchments.
2. Contribute to a net decrease in nutrient in catchments.
3. Evidence based knowledge and decision-making of alternative wastewater management approaches.
4. Data sharing baselines and progress monitoring processes established and contributing to the Urban Water Management Framework.
5. Increased community awareness of total water cycle management and wastewater innovation.
6. Enable Reef Councils to more cost effectively unlock opportunities for population and tourism growth.





22

### Rationale

There are nearly 120 council-owned STPs in the Reef's catchments which provide essential services to protect public and environmental health. Even the most advanced STPs produce a residual nitrogen (and phosphorus) load. Nutrients (particularly nitrogen) significantly contribute to poor health of the GBR. Increased nutrient removal is usually directly linked to higher cost and greater energy use.

Traditionally, tertiary level treatment of sewage is considered the gold standard for wastewater management. Upgrades to a tertiary level are costly in terms of capital investment and upgraded plants are more expensive to operate with higher energy needs. Not only does the cost/benefit limit greater removal of nutrients but the associated increased energy requirement is counter to strategies to mitigate climate change – the greatest threat to Reef health.

According to a *qldwater* discussion paper, to upgrade all remaining plants to tertiary treatment within 50km of the coast, a \$719 million investment in new infrastructure and a further \$33 million per year for ongoing operational costs is required.<sup>8</sup> The cost for smaller STPs is disproportionately higher and with no economies of scale with a smaller population to cover the cost. The prohibitive costs of providing STPs must also be balanced with the needs of growing populations and economic growth, such as tourism.

There are innovative and practical alternatives to tertiary treatment that can be suitable, particularly for small STPs and where development requires new infrastructure.

The benefits of the proposed initiative include:

- assurance that investment is directed to approaches that will optimise water quality, ecological, social and economic outcomes;
- addressing the question of how GBR councils can best manage their STPs to balance environmental (particularly greenhouse and nutrient) outcomes with local social and financial costs and benefits; and
- innovative approaches in some circumstances could potentially decrease or off set operating costs and provide improved whole of life asset costs to local government.

### Alignment with Reef 2050 Plan actions

Initiative one will contribute to Reef 2050 Plan actions identified in the following table.

Table 5: Initiative one contributions to Reef 2050 Plan

Foundational programs and activities
Reef 2050 Water Quality Improvement Plan 2017–2022 provisions including: <ul style="list-style-type: none"> <li>• applying minimum practice standards across all industries and land uses</li> <li>• supporting industries and communities to build a culture of innovation and stewardship that takes them beyond minimum standards</li> <li>• restoring catchments through works to improve or repair riparian vegetation, streambanks, gullies, waterways and wetlands</li> <li>• Regional report cards</li> <li>• Ongoing activities to reduce nutrients including nominated sewage treatment plant upgrades</li> </ul> Implementing regulatory standards for stormwater run-off, dredging, sewage outfalls, mine discharges and industrial contaminants
Reef Guardians
Local Marine Advisory Committees
Regional report card partnerships

<sup>8</sup> *qldwater* (2017) Sewage treatment plants in Great Barrier Reef catchments, Industry Discussion Paper (March 2017)

23

Sewerage treatment plant solutions including upgrades, where appropriate, to deliver net tertiary grade treatment
Regulatory standards for storm water run-off, sewage outfalls, mine discharges and industrial contaminant
<b>Actions</b>
MTR EHA1 Finalise development of the Reef 2050 Net Benefit Policy and identify pathways for implementation
MTR EHA13 Finalise the Reef 2050 Cumulative Impact Management Policy and identify pathways for implementation.
MTR EBA2 Improve guidance and procedural requirements for offsetting impacts to the Reef from industry activities using standardised policies, procedures and guidelines
MTR WQA1 Implement the Reef 2050 Water Quality Improvement Plan 2017–2022 *
GA12 Prioritise and develop specific implementation plans and reporting protocols addressing the Plans targets and actions in consultation with the community.
MTR GA3 Identify, develop and implement opportunities for local governments to facilitate and support achievement of targets and objectives.

#### Alignment with Reef WQIP actions

Initiative one will contribute to the Reef 2050 WQIP actions identified in the following table.

Table 6: Initiative one contribution to Reef 2050 WQIP actions

Implementation Table A1: Minimum Practice standards apply everywhere	
Action	Delivery
1.2 Ensure that urban, industrial and mining activities comply with requirements under the Environment Protection and Biodiversity Conservation Act 1999, Planning Act 2016, Environmental Protection Act 1994, and Waste Reduction and Recycling Act 2011.	Additional activity that will contribute to this action's delivery*
1.3 Refine existing standards, regulations and planning frameworks as new information improves knowledge for all industries.	Update the Voluntary Market Based Nutrient Management and Point-source Water Quality Offsets Policies in line with new science and practice standards.
Implementation Table A2: Culture of innovation and stewardship	
2.1 Support land managers, industries and local governments to adopt improved management practices, e.g. through coordinated extension, education and awareness programs.	<p>Deliver communication and education activities to foster behaviour within communities and industries that minimise negative impacts on water quality from urban areas.</p> <p>Build capacity of local governments and industry to design, deliver and maintain:</p> <ul style="list-style-type: none"> <li>• total water cycle management</li> <li>• water sensitive urban design into new and existing urban and industrial development</li> </ul>
2.6 Trial and implement innovative monitoring, land management and treatment system solutions that aim to deliver water quality benefits.	Foster innovation and continuous improvement in the management and release of point-source discharges and industrial land run-off. Develop leading practice standards based on successful



24

	trials to encourage broader adoption of improved management
<b>Implementation Table A3: Catchment restoration</b>	
3.1 Use whole-of-system catchment management, planning and information to support prioritisation.	Additional activity that will contribute to this action's delivery*
3.3 Trial and implement innovation in catchment repair projects to reduce sediment and nutrient delivery to the Reef.	Additional activity that will contribute to this action's delivery*
<b>Implementation Table B1: Applying the best available science and knowledge</b>	
4.2 Integrate forms of knowledge including science, policy, management, Traditional Owner and community through regular synthesis workshops and theme specific working groups to support consistent communication messages and guidance for manager	Capture on-ground management knowledge and expertise to provide guidance for program designers and managers
4.3 Deliver decision support tools, communication and education products tailored to specific audiences.	Develop new tools and technologies to support land managers and program managers
<b>Implementation Table B2: Coordinating and prioritising investment</b>	
5.2 Identify opportunities for co-investment or alignment of funds and resources with industry, research organisations, philanthropists, Natural Resource Management bodies, community and corporate organisations to achieve water quality objectives.	Expand on cross-government co-investment opportunities.
5.3 Prioritise investment across Reef catchments according to catchment priorities and targets.	Use decision support tools, Walking the Landscape workshops, regionally developed plans and modelling scenarios, e.g. eReefs and Source Catchments, to determine program priorities.
5.4 Identify the benefits and appropriate applications of different investment mechanisms	Additional activity that will contribute to this action's delivery*
<b>Implementation Table B3: Governance to support coordinated decision-making and accountability</b>	
6.4 Include all stakeholders including local organisations, communities and Traditional Owners in decision-making and priority setting	Establish mechanisms to ensure decision-making across all levels of government is coordinated and delivers water quality improvement outcomes.
<b>Implementation Table B4: Evaluating performance</b>	
7.5 Report progress towards targets, objectives and outcomes.	Report on implementation of Reef 2050 WQIP actions through Reef 2050 Plan implementation reporting.
7.6 Communicate regionally relevant information for management decisions and local communities.	Continue to build cultural reporting capacity in regional report cards

\*Activity is in addition to activities identified under the Delivery column.

### Activities

The initiative has four sub projects: strategic assessment; decision making framework, innovation trials and innovation roll out.

25

### Strategic assessment

#### *Undertake a strategic assessment of STPs across the 32 Reef Catchment councils*

This activity will involve partnerships across Reef councils and the Department of Environment and Science (DES) to source data and willing research institutions to frame the assessment and prioritisation methodology. This project will be accelerated through use of data from work currently underway by *qldwater* and DES.

This project will assess STPs across the region to identify those with the highest impact to Reef water quality. Those sites most suitable for conducting innovation trials will also be selected considering suitability for acting as a surrogate for high impact STPs without increasing risk to water quality. Innovation trial sites will be rigorously assessed comparing innovative and traditional approaches to select the best options for the location, size of the STP and whole of life costs to council.

An indicative list of potential innovative approaches that may be considered for assessment and trial is included in Table 7 and presented according to the waste and resource management hierarchy.

This phase will help to refine the number of trial sites and cost of installation and maintenance of alternative approaches.

*Table 7: Possible wastewater treatment approaches according to hierarchy of preferred approach*

Strategy hierarchy	Possible approaches
Reduce	<ul style="list-style-type: none"> <li>balance production of biosolids vs effluent</li> <li>sewer rehabilitation to reduce inflow and infiltration</li> <li>evaporation ponds in dry areas</li> </ul>
Recycle	<ul style="list-style-type: none"> <li>reuse of low grade effluent</li> <li>A+ effluent reuse for public greening</li> <li>direct or indirect potable reuse</li> <li>nutrient recovery</li> <li>beneficial reuse of biosolids</li> <li>new technologies for biosolid reuse</li> </ul>
Release to land	<ul style="list-style-type: none"> <li>irrigation efficiencies</li> <li>joint biosolids collection</li> <li>biosolid drying/treatment technologies</li> </ul>
Release to Waters & Offset	<ul style="list-style-type: none"> <li>Offsets to mitigate nutrients elsewhere</li> </ul>
Release to Waters with best practice treatment	<ul style="list-style-type: none"> <li>Biological nutrient removal and other 'tertiary' treatment</li> </ul>

26

**Decision-making framework:**

Develop a decision-making framework to support council assessment of STP upgrade options considering whole of life economic, environmental and social risks, costs and benefits. This framework will provide for the comparison of traditional and innovative approaches.

This framework will build upon the processes and learnings from the strategic assessment to develop a practical tool for use at a council and catchment wide level. The framework will be complemented by resources including factsheets, case studies and key contacts for further information.

**Innovation trials:**

Trials will be undertaken to test and provide demonstration sites of the innovative approaches at locations identified through the strategic assessment and in close collaboration with partners such as universities. A suite of innovations will be trialled in locations across a range of catchment typologies to test, monitor and evaluate the approaches within a pre-agreed framework. This may include approaches such as alternative nutrient management using algae, offsets, recycling wastewater and reuse of biosolids.

Community engagement will raise awareness through the trials and enhance understanding of the total water management cycle and the role each element plays - positive and negative.

Trial outcomes will be documented to formally contribute to collective scientific and practice knowledge in relation to wastewater treatment for improved water quality. The initiative coordinator and councils will work with DES to identify how successful outcomes can be used to update and support existing policies and regulatory requirements.

**Innovation roll out:**

A new annual wastewater management program will be sought to fund proven cost-effective methods to complement traditional approaches. The decision-making framework and information, demonstration sites and contacts for advice relating to practical considerations for the implementation of alternative measures will be available, informed by the innovation trials.

In years four of the MIP program, the first round will be funded to identified high priority STPs (identified through the strategic assessment) and is proposed to continue until year seven. Funding will be available to undertake option assessment and delivery stages on a 70/30 split. Funding will only be available to upgrade existing STPs.

Community engagement and awareness will continue to be an element. Building capacity with wastewater stewardship through knowledge sharing activities across councils will be ongoing and a requirement associated with accessing funding.





### Initiative 1. Funding requirements

The following table sets out broad activities to occur under each stage, timeframes for completion and estimated resource requirements.

Table 8: Indicative costings for Wastewater Stewardship Initiative

Activity	Inputs	Delivery parties	Duration	Cost
Strategic assessment	Design communication and engagement – industry stakeholder and community awareness and engagement and associated materials	Consultant, LG, NRM, Industry, Agriculture peak bodies	4 months	\$50,000 + In kind
	Collect waste water quality data, identify loads and data gaps	SG (Current <i>qldwater</i> project and DES projects)	6 months	In kind
	Develop methodology to identify priority and trial sites and criteria to assess solutions. Identify representative small, medium and large STPs in high and low-impact catchments (based on existing reef modelling). Consider Council capacity/willingness to undertake trials and overall funding co-contribution.	Analyst LG – in kind in workshop, capacity to undertake, including possible funding co-contributions Qld Govt (DES) / Councils – modelling and science support	3 months	\$30,000 + In kind
	Identify alternative options for trial sites - desktop investigation of alternative options and seek recommendations from industry experts/ service providers to the industry.	University/Consultant	2 months	\$30 000
	Undertake a detailed life cycle assessment of alternatives considering environmental, social and economic costs and benefits and apply short list of priority sites.	University/Consultant	3 months	\$70 000
	Gap resolution and stakeholder workshop using representative STPs as a focus and the criteria developed in 3.	University/Consultant, SG & LG	3-6 months	\$20,000 + In kind
	Assessment and prioritisation report on short listed opportunities	University/Consultant	1-2 months	\$15,000
	Negotiate and select alternative approaches with stakeholders at a trial site level.	University/Consultant, SG & LG	4 months	\$10,000 + In kind
	Develop testing parameters, monitoring indicators and evaluation framework.	University/Consultant	3 months	\$15,000
	Establish trial governance framework and discuss contractual arrangements with technology/approach providers	SG, LG, research and industry partners	3 months	In kind
	<b>TOTAL</b>		<b>12-18 months</b>	<b>\$240,000</b>

November 18



28

Activity	Inputs	Delivery parties	Duration	Cost
Trails	Construct and commence trials and outcome monitoring (repeat trial sites in different catchments - \$ dependent)	University/Consultant, SG & LG	18 months	\$3,000,000
	Commence community awareness and engagement activities	LG	18 months	\$150,000 + partner in kind
	TOTAL		18 months	\$3,150,000
Decision making framework	Draft decision-making framework outline for consultation with Reef councils. The outline will identify key investigation, assessment and governance process.	Consultant	2 months	\$20,000
	Workshop decision-making framework with councils to identify organisational or practical opportunities or issues in applying framework	Consultant Councils- in kind participation	1 month	\$20,000 In kind
	Develop guidance information to guide councils in the implementation of the framework including the development of fact sheets and case studies describing innovative approaches and learnings.	Consultant	3 months	\$40,000
	Test framework with councils	Councils in kind Consultant support	6 months	\$15,000 In kind
	Finalise framework incorporating amendments identified through trials.	Consultant	1 month	\$5,000
	Distribute, training and promote to Reef councils.	LGAQ/ Reef Guardian Councils	1 month	\$20,000 In-kind
	TOTAL		1 year	\$120,000
Innovation roll out program	Annual roll out by priority site	SG & LG (contribution based on LGAQ subscription formula) \$5 M/p.a. fund	Varies	\$20,000,000
	Continue outcome monitoring (number of sites)	SG, LG, NRM body	Per schedule	In-kind
	Continue community awareness and engagement approach	LG – 3 catchments @ \$15,000/catchment per annum	On-going concurrent	\$180,000
	TOTAL		4 years	\$20,180,000

29

### Total Initiative Budget

The annual costs, total cost for the 'core' phase of the MIP and total cost of the initiative are shown in Table 9 below.

Table 9: Annual, 'core' program and total costs for the Wastewater Stewardship Initiative

Activity	Year 1	Year 2	Year 3	Core Stage Total	Years 4-7	TOTAL
Strategic Assessment	\$190,000	\$50,000	-	\$240,000	-	\$240,000
Innovation Trials + community engagement	-	\$600,000	\$2,550,000	\$3,150,000	-	\$3,150,000
STP Decision Making Framework	-	\$120,000	-	\$120,000	-	\$120,000
Innovation Roll out Program	-	-	-	-	\$20,180,000	\$20,180,000
.5 FTE Initiative Projects Coordinator (PC)	\$63,000	\$63,000	\$63,000	\$189,000	\$252,000	\$441,000
<b>TOTAL</b>	<b>\$253,000</b>	<b>\$833,000</b>	<b>\$2,613,000</b>	<b>\$3,699,000</b>	<b>\$20,432,000</b>	<b>\$24,131,000</b>





**Case Study – Working together to explore innovation**

Reef catchment councils are already actively seeking innovations, tapping into research and industry expertise, and working together to benefit GBR health and share learnings across council boundaries in the management of wastewater. This is in response to aging WTP infrastructure with high operational costs, particularly in terms of energy, combined with the drive to improve water quality entering Reef catchments. This work is currently small scale and limited with funding restricted to councils allocating what they can afford from annual budget and through submissions for funding grants that align to expected outcomes. Below are a selection of these initiatives and their status.

***Burdekin Shire Council***

Burdekin Shire Council (BSC), in partnership with James Cook University (JCU) and MBD Energy Ltd has been trialling the use of macro algal treatment to remove nitrogen and phosphorus from wastewater streams. The trials have been very successful and promise effective removal of both nutrient pollutants at a capital and carbon cost of perhaps as little as 10% of those associated with current treatment technologies. In the case of the Ayr/Brandon Waste Water Treatment Plant, which might require a capital investment of \$30 million dollars to meet the current standard DEHP 5N/2P licences, a solution may be found for under \$2 million dollars, including initial operational expenses in fine-tuning the new technology over the first 2 years. BSC has to date been unsuccessful in securing funding to deliver the first full-scale permanent commercial implementation of the technology to provide proof of concept in the real world. When proven successful, the solution could be applied to most of the 129 similarly problematic plants not yet upgraded in the catchment area of the Great Barrier Reef. This represents at once a saving of over 90% (billions of dollars) on current treatment solutions and a chance to make large, measurable gains in reducing the impact of human society on the Reef environment.

***Cairns Regional Council***

In partnership with James Cook University and Itron Australasia, Cairns Regional Council (CRC) was successful in receiving funding under Round 1 of the Federal Government's Smart Cities and Suburbs program to deliver a connected network of 30 environmental sensors installed in urban waterways to obtain real-time water quality data on discharges entering the Great Barrier Reef Marine Park. The project will deliver functional tools for CRC to make evidence-based decisions using up-to-date environmental data (nutrients, sediments and flow). By establishing baseline indicators CRC will be able to measure the efficiency and effectiveness of the environmental programs as they are delivered.

In the STP space, CRC has been actively investigating potential options for the management of organic waste (including biosolids), partnering with industry to facilitate wastewater recycling and the use of macro algae for STPs.

***Townsville City Council/Townsville Water (Townsville)***

Townsville has also been trialling the use of smart technology for monitoring water quality and is currently investigating flow monitoring. They are also looking at using this technology to provide sewer and stormwater overflow alerts.

Like BSC, Townsville has undertaken a small-scale trial of macro-algae treatment at their Mt St Johns WWTP and are also in the process of developing a 15ML/day recycled water scheme from Cleveland Bay WWTP.

These initiatives demonstrate leading edge practice and innovative approaches and are being undertaken locally across individual councils. Trialling innovation and then rolling out to a full-scale trial / implementation is costly. If full scale trials prove as successful as research and small trials indicate, wide spread adoption of these new ways of doing things will deliver a range of benefits including cost savings (capital and annual operational costs), lower energy use, improved water quality and the potential for new income streams.

November 18

## Initiative two: Fish Friendly Councils

### Description

Fish Friendly Councils is a suite of new activities aimed at maintaining or restoring connectivity between catchment, coastal and marine ecosystems to deliver multiple social, environmental and economic outcomes. These will be delivered under a single umbrella and framed through the lens of fish species' lifecycles and habitat needs. The activities will be a mix of habitat restoration, flow reconnection and local stormwater quality improvement. The activities will: raise awareness and build capacity for behaviour change within local government, community and industry; and improve system understanding, infrastructure and maintenance regimes.

### Objectives

- A. Create a community-based movement to improve fish habitat in participating Reef catchments through a series of clearly identified actions;
- B. Facilitate industry and council improvement in compliance with and enforcement of erosion and sediment control and stormwater management requirements;
- C. Establish a suite of Water Sensitive Urban Design (WSUD) solutions appropriate for different Reef catchment types and location characteristics;
- D. Build State, local government and industry knowledge of design and management of WSUD solutions;
- E. Support Reef councils in addressing barriers to fish migration;
- F. Establish demonstration sites showcasing techniques in turning stormwater management systems into fish habitats.

### Outcomes

1. Increased community and industry awareness of, support for and participation in protection and restoration of fish habitats in Reef catchments.
2. Improved local government capacity to incorporate 'fish friendly' practices in maintenance of stormwater drainage systems and in meeting requirements of the Fisheries Queensland Waterways Barrier Works Accepted Development Code (Fisheries Act 1994).
3. Net increase in health of urban and peri-urban fish habitats in participating Reef catchments.
4. An equitable contribution to meeting water quality targets in key catchments.
5. Improved connectivity between fish habitats to support native fish populations.
6. Contribute to a net decrease in pollution from urban stormwater and erosion in other catchments.

### Rationale

Fish Friendly Councils is immediately relatable to the broader community as an outcome and instils meaning and purpose into perceived 'bureaucratic' requirements such as erosion and sediment control (ESC), stormwater and waterway management. As a program, it taps into the recreational (and commercial) fishers audience – a large and diverse group of people – up and down the Reef catchment.

The activities focus on building social capital to act to protect and enhance high priority fish habitats in participating Reef catchments through collaboration, good design, informed management and compliance with minimum standards. It also facilitates improved understanding within local government areas of fish habitats and priorities for their management and rehabilitation.

Connectivity between catchment, coastal and marine ecosystems is a critical driver of Reef health and the resilience of native fish species. Fish migration is an essential aspect of the lifecycle of many fish species. Migration between habitats have evolved for various reasons, including feeding and reproduction purposes, to avoid predators and maintain genetic diversity. Barriers and low-quality habitats that have resulted from urban and rural development are preventing connectivity between habitats, impacting fishery productivity and creating environmental conditions favouring invasive species.

32

Diadromous fish species rely on good connectivity between saltwater spawning grounds and freshwater nursery habitats. These fish are important to recreational and commercial fisheries and indigenous culture and cultural practices. Barramundi and sea mullet are diadromous and are Queensland's most valuable inshore net commercial species, contributing millions of dollars to the state's economy every year. This initiative facilitates a strategic approach to existing and proposed council and partner activities across the GBR contributing to ecosystem connectivity and function.

#### Alignment with Reef Plan actions

Initiative two will contribute to Reef 2050 actions identified in the following table.

Table 10: Initiative one contribution to Reef 2050 Plan actions

Foundational programs and activities
Reef 2050 Water Quality Improvement Plan 2017–2022 provisions including: <ul style="list-style-type: none"> <li>• applying minimum practice standards across all industries and land uses</li> <li>• supporting industries and communities to build a culture of innovation and stewardship that takes them beyond minimum standards</li> <li>• restoring catchments through works to improve or repair riparian vegetation, streambanks, gullies, waterways and wetlands</li> <li>• Regional report cards</li> <li>• Ongoing activities to reduce nutrients including nominated sewage treatment plant upgrades</li> </ul> Implementing regulatory standards for stormwater run-off, dredging, sewage outfalls, mine discharges and industrial contaminants
Queensland Wetlands Program
Local government coastal hazard adaptation strategies
QCoast 2100
Great Barrier Reef Coastal Ecosystem Assessment Framework
Reef Guardians
Local Marine Advisory Committees
Regional report card partnerships
Regulatory standards for storm water run-off, sewage outfalls, mine discharges and industrial contaminant
Action
EHA3 Support Traditional Owner stewardship activities that contribute to Reef health and resilience, including removing and, where possible, identifying the sources of marine debris.
MTR EHA3 Investigate, deliver and support active localised restoration activities, as identified in the Reef Blueprint
EHA5 Develop, implement and coordinate a protocol and knowledge management system for recording, storing, protecting and, where appropriate, sharing of knowledge, innovations and practices; conserving and cultural use of biocultural diversity; and use in decision making.
EHA27 Implement on-ground activities to reduce the volume of debris and gross pollutants generated in or entering the World Heritage Area and adjoining aquatic ecosystems, as well as undertake education and awareness raising activities to minimise the source and occurrence of debris
MTR EHA1 Finalise development of the Reef 2050 Net Benefit Policy and identify pathways for implementation
MTR EHA7 Implement the Wetlands in the Great Barrier Reef Catchments Management Strategy 2016–2021.



33

MTR EHA9 Through the Queensland Land Restoration fund, support land sector carbon reduction projects that deliver water quality, biodiversity and social cobenefits, including in Great Barrier Reef catchments
MTR EHA13 Finalise the Reef 2050 Cumulative Impact Management Policy and identify pathways for implementation.
MTR WQA1 Implement the Reef 2050 Water Quality Improvement Plan 2017–2022 *
MTR EBA2 Improve guidance and procedural requirements for offsetting impacts to the Reef from industry activities using standardised policies, procedures and guidelines
GA12 Prioritise and develop specific implementation plans and reporting protocols addressing the Plans targets and actions in consultation with the community.
MTR GA3 Identify, develop and implement opportunities for local governments to facilitate and support achievement of targets and objectives.

#### Alignment with Reef WQIP actions

Initiative two will contribute to the WQIP actions identified in the following table.

Table 11: Initiative two contribution to Reef 2050 WQIP actions

Implementation Table A1: Minimum Practice standards apply everywhere	
Action	Delivery
1.2 Ensure that urban, industrial and mining activities comply with requirements under the Environment Protection and Biodiversity Conservation Act 1999, Planning Act 2016, Environmental Protection Act 1994, and Waste Reduction and Recycling Act 2011.	Additional activity that will contribute to this action's delivery*
1.3 Refine existing standards, regulations and planning frameworks as new information improves knowledge for all industries.	Additional activity that will contribute to this action's delivery*
Implementation Table A2: Culture of innovation and stewardship	
2.1 Support land managers, industries and local governments to adopt improved management practices, e.g. through coordinated extension, education and awareness programs.	<p>Deliver communication and education activities to foster behaviour within communities and industries that minimise negative impacts on water quality from urban areas.</p> <p>Build capacity of local governments and industry to design, deliver and maintain:</p> <ul style="list-style-type: none"> <li>total water cycle management</li> <li>water sensitive urban design into new and existing urban and industrial development</li> </ul> <p>Facilitate erosion and sediment control training for local governments and industry to reduce pollutants from urban areas.</p>
2.2 Empower stewardship leaders to influence peers and the broader community to adopt improved practices.	<p>Facilitate peer to peer learning, mentoring and influencing opportunities.</p> <p>Ensure Reef Guardians and other stewardship leaders have knowledge and skills to enhance their capacity to influence stewardship of the Reef.</p>

34

	Continue to participate in the Reef Guardian Councils program and encourage and incentivise Reef Catchment Councils to join the program.
<b>Implementation Table A3: Catchment restoration</b>	
3.1 Use whole-of-system catchment management, planning and information to support prioritisation.	Use modelling, gully, ground cover, riparian extent, wetland and Walking the Landscape mapping to identify sites for on-ground intervention that maximise water quality benefits and consider co-benefits.  + Additional activity that will contribute to this action's delivery*
3.2 Use guidelines, Traditional knowledge and decision support tools to design and inform interventions.	Use the Gully and Stream Bank Toolbox and lessons from relevant monitoring and research projects to inform design and selection of site remediation actions.  + Additional activity that will contribute to this action's delivery*
3.3 Trial and implement innovation in catchment repair projects to reduce sediment and nutrient delivery to the Reef.	Trial innovative approaches to catchment repair.  Deliver targeted catchment repair projects including riparian revegetation, gully repair, streambank stabilisation and coastal wetlands rehabilitation through the Major Integrated Projects, Land Restoration Fund and Reef Trust.
3.4 Modify existing urban area stormwater management and rehabilitate urban waterways.	Additional activity that will contribute to this action's delivery*
3.5 Partner with voluntary stewardship groups, Traditional Owner groups, Indigenous Land and Sea Rangers and other organisations to deliver catchment repair projects.	Additional activity that will contribute to this action's delivery*
3.6 Support the development of ground up, multi-stakeholder programs for the delivery of catchment repair projects.	Strengthen regional partnerships (such as Reef Alliance, regional waterway health and water quality reporting partnerships) to support water quality improvement initiatives aimed at onground actions, monitoring and reporting.  + Additional activity that will contribute to this action's delivery*
<b>Implementation Table B1: Applying the best available science and knowledge</b>	
4.2 Integrate forms of knowledge including science, policy, management, Traditional Owner and community through regular synthesis workshops and theme specific working groups to support consistent communication messages and guidance for manager	Capture on-ground management knowledge and expertise to provide guidance for program designers and managers
<b>Implementation Table B2: Coordinating and prioritising investment</b>	
5.2 Identify opportunities for co-investment or alignment of funds and resources with industry, research organisations, philanthropists, Natural Resource Management bodies, community and	Expand on cross-government co-investment opportunities.

35

corporate organisations to achieve water quality objectives	
<b>Implementation Table B3: Governance to support coordinated decision-making and accountability</b>	
6.4 Include all stakeholders including local organisations, communities and Traditional Owners in decision-making and priority setting	Establish mechanisms to ensure decision-making across all levels of government is coordinated and delivers water quality improvement outcomes.
<b>Implementation Table B4: Evaluating performance</b>	
7.5 Report progress towards targets, objectives and outcomes.	Report on implementation of Reef 2050 WQIP actions through Reef 2050 Plan implementation reporting.
7.6 Communicate regionally relevant information for management decisions and local communities.	Continue to build cultural reporting capacity in regional report cards

\*Activity is in addition to activities identified under the Delivery column.

## Activities

### Fish Friendly Habitats

#### *Fish barrier prioritisation*

Barriers impact fish communities, effect aquatic ecosystem resilience and reduce the value local communities place on waterways flowing into the Great Barrier Reef Marine Park. Box culverts, pipes, road crossings, weirs, dams, stream flow gauging structures, floodgates, barrages and bunds (or ponded pastures) can all block and impede connectivity and reduce fish populations. Many of these assets are owned and managed by local government.

Modern standards and legislation mitigate the risk of introducing new fish barriers. This initiative focuses on identifying and prioritising remediation of legacy structures. Removing or by-passing these barriers through appropriately designed fishways to reconnect fish habitats and support the reinstatement of natural migratory habits. Most local government areas have thousands of fish barriers in their region. Fish barrier prioritisation is a methodical and holistic approach to identify and prioritise fish barriers that will deliver greatest benefit to fish migratory outcomes. The project builds on existing information, harmonising data and filling gaps. Steps in the process include:

- identifying all potential barriers using aerial imagery and local knowledge;
- rank the large number of fish barriers using a rapid assessment GIS process that comprehensively evaluates fishery, economic, social and eco-system benefits of fish barrier removal at each site;
- ground truth highest ranking potential fish barriers in the field to validate and assess impact;
- further prioritise actual fish barriers based on configuration and ecological characteristics;
- develop and apply a decision-making process to ensure key functions of barriers (e.g. flood mitigation) are considered in the prioritisation process;
- produce a list of the highest priority fish barriers in each region where remediation activities will deliver the greatest 'Bang for Buck' to ecological and social outcomes.

The process also recommends the most suitable solutions to remediate the top 30 fish barriers in the catchment. The result is an action plan of projects that can then be programmed and delivered.

#### *Fish Friendly infrastructure and operational delivery*

A funding pool to enable strategic investment in efforts to increase fish populations and improve aquatic ecosystem health will be available to Reef councils. Eligible projects will include, but not be limited to:

- fishways and fish ladder design and construction to remediate fish barriers by allowing fish the opportunity to reach required upstream habitats and complete their life-cycle;
- off-site solutions;



36

- hard drainage naturalisation;
- management of invasive species (including invasive fish species);
- riparian assisted restoration and/or revegetation.

#### **Be 'Fish Friendly' community campaign**

Campaign to increase awareness and encourage communities to adopt 'fish friendly' practices at a household and individual level. The campaign will include:

- recruit 'Be Fish Friendly' ambassadors for child, adult and industry audiences
- targeted awareness and information campaign across multiple media to increase understanding of impacts affecting fish habitats and personal actions to be 'Fish Friendly'
- local community events to migrate audiences from 'awareness to action' through connection with local fish habitats
- targeted educational program with catchment schools through the development of resources for use in classroom environments.

#### **Be 'Fish Friendly' industry campaign**

Campaign to increase awareness and encourage industry to adopt 'fish friendly' practices to improve compliance with regards to erosion and sediment control requirements. This will include the following activities:

- create simple information tools to support industry knowledge of best practice compliance (build on existing tools and resources such as the Industry App, training days and demonstration sites)
- offer Fish Friendly industry certification for developers and contractors to foster stewardship and leading practice
- provide training to Fish Friendly councils on the compliance to enforcement spectrum
- establish a self-compliance system using the Industry App and council systems (NOTE: The App and this model could also be rolled out to road construction/maintenance contractors as part of the roads initiative)
- councils set a benchmark for best practice in their own works.

#### **WSUD that works for everyone**

This project focusses on the design and implementation of Water Sensitive Urban Design (WSUD) that is regionally appropriate. Projects will include several pilot sites and will demonstrate WSUD that responds to local characteristics. This would involve:

- identify geophysical characteristics and variables that determine WSUD design constraints for each pilot catchment
- facilitate innovation sprints for local professionals to generate locally appropriate WSUD design and maintenance principles through to design ideas (series of half day workshops)
- proof of concept sites – low risk sites for testing design innovations and plant species suitability.
- monitoring and maintenance
- sites used to train council maintenance staff.

#### **Prerequisites**

These activities require holistic catchment knowledge and understanding. The State funded "Walking the Landscape" program is a key initiative as an input to identifying the 'right mix' of activities to maximise benefits to water quality flowing to the Reef. Access to fish barrier remediation funding is dependent on completing the fish barrier prioritisation process. Therefore, in some catchments more detailed Walking the Landscape assessments may be required.





### Funding requirements

The following table sets out broad activities to occur under each stage, timeframes for completion and estimated resource requirements.

Table 12: Indicative program activities and costings

Activity	Inputs	Delivery parties	Duration	Cost
Program wide activities	Program development – including confirmation of 2 pilot councils	Consultant/Program coordinator, LG, SG, NRM and other key stakeholders (e.g. CAREFISH, Sunfish)	3 months	\$35,000 + In-kind
	Market research to inform pilot evaluation and review prior to wider roll out	Consultant, LG media and comms	3 months	\$35,000 + In-kind
	Marketing and communications planning	Consultant, LG media/ comms	3 months	\$45,000 + In-kind
	Resource development (technical input, professional drafting and design) website, fact sheets and other collateral, including profile and role of ambassadors and partners	Consultant, LG media and comms, SG, NRM and other key stakeholders (e.g. CAREFISH, Sunfish)	5 months	\$70,000 + In-kind
	Design monitoring and evaluation for all program sub-components	Consultant, LG, SG	5 months	\$45,000 + In-kind
	Undertake monitoring and evaluation – from year 2 for duration of program	Consultant, LG, SG	6 years from year 2	\$60,000 + In-kind
	TOTAL		12 months + 6 years	\$290,000



38

Activity	Inputs	Delivery parties	Duration	Cost
Be Fish Friendly Campaign	Recruitment of "Fish Friendly" ambassadors	Program coordinator (PC), LG, SG	4-5 months	PC salary + In-kind
	Plan and deliver launches of 'Fish Friendly' to piloting councils x 2	PC, LG, SG, partners and Ambassadors @ \$10,000/event x 2 councils x 3 years	3 years	\$60,000 + In-kind
	Roll out "Fish Friendly" community events x 2 pilots x 3 years	LG, partners, PC @ \$40,000/event x 2 councils x 3 years	3 years	\$240,000 + In-kind
	Promotion of "Fish Friendly" industry and habitats sub program achievements x 2 pilots x 3 years	LG, partners, PC @ \$40,000/p.a.	3 years	\$120,000 + In-kind
	Roll out across approximately 10 Reef councils	PC, LG and partners	Years 4-7	\$660,000 + In-kind
	<b>TOTAL</b>		<b>3 + 4 years</b>	<b>\$1,080,000</b>
Be Fish Friendly Industry	Resource development (technical input, professional drafting and design)	Consultant, LG media and comms, SG, NRM and other key stakeholders (e.g. CAREFISH, Sunfish)	5 months	\$60,000
	Pilot in selected councils	LG, partners, PC	2 years	In-kind
	Roll out across approximately 10 Reef councils – including adjusting and adapting resources	Consultant, LG, partners, PC	Years 4-7	\$60,000
	<b>TOTAL</b>		<b>2 + 4 years</b>	<b>\$120,000</b>



39

Activity	Inputs	Delivery parties	Duration	Cost
WSUD that works for everyone	Establish project governance group and communication and engagement approach	PC, LG, SG and stakeholders	3 months	PC salary + In kind
	Identify geophysical characteristics and variables that determine WSUD design constraints for each pilot catchment in consultation with local stakeholders	SG (Urban Water Management Framework), Consultant, LG, Design/construction stakeholders	6 months	\$65,000
	Generate locally appropriate WSUD design and maintenance principles and design ideas through a series of half day "Innovation Sprint" workshops.	PC, LG and stakeholders	3 months	\$25,000 + In kind
	Identify proof of concept sites – low risk sites for testing design innovations and species suitability – in consultation with stakeholders	LG and stakeholders	6 months	In kind
	Ideas design development and technical specifications x 2 pilot catchments x 3-4 solutions for each	Local design consultant consortiums	5 months	\$120,000
	Construct trial WSUD 6-8 solutions	LG, Construction Industry partners	1 year	\$600,000
	Monitoring and maintenance	LG	3 years	In kind
	Sites used to train LG maintenance staff x 3 training days/p.a.	Consultant, LG	3 years	\$40,000
TOTAL			4 years	\$850,000



40

Activity	Inputs	Delivery parties	Duration	Cost
Fish Friendly Habitats	Fish prioritisation study- undertake for coastal councils that have not yet undertaken a fish barrier assessment- assume 2-3 coastal local governments per year	Consultant, NRM, LG @\$50,000/council x 3 p.a.	6 months each/3 years	\$450,000 + in kind
	Implementation of on the ground projects including: Off-site solutions Hard drainage naturalisation to improve management of urban/peri-urban waterways (fish nurseries) to improve fish numbers Management of invasive species (including invasive fish species) Riparian revegetation x 2 catchments x 3 sites each Removal of fish barriers x 2 catchments x 3 sites each	LG, NRM, Development industry \$720,000 p.a. X 5 years	5 years	\$3,600,000 +In kind
	TOTAL		7 years	\$4,050,000

#### Total Initiative Budget

The annual costs, total cost for the 'core' phase of the MIP and total cost of the initiative are shown in Table 13 below.

Table 13: Annual, 'core' program and total costs for the Fish Friendly Councils Initiative

Activity	Year 1	Year 2	Year 3	Core Stage Total	Years 4-7	TOTAL
Program wide activities	\$230,000	\$10,000	\$10,000	\$250,000	40,000	\$290,000
Be Fish Friendly Campaign	\$140,000	\$140,000	\$140,000	\$420,000	\$660,000	\$1,080,000
Be Fish Friendly Industry	\$60,000	-	-	\$60,000	\$60,000	\$120,000
WSUD that works for everyone	\$90,000	\$200,000	\$520,000	\$810,000	\$40,000	\$850,000
Fish Friendly Habitats	\$150,000	\$870,000	\$870,000	\$1,890,000	\$2,160,000	\$4,050,000
1 FTE Initiative Projects Coordinator (PC)	\$126,000	\$126,000	\$126,000	\$378,000	\$504,000	\$882,000
TOTAL	\$795,000	\$1,345,000	\$1,665,000	\$3,808,000	\$3,464,000	\$7,272,000



**Case Study – Fish barrier prioritisation and remediation**

Mackay Regional Council (MRC) is leading practice in the adoption of 'fish friendly' approaches including the management of urban stormwater, remediation of natural waterways, the identification, prioritisation and remediation of fish barriers and coastal foreshore management. With an investment of over \$8.5 million across almost 30 projects and maintenance programs, MRC is achieving improved water quality outcomes and native fish numbers.

In 2015, MRC and local NRM body (Reef Catchments) commissioned a Fish Barrier Prioritisation Report. Undertaken by Catchment Solutions, the report was developed through a similar methodology as proposed for the MIP and focussed on providing a full picture of fish barriers for the region which improved capacity amongst council staff in the identification and remediation of fish barriers. The process resulted in a prioritised list that is used to access funding through council budget processes to address high priority barriers.

The fish barrier prioritisation report identified 2,929 potential barriers to fish migration within the MRC local government area. As of July 2018, MRC has addressed 18 of its highest priority barriers with detailed planning undertaken for a further 3-4 barriers to be remediated by the end of the 2018/19 financial year. Projects delivered have seen significant improvement in fish movements. Recently, a record 31,000 fish in one day were sampled moving through the most downstream fishway at Mackay's Gooseponds. This fishway is located right on the transition zone between freshwater and saltwater environments and enabling movement from the estuary to a freshwater safe-haven is critical to the survival of these fish. (See media release - <http://reefcatchments.com.au/community/31000-fish-all-in-a-days-work/>)

MRC has also been active in changing the perception of stormwater drains and urban waterways across council, industry and the community. Urban drains and stormwater systems are potential fish habitats and have a significant connection to Reef health. The naturalisation of urban waterways through natural channel design, revegetation and weed control and community engagement associated with these projects are assisting in changing perceptions and providing water quality, ecosystem, amenity and social benefits.

MRC, as with other Reef councils are committed to improving practices. They are continuing to explore ways to improve environmental, social and economic outcomes through new ways of approaching traditional council business as usual. Funding and partnerships to trial new approaches is fundamental to achieving this and is most beneficial where councils work together to trial and share learnings and knowledge. Funding to assist in the cost of addressing legacy infrastructure in high priority, high impact locations is also important to improve outcomes for Reef health.



42

## Initiative three: Best Practice for Erosion & Sediment Control from Unsealed Roads

### Description

This initiative will improve understanding of unsealed roads and their impact on water quality. It will inform development of a framework to enable road managers to better address ESC in the design and maintenance of unsealed roads.

This initiative will also consider how water quality benefits can be considered in the cost benefit assessment of roads under consideration for sealing, trialling the application of the Reef Net Benefit and Cumulative Impacts Policies.

### Objectives

- A. Through an evidence-based assessment establish the impact of unsealed roads on water quality and gully erosion to identify high risk road segments where improved infrastructure design or maintenance processes would benefit water quality;
- B. Identify a suite of cost effective and practical measures to improve the management of water quality impacts from unsealed roads;
- C. Facilitate road manager adoption and implementation of identified impact management measures to improve water quality in Reef catchments.
- D. Provide funding to address high priority/high risk locations.

### Outcomes

1. Make an equitable contribution to meeting water quality targets in key catchments.
2. Minimum practice standards are in place for the management of unsealed roads in Reef catchments.
3. Road managers actively engaged in identifying and implementing best practice measures to improve water quality outcomes.
4. Measure/s of the water quality benefits of sealing roads in Reef catchments inform business cases proposing sealing of unsealed roads.
5. Baseline data established; monitoring and data sharing processes in place.

### Rationale

Local government manages thousands of kilometres of unsealed road within the Reef catchment representing significant areas of exposed earth that is prone to erosion particularly over the wet season, contributing to gully erosion and increased sediment loads in waterways. On average, unsealed pavements lose the top 25mm of pavement material per year. This loss can vary depending on traffic, volumes (particularly heavy vehicle movements), material and weather. A considerable sediment load is potentially generated when this tonnage / km is equated to the lineal kilometres of unsealed roads that report to the GBR catchments in Queensland. Of particular concern is the finer fraction of this pavement material (the plastics), being more mobile and dispersive in nature, can be transported to our major rivers draining to the GBR lagoon. This finer fraction is about 8% mass for a typical C grade pavement material.

Many of these roads will remain unsealed as they do not attract the volume of traffic to justify sealing. These roads are subject to regular maintenance and grading that requires access to gravel from the nearby environment and the movement of materials to improve road conditions. Traffic movements distribute dust from the road surface and heavy rain can wash out road surfaces. More frequent extreme weather events associated with climate change increases the risk of significant damage to unsealed roads with environmental, economic and community connectivity impacts.



43

**Alignment with Reef 2050 actions**

Initiative three will contribute to Reef 2050 actions identified in the following table.

*Table 14: Initiative three contribution to Reef 2050 WQIP actions*

Foundational programs and activities
Reef 2050 Water Quality Improvement Plan 2017–2022 provisions including: <ul style="list-style-type: none"> <li>• applying minimum practice standards across all industries and land uses</li> <li>• supporting industries and communities to build a culture of innovation and stewardship that takes them beyond minimum standards</li> <li>• Regional report cards</li> <li>• Ongoing activities to reduce nutrients including nominated sewage treatment plant upgrades</li> </ul> Implementing regulatory standards for stormwater run-off, dredging, sewage outfalls, mine discharges and industrial contaminants
Queensland Wetlands Program
Great Barrier Reef Coastal Ecosystem Assessment Framework
Reef Guardians
Local Marine Advisory Committees
Regional report card partnerships
Action
EHA5 Develop, implement and coordinate a protocol and knowledge management system for recording, storing, protecting and, where appropriate, sharing of knowledge, innovations and practices; conserving and cultural use of biocultural diversity; and use in decision making.
MTR EHA1 Finalise development of the Reef 2050 Net Benefit Policy and identify pathways for implementation
MTR EHA13 Finalise the Reef 2050 Cumulative Impact Management Policy and identify pathways for implementation.
MTR WQA1 Implement the Reef 2050 Water Quality Improvement Plan 2017–2022 *
MTR EBA2 Improve guidance and procedural requirements for offsetting impacts to the Reef from industry activities using standardised policies, procedures and guidelines
GA12 Prioritise and develop specific implementation plans and reporting protocols addressing the Plans targets and actions in consultation with the community.
MTR GA3 Identify, develop and implement opportunities for local governments to facilitate and support achievement of targets and objectives.

44

**Alignment with Reef WQIP actions**

Initiative three will contribute to the WQIP actions identified in the following table.

Table 15: Initiative three contribution to Reef 2050 WQIP actions

Implementation Table A1: Minimum Practice standards apply everywhere	
Action	Delivery
1.2 Ensure that urban, industrial and mining activities comply with requirements under the Environment Protection and Biodiversity Conservation Act 1999, Planning Act 2016, Environmental Protection Act 1994, and Waste Reduction and Recycling Act 2011.	Additional activity that will contribute to this action's delivery*
1.3 Refine existing standards, regulations and planning frameworks as new information improves knowledge for all industries.	Provides frameworks and guidance for management of unsealed roads.
Implementation Table A2: Culture of innovation and stewardship	
2.1 Support land managers, industries and local governments to adopt improved management practices, e.g. through coordinated extension, education and awareness programs.	Facilitate erosion and sediment control training for local governments and industry to reduce pollutants from urban areas  Additional activity that will contribute to this action's delivery*
2.2 Empower stewardship leaders to influence peers and the broader community to adopt improved practices.	Facilitate peer to peer learning, mentoring and influencing opportunities.  Ensure Reef Guardians and other stewardship leaders have knowledge and skills to enhance their capacity to influence stewardship of the Reef.  Continue to participate in the Reef Guardian Councils program and encourage and incentivise Reef Catchment Councils to join the program.
2.4 Identify and address barriers to change and practice improvement uptake through programs and policy.	Undertake targeted research about barriers and motivators as part of existing projects and programs.  Conduct economic evaluations to validate the economics of management practices that improve water quality and provide information to landholders as part of the extension program  + Additional activity that will contribute to this action's delivery*
2.6 Trial and implement innovative monitoring, land management and treatment system solutions that aim to deliver water quality benefits.	Additional activity that will contribute to this action's delivery*
Implementation Table A3: Catchment restoration	
3.1 Use whole-of-system catchment management, planning and information to support prioritisation.	Additional activity that will contribute to this action's delivery*
3.2 Use guidelines, Traditional knowledge and decision support tools to design and inform interventions.	Additional activity that will contribute to this action's delivery*



45

3.3 Trial and implement innovation in catchment repair projects to reduce sediment and nutrient delivery to the Reef.	Deliver targeted catchment repair projects including riparian revegetation, gully repair, streambank stabilisation and coastal wetlands rehabilitation through the Major Integrated Projects, Land Restoration Fund and Reef Trust.
<b>Implementation Table B1: Applying the best available science and knowledge</b>	
4.2 Integrate forms of knowledge including science, policy, management, Traditional Owner and community through regular synthesis workshops and theme specific working groups to support consistent communication messages and guidance for manager	Capture on-ground management knowledge and expertise to provide guidance for program designers and managers
<b>Implementation Table B2: Coordinating and prioritising investment</b>	
5.2 Identify opportunities for co-investment or alignment of funds and resources with industry, research organisations, philanthropists, Natural Resource Management bodies, community and corporate organisations to achieve water quality objectives	Expand on cross-government co-investment opportunities.
<b>Implementation Table B3: Governance to support coordinated decision-making and accountability</b>	
6.4 Include all stakeholders including local organisations, communities and Traditional Owners in decision-making and priority setting	Establish mechanisms to ensure decision-making across all levels of government is coordinated and delivers water quality improvement outcomes.
<b>Implementation Table B4: Evaluating performance</b>	
7.5 Report progress towards targets, objectives and outcomes.	Report on implementation of Reef 2050 WQIP actions through Reef 2050 Plan implementation reporting.
7.6 Communicate regionally relevant information for management decisions and local communities.	Continue to build cultural reporting capacity in regional report cards

## Activities

### Site selection and baseline data collection

Establish criteria to select unsealed road sections for baseline monitoring and piloting of treatment approaches in consultation with the State's Paddock 2 Reef program, councils, NRM bodies and other key stakeholders. Ideally, selection of water monitoring and gully erosion sites will include a diversity of environmentally sensitive locations across a range of climate 'zones' and soil types. Data collection would occur across a year and be evaluated against other available data and modelling to establish baseline water quality.

### Developing a suite of impact management and best practice measures

Industry best practice will be identified, and a set of measures will be developed for trial. Consultation with road managers will ensure measures are affordable, practical and achievable.

Funding and programming will also be explored with councils and State Government to address potential programming challenges that exist with the allocation of funding in annual budgets and climatic constraints associated with the wet season.

Develop guidance/decision support for considering Reef water quality in road upgrades



46

The Reef Net Benefit and Cumulative Impacts Policies will be used to support the consideration of water quality benefits in the cost benefit assessment of roads under consideration for sealing. State and local government road infrastructure planners will be engaged in the development of a guidance/decision support tool.

**Testing ESC options**

Treatments will be piloted across ten sites over two years. Monitoring of the test sites will continue for the remainder of the MIP program. This monitoring will seek to evaluate the impact of treatments on water quality, erosion, road network resilience and whole-of-life asset costs. This evaluation will inform recommendations for the most effective ESC practices in differing environments.

**Capacity building and rollout**

Deliver a toolkit of resources and guidance to support the delivery of recommended measures and road manager and industry awareness and capacity building activities. Toolkit will also provide guidance on the identification and prioritisation of sites.

**Works funding**

A program will be in place for the final two years of the MIP program to fund impact management at high priority sites.





### Funding requirements

The following table sets out broad activities to occur under each stage, timeframes for completion and estimated resource requirements.

Table 16: Indicative initiative activities and costings

Activity	Inputs	Delivery parties	Timing	Cost
Measuring and establishing impacts	Nomination of 10 sites across 2 years for monitoring and testing of measures	PC, LG, NRM, SG, key stakeholders	2 months	PC salary
	Selection of water and erosion monitoring sites – mix of climates and soil types across a 12-month period to establish a baseline	PC, SG, LG, NRM, key stakeholders	3 months	PC salary
	Develop methodology for establishment of baselines	Consultant	2 months	\$10,000
	Installation of monitoring at pilot sites	LG	6 months	\$500,000 + In-kind
	Baseline monitoring of pilot sites	LG	12 months	\$100,000
	Finalise testing sites and monitoring report	Consultant	2 months	\$15,000
	<b>TOTAL</b>		<b>25 months</b>	<b>\$625,000</b>
Development of best practice options	Research industry best practice	Consultant	2 months	\$10,000
	Develop a set of draft measures	Consultant	2 months	\$50,000
	Consult to ensure measures are practical and achievable and identify the best toolkit format for adoption	Consultant, PC, LG road managers, NRM, SG, key stakeholders	2 months	\$20,000 + In-kind
	Prepare final toolkit of measures to be trialled	Consultant	4 months	\$40,000
	<b>TOTAL</b>		<b>10 months</b>	<b>\$120,000</b>

48

Activity	Inputs	Delivery parties	Timing	Cost
Design and option testing	Establish testing project governance arrangements	PC, LG and key stakeholders	1 month	PC salary
	Implement suitable measures at prioritised sites - 5 sites per year across 2 years	LG	2 years	\$4,000,000
	Monitor and evaluate success of measures 10 sites x 2 years	Consultant, PC, LG	2 years	\$80,000 In-kind
	Finalise trial report with recommendations for suitable measures	Consultant, PC, LG, SG	3 months	\$40,000 + In-kind
	Determine measure/s of water quality benefits of sealing roads in Reef catchments for adoption in Business Cases considering sealing of unsealed roads	Consultant, LG road managers, PC and key stakeholders	3 months	\$15,000 + In-kind
	TOTAL		3-4 years	\$4,135,000
Guidance for WQ in road business case	Work with councils to identify 'candidate projects' to apply Reef Net Benefit and Cumulative Impacts Policies.	LG/ Program Coordinator/ Consultant	2 months	\$15,000 + In-kind
	Identify practical considerations and guidance and add to best practice capacity building program.	Consultant	2 months	\$10,000
	TOTAL		2 months	\$25,000

49

Activity	Inputs	Delivery parties	Timing	Cost
Best practice capacity building	Amend toolkit of resources for roll out of recommended measures	Consultant	2 months	\$35,000
	Deliver road manager awareness and capacity building	Consultant	2.5 years	\$110,000
	Undertake assessment of adoption rates in year 3.	Consultant, PC, LG road managers, NRM, SG, key stakeholders	6 months	\$10,000 + In-kind
	TOTAL		3 years	\$155,000
Works funding	Identification and delivery of projects, including ongoing capacity building with each new council.	LG/Program Coordinator/Steering Committee	12 months	\$20,000,000
	TOTAL		4 years	\$20,000,000
Long term monitoring	4-year pilot site monitoring program	LG	48 months	\$400,000
	TOTAL		4 years	\$400,000

50

**Total Initiative Budget**

The annual costs, total cost for the 'core' phase of the MIP and total cost of the initiative are shown in Table 13 below.

*Table 17: Annual, 'core' program and total costs for the Best Practice for Erosion and Sediment Control from Unsealed Roads Initiative*

Activity	Year 1	Year 2	Year 3	Core Stage Total	Years 4-7	TOTAL
Measuring and establishing impacts	\$510,000	\$115,000	-	\$625,000	-	\$625,000
Developing suite of best practice options	\$100,000	\$20,000	-	\$120,000	-	\$120,000
Design and option testing - 5 sites per year with year 1 design	\$80,000	-	\$4,000,000	\$4,080,000	\$55,000	\$4,135,000
Guidance for water quality consideration in Business Cases	-	\$25,000	-	\$25,000	-	\$25,000
Capacity building	-	\$75,000	\$80,000	\$155,000	-	\$155,000
Works funding	-	-	-	-	\$20,000,000	\$20,000,000
Long term monitoring	-	\$100,000	\$100,000	\$200,000	\$200,000	\$400,000
.5 FTE Initiative Projects Coordinator (PC)	\$63,000	\$63,000	\$63,000	\$189,000	\$252,000	\$441,000
<b>TOTAL</b>	<b>\$753,500</b>	<b>\$398,500</b>	<b>\$4,243,000</b>	<b>\$5,394,000</b>	<b>\$20,507,000</b>	<b>\$25,901,000</b>



**Case Study - Cassowary Coast Regional Council**

Unsealed roads represent thousands of square kilometres of exposed earth across Reef catchments, often in environmentally sensitive locations. These roads can be a major source of sediment entering waterways and making its way into the Reef lagoon and have been found to be the source points for gully erosion on nearby properties.

Cassowary Coast Regional Council (CCRC) is one of many Reef catchment councils with unsealed roads and as a case study, demonstrates the issue. The CCRC is in far north Queensland, south of Cairns and centred around the towns of Innisfail, Cardwell and Tully. The local government covers approximately 4,700km<sup>2</sup> and has a population of just under 30,000 people.

Like many councils within the GBR catchment CCRC owns and manages a significant local road network. Of CCRC's 1,200km of local road network, approximately 45% or around 550km are unsealed. Coupled with 3,134mm annual average rainfall which mostly falls between January and April, it is unsurprising that maintaining unsealed roads for safe use by residents and visitors is a significant pressure. While it must be acknowledged that the township of Tully holds the nation's annual rainfall record, the pressure of maintaining unsealed roads with significant rainfall events during the wet season is a common story across many Reef councils.

While funding sources such as the Natural Disaster Relief and Recovery Arrangements (NDRRA, to be replaced by the Disaster Funding Arrangements 2018 on 1 November 2018) provide financial assistance to affected councils during declared natural disasters, this does not provide for enhancement works leading to some locations failing regularly. Capacity to address this repeat failure, is limited by ongoing financial pressure from low rates growth and frequent, wide disruption of the rate base by disasters. This means that proactive works are often outside the reach of council's available funding. Assessment of these types of works under any traditional Cost Benefit Analysis (CBA) would never justify costly works such as sealing or targeted works at high risk, due to very low traffic volumes.

Annual road maintenance, new road construction and legacy road problems contribute to sediment levels in GBR catchments. Repeat road reconstruction and maintenance needs to be assessed with another lens with the protection of the Reef as a key outcome. Local councils such as CCRC are acutely aware of the impacts and are currently investing in exploring solutions from within their own constrained budgets, which means progress is slow. Using binding agents, varying gravel mixes, reviewing cross falls and drainage are all techniques that are being explored.



**9.3 MAREEBA AIRPORT UPGRADING - NOVEMBER 2018 PROGRESS REPORT**

**Date Prepared:** 10 December 2018

**Author:** Manager Technical Services

**Attachments:** 1. Progress Photographs - November 2018 [↓](#)

---

**EXECUTIVE SUMMARY**

Council has received grant funding from the Australian and Queensland governments towards the upgrading of the Mareeba Airport.

At its Ordinary Meeting of 21 March 2018, Council resolved to award Contract TMSC2017-27 Mareeba Airport Upgrade to FGF Developments Pty Ltd, with works commencing onsite mid-April 2018.

The purpose of this report is to provide an update on progress of the Mareeba Airport Upgrade project.

**RECOMMENDATION**

That Council receives the November 2018 progress report on the Mareeba Airport Upgrade Project.

**BACKGROUND**Funding

Council has received \$13 million from the Queensland State Government's Royalties for Regions program and \$5 million from the Australian Government's National Stronger Regions Fund towards the upgrading of the Mareeba Airport.

Additional funding of \$5 million has been secured under the Australian Government's Building Better Regions Fund (BBRF) to undertake lengthening and strengthening of the runway, taxiways and airfield ground lighting, bringing the total project budget to \$23 million.

Following confirmation of additional funding through BBRF, Council resolved at its Special Meeting on 5 September 2018, to award a variation to Contract TMSC2017-27 up to a value of \$4 million (excluding GST) for amendments to the runway, taxiways and airfield lighting. The remainder of this additional funding has been allocated to design, project management, CASA approvals and contingency.

Programme and Progress

A programme of works has been prepared which reflects the works and commitment made by Council in the funding agreements. This programme will be updated at fortnightly meetings of the Project Team, which includes Council, FGF and Council's Consultant Contract Management representatives (Trinity Engineering Consultants).

In November 2018, FGF completed the installation of underground services and construction and sealing of airside pavements, with construction of roads and fencing undertaken.

Planned construction works for December includes completion of the roadworks and installation of the packaged treatment plant. The aviation commercial precinct will be substantially complete by the end of 2018 with minor works to be completed in January 2019.

The scope of works for the airfield lighting, runway and taxiway upgrades is being finalised with this work scheduled to commence in early 2019.

#### Stakeholder Engagement

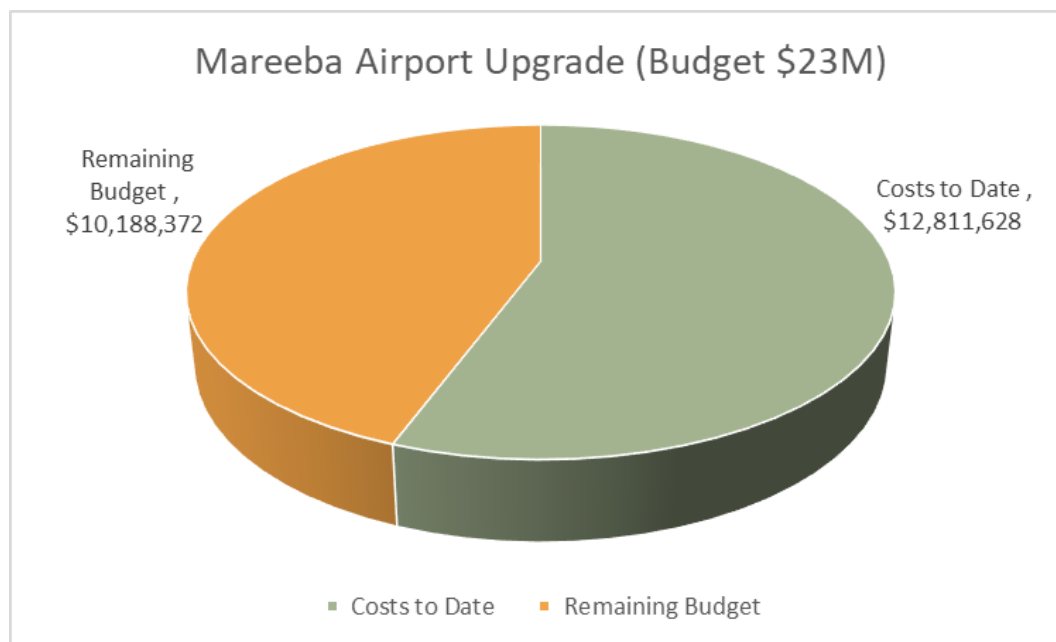
A Communication and Stakeholder Engagement Plan has been developed, which sets out the engagement strategy for delivery phase of the project. Ongoing engagement will be undertaken for the duration of the project. Project newsletters are planned for release as necessary.

#### Aviation Commercial Precinct Leasing Opportunities

To date, applications have been received for leasing of five (5) sites within the new aviation commercial precinct. Council has received many enquiries regarding leasing of land, with further lease applications expected to be received once construction is complete.

#### Expenditure

Council expect to receive regular monthly claims which will be reflected within the chart below.



#### **RISK IMPLICATIONS**

##### **Financial**

Latent conditions and potential project variations represent normal risks with complex projects, nominal allowances within the budget have been made.

##### **LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

The contract is being managed under Australian Standard AS4000-1997 Conditions of Contract. Tender and procurement activities have been completed in accordance with Council's procurement policy.

**FINANCIAL AND RESOURCE IMPLICATIONS*****Capital***

Funding for this project has been made available from the Australian and State Governments.

***Is the expenditure noted above included in the current budget?***

Yes

***Operating***

Nil

**LINK TO CORPORATE PLAN**

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

This purpose of this report is to provide Council with an update as to progress of the Project. No additional actions required at this time.

All communication in relation to the project shall be in accordance with the protocols outlined in the deeds of agreement with the Australian and Queensland governments.

**PROGRESS PHOTOS MAREEBA AIRPORT- November 2018**



6 November 2018 - completion of amenities block for aviation industrial park



9 November 2018 - aerial imagery showing progress on aviation industrial park.





9 November 2018 - aerial imagery showing progress on aviation industrial park.



16 November 2018 - spreading and rolling of sand locking coat as part of 3-coat seal to taxilanes and aprons in aviation industrial park



22 November 2018 - Installation of perimeter fencing to aviation industrial park



27 November 2018 - widening of JRM Braes Rd





4 December 2018 - aerial imagery showing progress on aviation industrial park.



4 December 2018 - aerial imagery showing progress on aviation industrial park.



## 9.4 INFRASTRUCTURE SERVICES, TECHNICAL SERVICES MONTHLY ACTIVITIES REPORT - NOVEMBER 2018

**Date Prepared:** 5 December 2018  
**Author:** Manager Technical Services  
**Attachments:** Nil

### EXECUTIVE SUMMARY

This purpose of this report is to summarise Council's Fleet, Design, Soils Lab, Survey, Quality, GIS, Project Management and Investigation Services activities undertaken by Infrastructure Services during the month of November 2018.

### RECOMMENDATION

That Council receives the Infrastructure Services, Technical Services Monthly Report for the month of November 2018.

### BACKGROUND

Below is a summary of the activities undertaken by the Technical Services section for the month of November 2018:

DESIGN	
2017/18 Capital Works	<ul style="list-style-type: none"> <li>• Malone Road Drainage, Mareeba - Redesign being undertaken</li> <li>• KIAC - Therwine Street, Kuranda, Redevelopment - Provide technical advice</li> </ul>
Works for Queensland Rd 2	<ul style="list-style-type: none"> <li>• Anzac Avenue, Barron River Bridge, Mareeba - Concept plans provided from GHD for review</li> </ul>
2018/19 Capital Works	<ul style="list-style-type: none"> <li>• Mareeba Industrial Estate, Stage 16A - Electrical, communications plans received and awaiting approval for Civil drawings</li> <li>• Railway Avenue, Mareeba, Car Park Area Design - Concept plan for overall layout being undertaken</li> <li>• Mary Andrews Park, Mareeba, Car Park - Concept design for entry road</li> <li>• Fumar Road, Mutchilba, Drainage - Detailed design revised</li> <li>• Springmount Road, Arriga - Detailed design being undertaken for widening of existing causeway to two lanes</li> <li>• Ootann Road CH 78.2-80.2 (Package 2), Almaden - Preliminary design plans undertaken</li> </ul>
Miscellaneous	<ul style="list-style-type: none"> <li>• General investigations related to customer requests</li> <li>• Traffic counter installation</li> <li>• Installation of rural addresses</li> <li>• DBYD plans</li> <li>• Fire evacuation plans</li> <li>• As-Constructed plans for external customers</li> <li>• Byrnes Street Master Landscape Plan</li> </ul>



<b>SURVEY</b>	
Works for Queensland Rd 1	<ul style="list-style-type: none"> <li>• Kuranda Amphitheatre Access Upgrade - As constructed survey</li> </ul>
Miscellaneous	<ul style="list-style-type: none"> <li>• Mareeba Landfill - Survey volume pick-up</li> <li>• Wetherby Road Opening - Cadastral Survey Plan for Lot 37 SP166323</li> <li>• Borzi Park, Mareeba - Lease area identification and plan</li> <li>• McIver Road Drainage - Detailed Survey being undertaken</li> </ul>
2018/19 Capital Works	<ul style="list-style-type: none"> <li>• Springmount Road, Arriga - Construction set out</li> <li>• Ootann Road CH 78.2-80.2 (Package 2), Almaden - Detailed Survey compete</li> <li>• Fumar Road, Mutchilba, Drainage - Construction setout</li> <li>• Mareeba Industrial Estate, Stage 16A - Construction setout</li> <li>• Mary Andrews Park, Mareeba, Car park - As constructed survey</li> </ul>

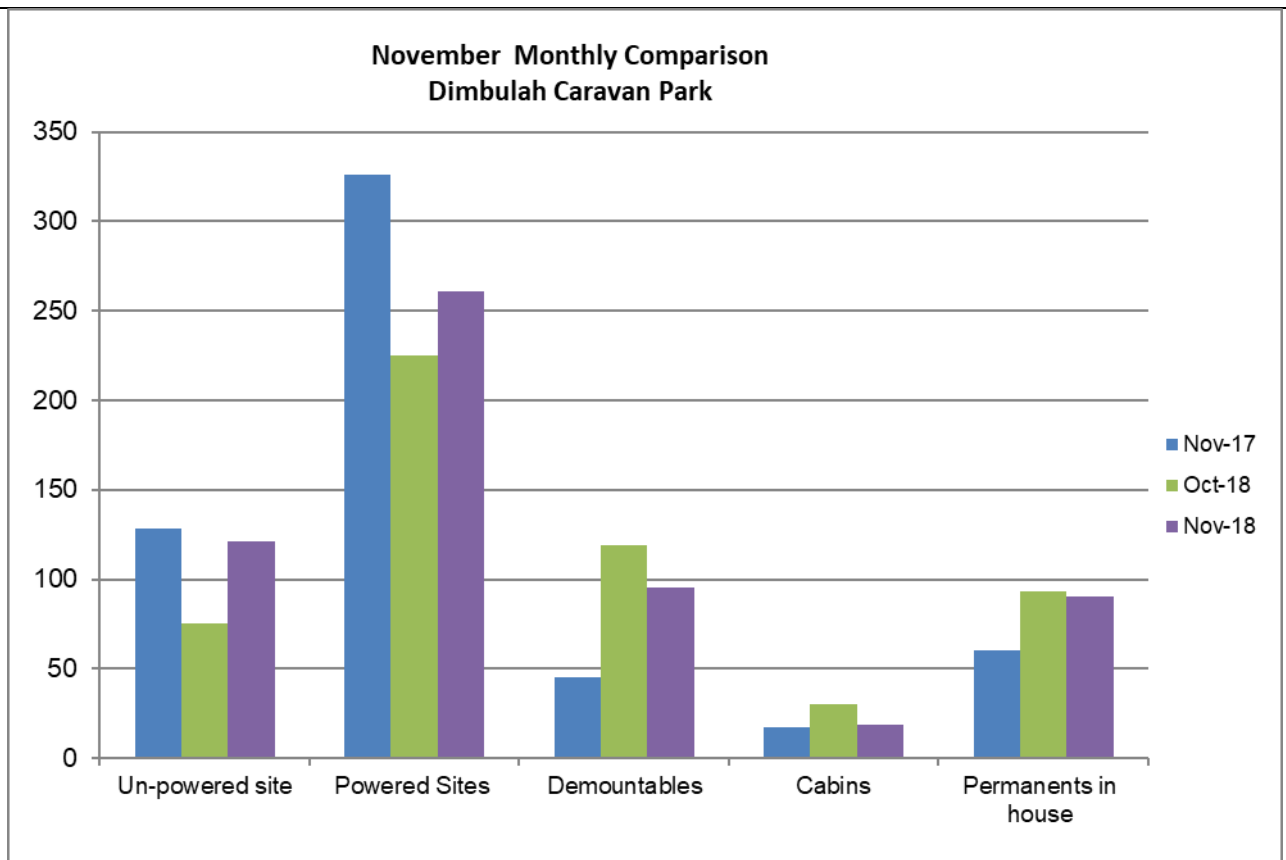
<b>SUBDIVISIONS AND INVESTIGATIONS</b>	
Subdivisions <i>(Under Construction)</i>	<ul style="list-style-type: none"> <li>• Amaroo Stage 10 <ul style="list-style-type: none"> <li>○ Shaping of internal roads</li> <li>○ Installation of stormwater, water and sewer services</li> </ul> </li> <li>• Bundanoon Stage 2 <ul style="list-style-type: none"> <li>○ Bulk earthworks being undertaken</li> </ul> </li> </ul>
On-Maintenance <i>(Monitoring for 12 months as the Defects Liability Period prior to becoming a Council Asset)</i>	<ul style="list-style-type: none"> <li>• The Edge Stage 2A (Antonio Drive, Mareeba)</li> <li>• Hilltop Close, Kuranda (Vegetation clearing)</li> <li>• Amaroo Stage 9</li> <li>• 8-10 Forest Close, Kuranda</li> <li>• Rodeo Acres Pty Ltd (Mareeba - Dimbulah Road)</li> <li>• Kanjini Co-Op Ltd Stage 2 (Emerald Falls Road, Mareeba)</li> <li>• Develop North (Barnwell Road Upgrade)</li> </ul>
Off-Maintenance	<ul style="list-style-type: none"> <li>• Springmount Road and Kippin Drive Intersection Upgrade</li> </ul>
Operational Works	<ul style="list-style-type: none"> <li>• 112 Barnwell property, on-going monitoring of;</li> <li>• Dam construction completed and being monitored</li> <li>• Access completed and monitoring underway</li> <li>• Nature Base Tourism Works (MCU/17/0012) completed and being monitored</li> </ul>

<b>PROJECT MANAGEMENT</b>	
Building	<ul style="list-style-type: none"> <li>• Kuranda Centenary Park Toilets upgrade - Tender awarded to Osbourne Construction Solutions.</li> </ul> <p>Work commenced on 19 November 2018 and the upgrade to both the male and female amenities is scheduled to be completed by the end of January 2019.</p>
Civil	<p><u>2017-18 Reseals Bitumen and Asphalt Programmes:</u></p> <ul style="list-style-type: none"> <li>• Line marking programme of works being finalised and quotations to be sought in early 2019</li> </ul>

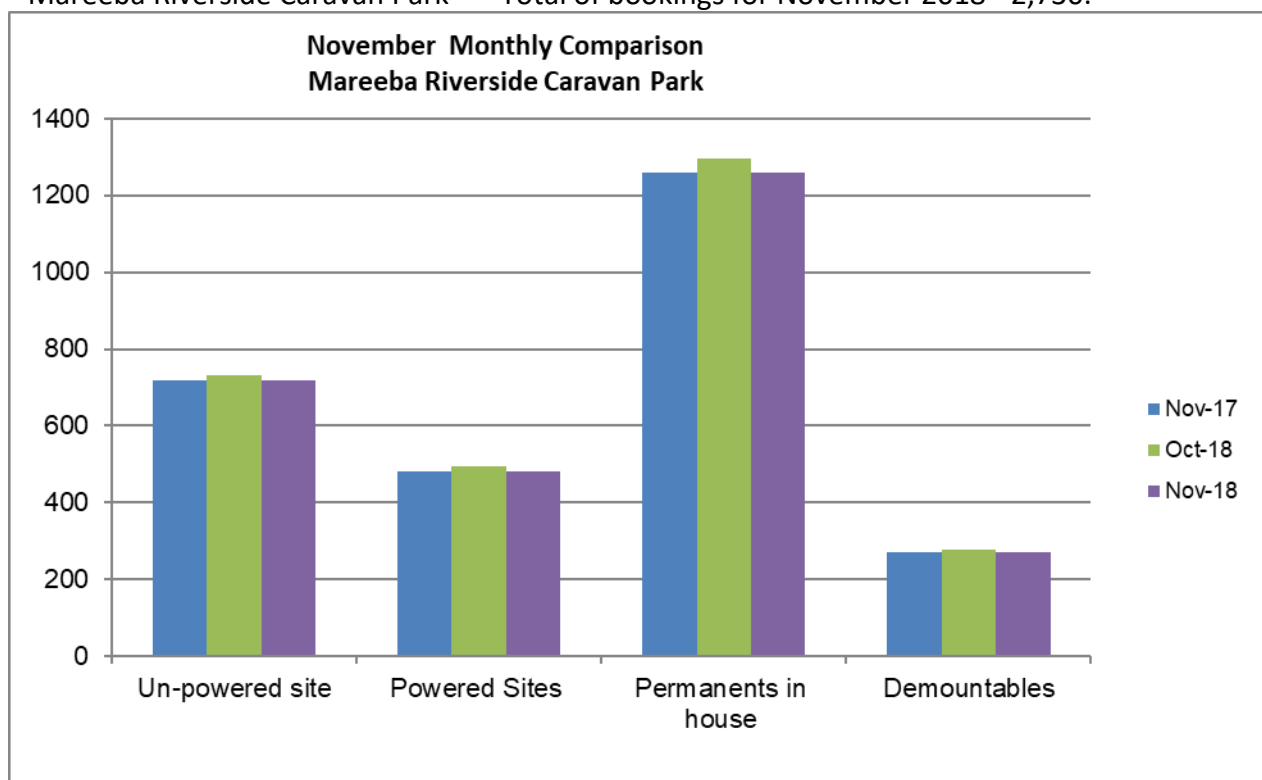
	<p><u>2018-19 Reseals Bitumen Program:</u></p> <ul style="list-style-type: none"> <li>• MSC programme is scheduled for January 2019, weather permitting</li> </ul> <p><u>Therwine Street Redevelopment:</u></p> <ul style="list-style-type: none"> <li>• JMAC commenced work 13 August</li> <li>• First stage of lower Therwine Street nearing completion</li> </ul> <p><u>Kuranda KIAC Wayfinding Signage:</u></p> <ul style="list-style-type: none"> <li>• Concept plans being prepared for review in early 2019</li> </ul> <p><u>Kuranda Barron Falls Walking Trail</u></p> <ul style="list-style-type: none"> <li>• World Trails have commenced on-site route assessment</li> </ul>
NDRRA	<p><u>6-10 March 2018 Event:</u></p> <ul style="list-style-type: none"> <li>• Emergent Works completed and claim to QRA submitted, finalising further queries from QRA.</li> <li>• Restoration submissions lodged and approved by QRA; <ul style="list-style-type: none"> <li>○ James Creek Crossing</li> <li>○ Flaggy Creek Bridge</li> <li>○ Western Roads (Chillagoe West)</li> <li>○ Mid-Western Area</li> <li>○ Dimbulah Area</li> <li>○ Geotech (landslips)</li> </ul> </li> <li>• Restoration submissions lodged and awaiting QRA approval; <ul style="list-style-type: none"> <li>○ Airport Submissions (Mareeba and Chillagoe)</li> <li>○ Mareeba-East Area (re-submitted)</li> </ul> </li> <li>• Tenders awarded for Reconstruction Works; <ul style="list-style-type: none"> <li>○ James Creek Crossing - HEH Civil</li> <li>○ Flaggy Creek Bridge - Civform</li> <li>○ Mareeba-East Area - Gregg Constructions</li> </ul> </li> <li>• Tenders on hold awaiting QRA funding approval as contract values exceed estimates originally approved by QRA; <ul style="list-style-type: none"> <li>○ Western Roads (Chillagoe West) - Wattos Earthmoving</li> <li>○ Mid-Western Area - Wattos Earthmoving</li> <li>○ Dimbulah Area - Gregg Constructions</li> </ul> </li> <li>• Construction progress: <ul style="list-style-type: none"> <li>○ James Creek Crossing - Side track and blinding layer constructed, culverts are being cast. Base slabs for culverts to commence in December with culvert installation to commence in January 2019.</li> <li>○ Flaggy Creek Bridge - contractor pre-start meeting held, temporary bridge to be removed prior to Christmas break.</li> <li>○ Mareeba-East Area - Cane Road side-track and Grove Creek bridge repairs completed. Awaiting QRA approval prior to commencing remaining sites.</li> </ul> </li> </ul>

## FACILITIES

Dimbulah Caravan Park      Total of bookings for November 2018 – 586.

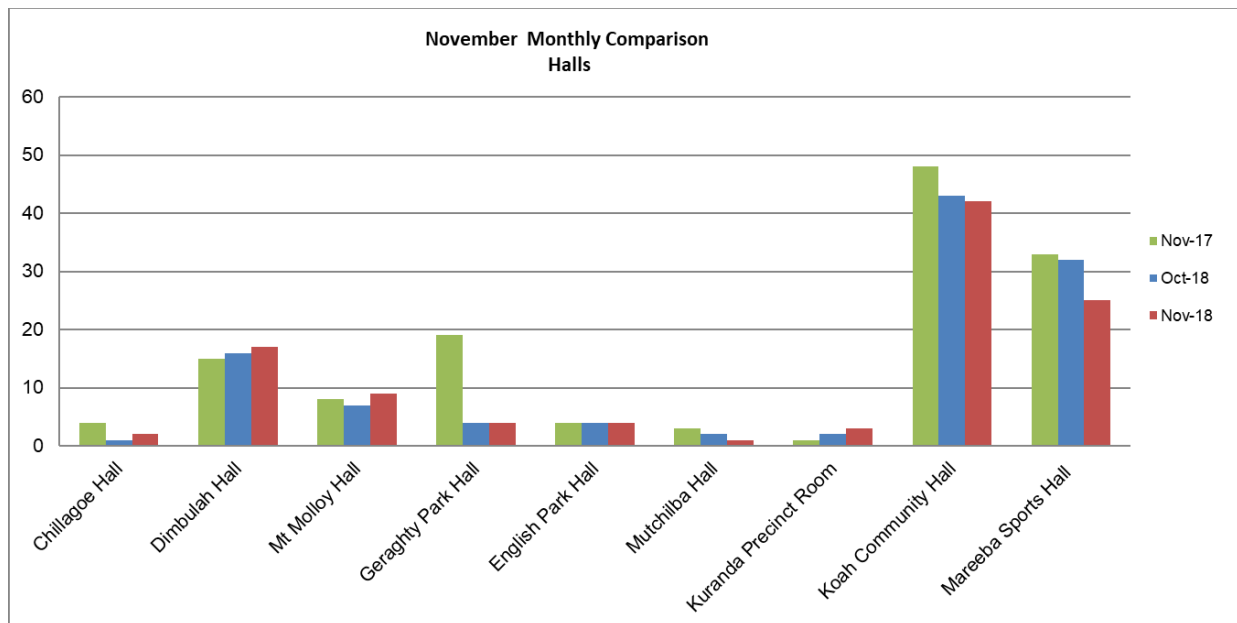


Mareeba Riverside Caravan Park      Total of bookings for November 2018 - 2,730.



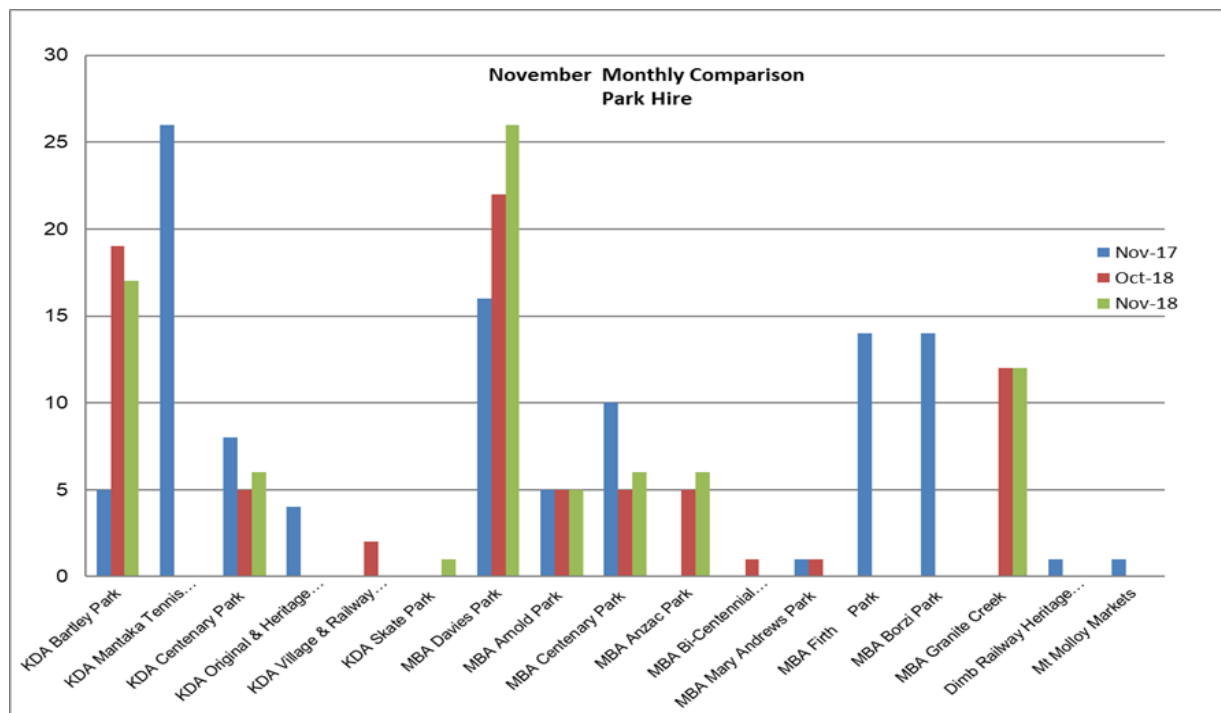
## Public Halls

Total of hall bookings for November - 107.



## Park Hire

A total of park bookings for November - 79.

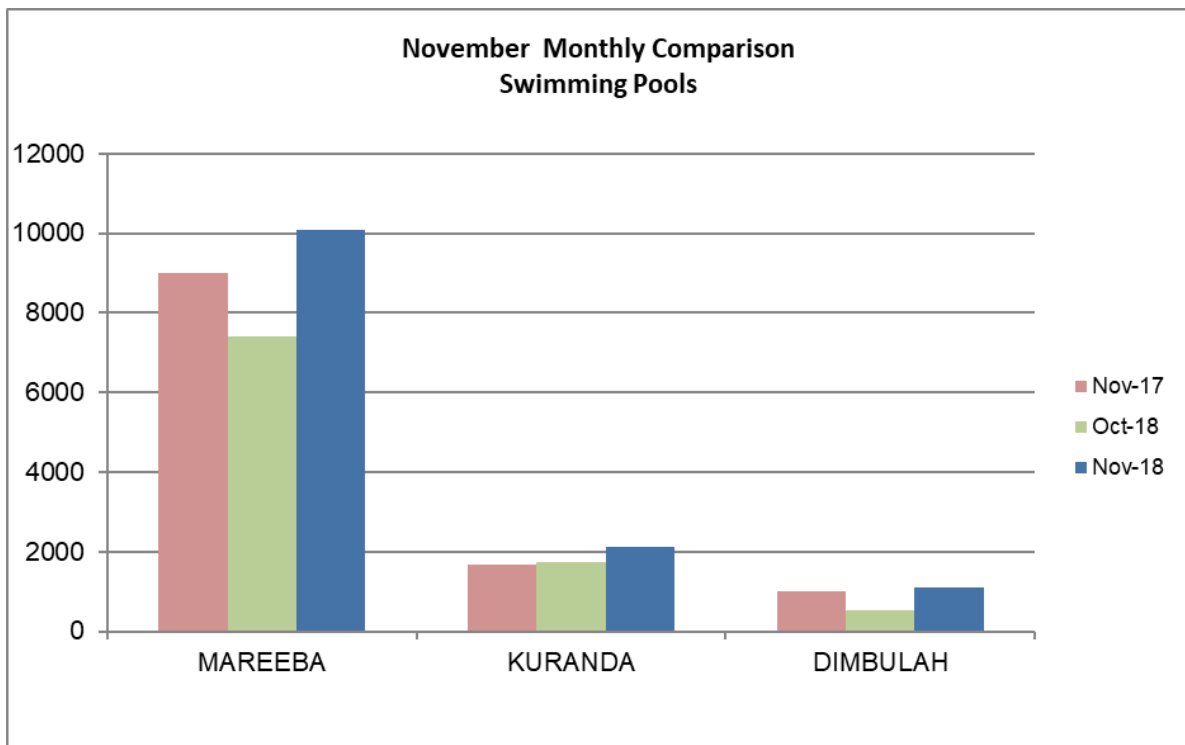


## Swimming Pools

Total of patron entries for November 2018

- Mareeba - 10 096
- Kuranda - 2 116
- Dimbulah - 1 114

Note - During Christmas 2018 / New Year's 2019 all Council Pools will have an alteration to their normal operating hours. These times will be available on the Council website, Pool websites and on social media.



### Vandalism and Graffiti

During November 2018, 2 reports of graffiti and vandalism were recorded on Councils Facilities.

- Mareeba Centenary Park
- Kuranda Old Visitors Centre

Graffiti and Vandalism	Year to date actuals
2015-16	\$2,134
2016-17	\$16,546
2017-18	\$23,948
2018-19	\$5,568

Currently there is no allocated budget for graffiti and vandalism; these costs are being booked to operational.

### RISK IMPLICATIONS

### FINANCIAL AND RESOURCE IMPLICATIONS

#### **Capital**

Projects funded through the Capital Works Program, with savings being found to address unexpected costs.

***Is the expenditure noted above included in the current budget?***

Yes

#### **Operating**

Additional costs associated with graffiti and vandalism.

***Is the expenditure noted above included in the current budget?***

No.



***If not you must recommend how the budget can be amended to accommodate the expenditure***  
Savings will be sought within the budget, where possible.

#### **LINK TO CORPORATE PLAN**

**Financial Sustainability:** A council that continuously looks for savings and opportunities while managing council's assets and reserves to ensure a sustainable future in a cost-effective manner.

**Community:** An engaged community which supports and encourages effective partnerships to enhance the liveability of the shire and the wellbeing of residents in communities which are resilient and prepared for unforeseen events.

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

#### **IMPLEMENTATION/COMMUNICATION**

This report provides Council with an update as to the month's deliverables by the Technical Services group.



## 9.5 INFRASTRUCTURE SERVICES, WORKS SECTION ACTIVITY REPORT - NOVEMBER 2018

**Date Prepared:** 4 December 2018

**Author:** Manager Works

**Attachments:** Nil

### EXECUTIVE SUMMARY

The purpose of this report is to summarise Council's Transport Infrastructure, Parks and Gardens, Bridge and Pest Management activities undertaken by Infrastructure Services during the month of November 2018.

### RECOMMENDATION

That Council receives the Infrastructure Services, Works Progress Report for the month of November 2018.

### BACKGROUND

#### Maintenance Activities

Maintenance activities accruing more than \$1,000 in expenditure were carried out in November at the following locations:

Description	Activity
Ootann Road, Almaden	Culvert repairs, road inspections
Bower Road, Arriga	Grading unsealed roads, road furniture
Lee Sye Road, Arriga	Grading unsealed roads
Coyle Road, Bibbohra	Grading unsealed roads
Hodzic Road, Bibbohra	Grading unsealed roads
Hume Road, Bibbohra	Grading unsealed roads
Sandy Creek Road, Dimbulah	Grading unsealed roads
Top Eureka Road, Dimbulah	Grading unsealed roads
Carr Road, Julatten	Bitumen patching, road furniture, slashing
Euluma Creek Road, Julatten	Bitumen patching, illegal waste disposal, road furniture, slashing
McLeans Bridge Road, Julatten	Bitumen patching, clean inlet/outlets culverts, grading unsealed roads, slashing
Mount Lewis Road, Julatten	Road furniture, slashing
Nine Mile Road, Julatten	Grading unsealed roads, road furniture, slashing
Pinnacle Road, Julatten	Clean inlet/outlets culverts, slashing
Black Mountain Road, Julatten	Bitumen patching, clean inlet/outlets culverts, grading unsealed roads, road furniture, road inspections, slashing
Black Mountain Road, Kuranda	Grading unsealed roads, road inspections, slashing
Myola Road, Kuranda	Bitumen patching, culvert repairs, slashing
Oak Forest Road, Kuranda	Bitumen patching, road inspections, slashing

Description	Activity
Rob Veivers Drive, Kuranda	Bitumen patching, general repairs and maintenance, mowing, slashing
Adil Road, Mareeba	Prep work for reseals
Wetherby Road, Mt Molloy	Clean inlet/outlets culverts, grading unsealed roads, Road furniture, slashing
Borzi Road, Mutchilba	Grading unsealed roads
Speewah Road, Speewah	Culvert repairs, grading unsealed roads, road inspections

The table below shows the current budget position of Transport Infrastructure operations for Mareeba Shire Council at the end of November.

Annual Budget	Year to Date Budget	Year to Date Actual
\$3,527,238	\$1,466,017	\$1,293,371

## **Works for Queensland Package 2**

### **Flin Creek Bridge, Pinnacle Road**

A Level III Condition and Load Assessment Report was carried out at Flin Creek Bridge on Pinnacle Road in May 2017. The report noted that the three-span timber structure was in very poor condition with an Overall Condition State Rating of 4 (very poor). The report recommended that the existing load limit of 44T be reduced to 7T due to the poor to very poor condition of multiple girders in all three spans.

Mareeba Shire Council engaged GHD Pty Ltd to provide design for minor rehabilitation of the bridge substructure and a replacement super structure.

The fabrication of pre-cast concrete deck and kerb units was completed mid-November and the on-site installation of the new components and rehabilitation works on the substructure is programmed mid-December after the commencement of the 2018 Christmas school holidays.

It is anticipated that the bridge will be closed for one (1) day for the deck and kerb unit replacement with other works being conducted under traffic.



### **Upgrade Bi-Centennial Lakes**

Work commenced in late October on the asphalt path and solar light installation at the Mason Street Lakes precinct. The scope of works included the installation of 240m of asphalt pathway to link with the existing pathways to create a 600m circuit that has been lit with 14 solar lights.

The project was completed in mid-November.



The table below shows the current status of projects under the Works for Queensland 2 program.

Description	Status
Toilet Facility Dimbulah Cemetery	Complete
Anzac Avenue Barron River Bridge Mareeba (funded under W4Q and Bridges Renewal Programme)	Awaiting design
Upgrade Bi-Centennial Lakes	Complete
Royes Street Mareeba Upgrade	Complete
Tinaroo Creek Road Upgrades	Complete
Western Roads Causeway Construction	Complete
Mareeba Swimming Pool Refurbishment	Complete (minor defects to be repaired under maintenance period)
Flin Creek Bridge, Pinnacle Road	Girder and deck unit fabrication complete
Boggy Creek Bridge Julatten, Hillview Road	Girders on order, ETA March 2019
Petersen Street Bibohra Carpark	Complete
Clacherty Road Crossing Improvement	Complete
Black Mountain Road Bridge 7 Mona Mona	Complete
Almaden Transfer Station Upgrade	Complete



## **Capital Works**

### **Springmount Road, Widening, Upgrade and Seal**

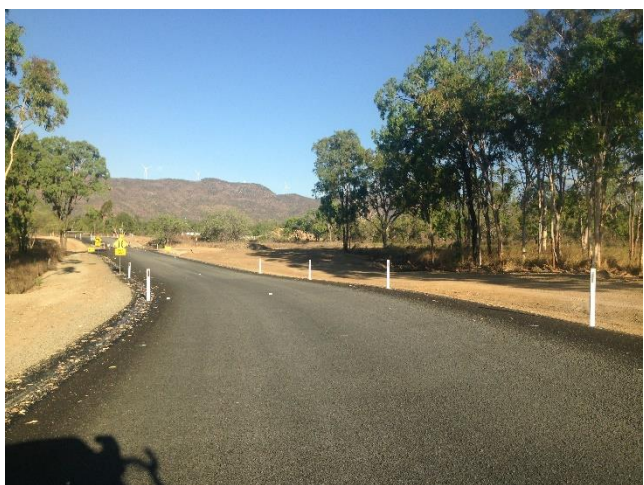
Construction work commenced in late August 2018 on the widening, upgrade and sealing of Springmount Road between Middle Creek Road and Oaky Valley Avenue.

The project scope includes the widening of the existing pavement and seal to 8m between CH 9000, CH 10430 including full width reconstruction between CH 9170, CH 9230 and filling and raising the pavement level between CH 9980, CH 10330.

Drainage works include extending existing culverts and headwalls and the removal and replacing of existing redundant culverts with new box culverts.

The project was sealed mid-November and will be line marked prior to the Christmas closedown.

The major culvert at Middle Creek will be widened to complete the project in early 2019.



### **Mareeba Industrial Park Stage 16A, Effley Street Extension**

Works commenced in mid-September 2018 on Stage 16A, Effley Street Extension at the Mareeba Industrial Park. The project scope includes the extension and asphalt sealing of Effley Street, the extension of an existing earth drain, installation of subsoil drains, construction of kerb and channel and the installation of street lighting, Telstra cabling and NBN infrastructure.



Due to delays in receiving final street lighting design plans, installation of conduiting was impacted by summer storms whilst trenches were open. It is now expected that practical completion will be reached in mid-January.



### Mary Andrews Park Car Park Upgrade

The upgrade of Mary Andrews Park car park commenced in early November and reached practical completion at the end of the month. The scope of works included the laying of barrier kerb, a 200mm layer of road base and a 35mm asphalt seal. New signage was erected, wheelstops installed and steel bollards replaced the existing timber posts.

The line marking will be under taken prior to Christmas closedown.





**Railway Park Dimbulah Renew Softfall**

149m<sup>2</sup> of Coloured Styrene Butadiene Rubber (CSBR) softfall was installed at Railway Park Dimbulah in November. The rubberised softfall replaced the existing sand softfall that had become compacted and rocky and was requiring a high level of maintenance.

**Wetherby Park Mt Molloy Replace Softfall**

In November, the brittle and cracked rubberised softfall was replaced with of Coloured Styrene Butadiene Rubber (CSBR) softfall. The broken climbing net was replaced as part of the project.

**TMR Routine Maintenance Performance Contract (RMPC)**

Routine maintenance activities were undertaken during November 2018 at the following locations:

Primary Location	Activity Name
Kennedy Highway	Rest Area Servicing
	Heavy Shoulder Grading
	Other Formation Work
Mulligan Highway - (Mareeba - Mt Molloy)	Emergency Call Out / Traffic Accident
	Repair Guide Signs
	Repair Signs (excluding Guide Signs)
Mulligan Highway - (Mt Molloy- Boundary)	Emergency Call Out / Traffic Accident
	Rest Area Servicing
	Roadside Litter Collection - Rural
Mareeba Connection Road	Heavy Shoulder Grading Rural - Includes Traffic Control
Mareeba - Dimbulah Road	Heavy Shoulder Grading Rural - Includes Traffic Control
	Other Sign Work
	Replace Guardrail Delineators
Herberton - Petford Road	Medium Formation Grading (Western) with Extras and 2 WaterCarts - Excludes Traffic Control
	Other Surface Drain Work
Burke Dev Road	Other Formation Work
	Other Sign Work
	Repair Signs (excluding Guide Signs)

The total claim to TMR for the works listed above for the month of November 2018 was \$114,000

## **Parks and Gardens Section**

### **Maintenance Activities**

Parks and Gardens maintenance activities accruing more than \$1,000 in expenditure were carried out in November at the following locations:

1. Location
2. Street Mowing, Mareeba
3. Library, CBD and Streets, Kuranda
4. Davies Park, Mareeba
5. Furniture and Playground Equipment, Mareeba
6. Byrnes Street Medians, Mareeba
7. Anzac Memorial Park, Kuranda
8. Nursery, Mareeba
9. Anzac Park, Mareeba
10. Pool and Carpark, Kuranda
11. Basalt Gully and Bi-Centennial Lakes, Mareeba
12. Mary Andrews Gardens, Mareeba
13. Borzi Park, Mareeba
14. Esplanade, Kuranda
15. Sunset/Sunbird Park, Mareeba

The table below shows the current budget position of Parks and Gardens operations for Mareeba Shire Council.

Annual Budget	Year to Date Budget	Year to Date Actual
---------------	---------------------	---------------------

\$1,849,034	\$772,605	\$689,240
-------------	-----------	-----------

**Bridge Section****Maintenance Activities**

Bridge inspection and maintenance activities were carried out in November at the following locations;

Structure	Road	Chainage	Area
Bridge	Hodzic Road	8040	Biboohra
Major Culvert	Wolfram Road	2508	Dimbulah
Major Culvert	Kingfisher Drive	220	Kuranda
Major Culvert	Price Creek Road	457	Mutchilba
Causeway	LA Road	1290	Mona Mona
Major Culvert	Leadingham Creek Road	6915	Dimbulah
Major Culvert	Veivers Drive	982	Speewah
Major Culvert	Chewko Road	5430	Mareeba
Major Culvert	Malone Road	2798	Mareeba
Major Culvert	Bowers Street	388	Mareeba
Major Culvert	Emerald End Road	1220	Mareeba
Bridge	Chewko Road	3035	Mareeba
Major Culvert	Mutchilba Road	302	Mutchilba
Causeway	Carman Road	354	Paddys Green
Causeway	Beh Road	630	Paddy Green
Major Culvert	Schincariol Road	973	Dimbulah
Major Culvert	Adil Road	657	Mareeba
Causeway	Wolfram Road	22496	Dimbulah
Major Culvert	Wolfram Road	4786	Dimbulah
Major Culvert	Bakers Road	239	Mt Molloy
Major Culvert	Springmount Road	9830	Mutchilba
Major Culvert	Algoma Road	234	Mutchilba
Bridge	Bolton Road	1273	Koah
Major Culvert	Springmount Road	3365	Mutchilba
Causeway	Collins Weir Road	973	Mutchilba
Major Culvert	Wolfram Road	7400	Dimbulah
Major Culvert	Boonmoo Road	1856	Dimbulah
Major Culvert	Carr Road	480	Julatten
Major Culvert	Boonmoo Road	5995	Dimbulah
Major Culvert	Boonmoo Road	7180	Dimbulah
Major Culvert	Springmount Road	7238	Mutchilba
Major Culvert	Sandy Creek Road	1318	Dimbulah
Causeway	Metzger Road	1820	Dimbulah
Causeway	Middle Creek Road	405	Mutchilba
Major Culvert	Leadingham Creek Road	8316	Dimbulah
Causeway	Narcotic Creek road	5776	Chewko
Causeway	Collins Weir Road	10370	Mutchilba
Major Culvert	Oaky Valley Avenue	5145	Mutchilba

The table below shows the current budget position of Bridge operations for Mareeba Shire Council.

Annual Budget	Year to Date Budget	Year to Date Actual
---------------	---------------------	---------------------



\$565,468	\$234,103	\$153,726
-----------	-----------	-----------

### **Land Protection Section**

The table below shows the current budget position for Land Protection operations for Mareeba Shire Council.

<b>Annual Budget</b>	<b>Year to Date Budget</b>	<b>Year to Date Actual</b>
\$461,679	\$178,727	\$182,424

**Parthenium Weed:** Property inspections were carried out on at risk properties to search the grounds for the presence of Parthenium Weed. Parthenium weed causes negative health effects (eczema, contact dermatitis, hay fever and asthma in susceptible people) and problems with domestic and farmed animals. The weed also outcompetes pastures and becomes an environmental weed.

No Parthenium weed was found and the current active sites were inspected to ensure that the landowners are compliant with their eradication program.



The above photos show Parthenium weed in a lime orchard that was mulched with contaminated hay. Water run off ran into the creek below and infested the bed and banks of the stream. The weed washed out of the creek on to some flood-out country and contaminated bushland on downstream properties. This weed incursion was cleaned up with the cooperation of the affected landowners.

**Limnobium (Amazon Frogbit):** The entire catchment upstream of the Granite Creek bridge in Mareeba has been treated for this and other invasive aquatic weeds. A follow up treatment has been programmed before the onset of the wet season.

Frogbit was found to have moved (probably by water fowl) into the adjacent Two Mile and Four Mile Creeks. These creeks are part of the Mitchell River catchment and it was critical that all plants were found and removed before they moved down stream and became a naturalised aquatic weed in the Mitchell.

Land protection staff have removed all the weed and have surveyed the waterway, swamps and anabranches as far as Pickford Road. Due to the proximity of Granite Creek, which is still infested with the weed below the Granite Creek Bridge in Mareeba, this survey and clean-up work on the Upper Mitchell River must continue.

**Multi Species Weed Removal program on the Upper Walsh River:** This long- running program that targets Belly Ache Bush, Physic Nut, Siam Weed and Rubber Vine continues and officers are aided

in this work by affected landowners, Biosecurity Staff, Northern Gulf Resource Management Group and the Mitchell River Catchment Management group.

**Wild Dog Coordinated Baiting Program:** All large-scale beef production properties within the Mitchell River Catchment have completed their end of year baiting programs. More than 30 properties covering millions of hectares have all been coordinated into catchments and baited this month.

**Feral Pigs:** Feral pigs have been trapped and destroyed. Many new exclusion fences have also been constructed during the month.

**Rabbits:** Rabbits have reached plague proportions in many areas to the south and west of Mareeba. Working in closely with some property owners, Land Protection staff have engaged in free feeding programs using carrots and sweet bucks, followed by the introduction of a solution that contains the Rabbit Haemorrhagic disease virus (The K5 strain).

Officers report mass destruction of rabbits in and around those properties. The benefits of this new Callisivirus strain is that flies are an effective spread vector and so by locating dead rabbits from Callisi-infected farms into other rabbit populations the virus can be easily spread.

## **RISK IMPLICATIONS**

### **Financial**

Nil

## **LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

Nil

## **FINANCIAL AND RESOURCE IMPLICATIONS**

### ***Capital***

All capital works are listed in and funded by the 2018/19 Capital Works Program.

### ***Operating***

All operational works are funded by the Section specific 2018/19 maintenance budgets.

## **LINK TO CORPORATE PLAN**

**Financial Sustainability:** A council that continuously looks for savings and opportunities while managing council's assets and reserves to ensure a sustainable future in a cost-effective manner.

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

## **IMPLEMENTATION/COMMUNICATION**

Nil

**9.6 WASTE MANAGEMENT SERVICES STRATEGY PUBLIC CONSULTATION**

**Date Prepared:** 3 December 2018

**Author:** Manager Water and Waste

**Attachments:** 1. Waste Management Services Strategy 2018 - 2027 [↓](#)  
2. Waste Management Services Strategy - Community Snapshot [↓](#)

---

**EXECUTIVE SUMMARY**

The draft Waste Management Services Strategy 2018 - 2027 (the Strategy) has been developed to fulfil Council's statutory obligation to prepare a Waste Reduction and Recycling Plan under the Waste Reduction and Recycling Act 2011. In order to meet this requirement, Council must adopt the Strategy through resolution following public consultation.

The Strategy addresses strategic management of the community's waste to enhance liveability and proactively mitigate against inappropriate waste management. The Strategy aims to do this by ensuring delivery of cost effective services, collaborative partnerships and accountable governance over the long term.

In conjunction with the Strategy, the Waste Management Services Strategy - Community Snapshot has been developed to summarise objectives of the Strategy for consultation purposes.

**RECOMMENDATION**

That Council adopts the draft Waste Management Services Strategy 2018 - 2027 and Community Snapshot for the purpose of public consultation.

**BACKGROUND**

The *Waste Reduction and Recycling Act 2011* requires local governments to prepare and implement a Waste Reduction and Recycling Plan. Council's commitment to environmentally responsible and efficient waste management and the promotion of community waste minimisation is also supported through the Corporate Plan 2018 - 2022.

The draft Waste Management Services Strategy 2018 - 2027 (the Strategy) has been developed to ensure Council is able to strategically manage the community's waste, enhance liveability and proactively mitigate against inappropriate waste management throughout the Shire.

**Development of the Strategy**

Aurecon was engaged to undertake a waste strategy planning study, which included a workshop with key Council officers, followed by analysis of Mareeba Shire's waste collection and treatment data.

Concurrently, Far North Queensland Regional Organisation of Councils (FNQROC) has engaged Arcadis to develop a Regional Waste Management Prioritisation and Resource Recovery Options Report (Arcadis Report). The Arcadis Report will assist FNQROC member councils to make informed decisions regarding the future development and improvement of the region's waste and resource recovery sector, based on evidence of need and prioritisation of options throughout the wider region.

The delivery of a sustainable waste management service is complex. There are several factors that must be considered when forward planning, including the changing waste policy setting, cost of providing services, increasing waste volumes, changing composition, shifts in government regulation and initiatives and opportunities for regional partnerships.

In recent decades, the service delivery model for Council's waste services has grown in complexity from traditional local government waste collection and disposal services to providing a major waste disposal facility accepting domestic and commercial waste from the Cairns region.

This complexity led to a Waste Service Situation Analysis and Risk Identification Review in undertaken in 2015 to identify and prioritise management issues affecting the provision of waste services. The resultant report (the Pacifica Report) provided a number of findings, including a key priority to develop a Waste Management Services Strategy that will ensure a sustainable waste service delivery over the long term.

With these complexities in mind, the Strategy has been developed to offer flexibility and resilience whilst outlining specific actions to achieve key corporate performance indicators and responsible waste management objectives.

### **Description of the Strategy**

The Strategy describes the legislative, economic and community context in which Council operates its current waste management services. These are considered to be the waste management drivers relevant to Mareeba Shire. The Strategy also defines the baseline waste profile for the Shire in terms of type and quantity of waste generated, trends and finances.

The waste management drivers and the Shire's waste profile have used to develop key strategic focus areas and broad strategic objectives:

- **Waste Reduction:** Encourage and support the community to reduce waste generation and to divert recyclable commodities from landfill.
- **Circular Economy Opportunities:** Advocate for the establishment of secondary resource processing markets into our region.
- **Waste Infrastructure:** Ensure infrastructure is equipped to responsibly process wastes streams and resources into the future to provide an essential environmental health service for the community.
- **Littering and Illegal Dumping:** Minimise the impact of littering and illegal dumping on the environment and our community.
- **Community and Regional Partnerships:** Foster partnerships with local governments, community organisations and private entities to provide cost effective arrangements consistent with the strategic focus areas.
- **Council's Own Waste:** Provide leadership in waste management within the shire in recognising Council's own contribution to the waste generation volumes and to identify and implement opportunities to divert wastes from landfill.

Out of these key focus areas, a set of key actions have been developed for planning and implementation over the next ten (10) years.

These are then considered against a set of waste management guiding principles that align to Council's corporate key performance indicators:

- Financial Sustainability
- Community Service
- Beneficial Infrastructure
- Environmentally Sustainable Development
- Reduce, Reuse, Recycle

The Strategy will be used to assist Council to achieve regulatory compliance and improved waste reduction balanced against community aspirations, asset sustainability and the provision of affordable levels of service. When adopted, it will also inform relevant Council plans and tools including the long-term asset management plan and financial plan, future corporate and operational plans and future waste management decisions.

### **Consultation**

The *Waste Reduction and Recycling Act 2011* requires a Local Government to adopt, by resolution, the Strategy following community consultation having regard to the level of appropriate consultation and any submissions made. The public consultation must be open for at least 28 days.

Consultation on the draft Strategy will be undertaken through the Council website and social media. Feedback will be sought from residents and businesses via a questionnaire to help gauge current utilisation of Council waste and recycling services and whether the Strategy is supported in general.

In conjunction with the Strategy, the Waste Management Services Strategy - Community Snapshot has been developed to provide a summary of the Strategy for consultation purposes.

### **RISK IMPLICATIONS**

#### **Financial**

The Waste Strategy will strategically inform the waste asset management plan and long term financial plan for waste infrastructure over a ten-year period. The endorsement of the Waste Strategy will assist Council to operate an efficient waste management service.

#### **Environmental**

Council is required to prepare and implement a Waste Reduction and Recycling Plan under the *Waste Reduction and Recycling Act 2014* to assist in achieving the objects of that Act

#### **Infrastructure and Assets**

The Waste Strategy will strategically inform the waste asset management plan and for waste infrastructure over a ten-year period. A key focus area of the strategy is to "*Ensure infrastructure is equipped to responsibly process wastes streams and resources into the future to provide an essential environmental health service for the community.*"

#### **Political and Reputational**

The Strategy, once endorsed, will provide a platform for long-term asset management and development of customer service standards. As such, it provides transparent governance and a mechanism for good decision making.



**Legal and Compliance**

Endorsement of the Strategy, following consideration of public consultation feedback, will ensure Council is meeting its statutory obligation under the Waste Reduction and Recycling Act 2011.

**LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

Community engagement is to be conducted in accordance with the Mareeba Shire Council's current Community Engagement Policy and Strategy.

**FINANCIAL AND RESOURCE IMPLICATIONS*****Capital***

The Waste Strategy will strategically inform the waste asset management plan and long term financial plan for waste infrastructure over a ten-year period.

***Is the expenditure noted above included in the current budget?***

N/A

***If not you must recommend how the budget can be amended to accommodate the expenditure***

The Strategy will inform the long-term asset management plan for waste, from which, long-term funding decisions can be made.

***Operating***

The endorsement of the Waste Strategy will assist Council to operate an efficient waste management services.

***Is the expenditure noted above included in the current budget?***

N/A

***If not you must recommend how the budget can be amended to accommodate the expenditure***

NA.

**LINK TO CORPORATE PLAN**

**Financial Sustainability:** A council that continuously looks for savings and opportunities while managing council's assets and reserves to ensure a sustainable future in a cost-effective manner.

**Community:** An engaged community which supports and encourages effective partnerships to enhance the liveability of the shire and the wellbeing of residents in communities which are resilient and prepared for unforeseen events.

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

The inception of the Strategy was developed through workshops with a cross-section of internal council staff and Councillors.

The draft Strategy has been peer-reviewed by an external consultant specialising in local government waste services.

The public consultation will be undertaken through the Council website and social media. Feedback will be sought via a Survey Monkey questionnaire.



# Waste Management Services Strategy

2018—2027

## Contents

Acronyms and Definitions .....	3
Executive Summary.....	5
1. Background .....	7
1.1. What is the Waste Management Services Strategy and How Will It Be Used?.....	8
2. Waste Management Service Drivers.....	11
2.1. Queensland Waste Strategy .....	12
2.2. Future Queensland Government Policies .....	12
2.3. Regulatory Context .....	15
2.4. Regional Planning Context .....	16
2.5. Economic Market Context .....	17
2.6. Community Drivers .....	18
3. Mareeba Shire Waste Profile.....	21
3.1. Current Waste Infrastructure .....	21
3.1.1. The Mareeba Landfill .....	22
3.1.2. The Old Mareeba Landfill (and Void) .....	24
3.1.3. Chillagoe Landfill .....	24
3.1.4. Waste Transfer Stations.....	25
3.1.5. Kuranda Recycling Hub, Arara Street.....	26
3.2. Waste Management Services .....	26
3.2.1. Waste Disposal Agreement.....	28
3.2.2. Waste Management Contract No 1396 .....	28
3.2.3. Kerbside Collection Contract.....	29
3.2.4. Other Contracts.....	30
3.2.5. Recycling .....	31
3.2.6. Disaster Waste Management.....	32
3.3. MSC Waste Finances.....	33
3.4. MSC Waste Production Trends .....	33
3.5. Waste Data Gaps.....	35
4. Waste Management Services Guiding Principles.....	36
4.1. Guiding Principle One: Financial Sustainability.....	36
4.2. Guiding Principle Two: Community Service .....	36
4.3. Guiding Principle Three: Beneficial Infrastructure.....	36

4.4.	Guiding Principal Four: Environmentally Sustainable Development .....	36
4.5.	Guiding Principle Four: Reduce, Reuse, Recycle .....	37
5.	Key Strategic Focus Areas and Action Plan: .....	38
5.1.	Waste Reduction .....	39
5.2.	Circular Economy Opportunities .....	42
5.3.	Waste Infrastructure .....	43
5.3.1.	Mareeba Landfill .....	43
5.3.2.	Mareeba Waste Transfer Station .....	44
5.3.3.	Other Waste Transfer Stations .....	44
5.3.4.	Chillagoe Landfill .....	45
5.3.5.	Recycling Hubs .....	45
5.4.	Littering and Illegal Dumping .....	45
5.5.	Community and Regional Partnerships .....	46
5.5.1.	FNQROC .....	46
5.5.2.	LAWMAC .....	46
5.6.	Council's Own Waste .....	47
6.	Action plan .....	47
	References .....	50

## Figures

Figure 1 A Mareeba resident recycling .....	4
Figure 2 Kerbside collection waste being unloaded at Mareeba Waste Transfer Station. ....	6
Figure 3 MSC Waste Strategy Methodology .....	8
Figure 4 Waste Strategy Relationship .....	9
Figure 5 Mareeba Landfill .....	10
Figure 6 Waste Management Service Drivers .....	11
Figure 7 Community recommended most important waste issues for MSC .....	20
Figure 8 Landfilled volumes 2017 to date .....	23
Figure 9 Mayor Tom Gilmore welcoming the new kerbside collection trucks .....	27
Figure 10 Mareeba Shire Waste Flows 2018 - 2026 .....	27
Figure 11 Recycling Waste Flows .....	32
Figure 12 Projected Waste Production and Population Growth .....	34
Figure 13 The Waste and Resource Management Hierarchy, Queensland Waste Avoidance and Resource Productivity Strategy (2014 - 2024) .....	37
Figure 14 Waste reduction measures are required for kerbside collections .....	39
Figure 15 Upgraded Kuranda Waste Transfer Station 2017 .....	47



## Acronyms and Definitions

**ARRF** Advanced Resource Recovery Facility: A facility where organic and non-organic residential and commercial waste is received and sorted via the 'Bedminster' technology to produce a compost.

**C & D** Construction and Demolition Waste: Waste resulting from the construction, demolition, alteration or building of man-made structures. Often contains building rubble, bricks, pavers, concrete without with-out reinforcing bars, timber, plasterboards etc.

**C & I** Commercial and Industrial waste; General waste from commercial and industrial sources. May contain putrescibles, packaging, dry bulky waste, recyclables etc.

**CRP** Container Refund Point where eligible containers can be presented by the public for a monetary refund (see s 99K *Waste Reduction and Recycling Act*).

**CRS** Container Refund Scheme: A Queensland Government initiative aimed at reducing beverage container litter, which provides an incentivised scheme for the public to return eligible used beverage containers in exchange for a 10c refund.

**Designated Benefitted Area** : Areas designated by local government under the *Waste Reduction and Recycling Regulation 2011* or local law to receive a kerbside collection that is administered by the local government.

**DES Department of Environment and Science:** Queensland government department responsible for administering the *Environmental Protection Act 1994*, under which waste facilities including landfills and waste transfer stations require approval.

**ERA(s)** Environmentally Relevant Activities: Activities such as industrial processes or intensive agricultural activities with the potential to release emissions which impact on the environment and surrounding land uses. They are scheduled in *Environmental Protection Regulation 2008* and an Environmental Authority is required to conduct these activities.

**FNQROC** Far North Queensland Region of Councils: An organisation representing 13 member Councils from Hinchinbrook, north to Cook and west to Carpentaria in Far North Queensland.

**LAWMAC** Local Authority Waste Management Advisory Committee: An organisation of nineteen north Queensland councils dedicated to best practice waste management. LAWMAC aims to provide sustainable solutions through its regional forum and interactive participation across the region on current and future waste management practices and technologies.

**MGB** Mobile Garbage Bin: In this strategy, MGB refers to a 240L wheeled bin

**MRF** Materials Recovery Facility: A facility designed to sort and separate recyclable commodities through a combination of manual and mechanical processes. Plastics, steel, and aluminium are baled and are transported to Brisbane for recycling processes.

**MSC** Mareeba Shire Council

**MSW** Municipal Solid Waste: Waste produced primarily by households and similar residential properties, including recyclable and non-recyclable material.

**Organic Waste** Any waste that is of biological origin and has carbon content, and that can break down.

**WDA** Waste Disposal Agreement: A contract that sees any untreatable process waste from the ARRF returned to Mareeba for landfilling

**WTS(s)** Waste Transfer Station(s): A facility used for the temporary sorting, handling, and storage of waste prior to transport for final disposal or recycling.

**1396 Contract** MSC is party to the Waste Management Contract (no.1396) where kerbside collection rubbish combined with putrescible rubbish from waste transfer stations is delivered to the ARRF for processing. Douglas Shire and Cairns Regional Councils also participate in this contract with SUEZ. Cairns Regional Council administers the contract.



*Figure 1 A Mareeba resident recycling*

## Executive Summary

Mareeba Shire Council (MSC) provides local government waste management services for a geographically dispersed population of 21,557 (ABS, 2018) persons through a mix of kerbside collection services, and the operation of waste transfer stations and landfills.

To enable a growing, confident and sustainable shire, a Waste Strategy (the Strategy) is required to strategically manage the community's waste, enhance liveability and proactively mitigate against inappropriate waste management. This Strategy aims to do this by ensuring delivery of cost effective services, collaborative partnerships, and accountable governance over the long term. The Strategy also fulfils MSC's statutory obligation to prepare a Waste Reduction and Recycling Plan under the *Waste Reduction and Recycling Act 2011*.

The delivery of a sustainable waste management service is complex. There are several factors that must be considered when forward planning, including, but not limited to the changing waste policy setting, cost of providing services, increasing waste volumes and changing composition, ever changing government regulation, and initiatives and opportunities in regional partnerships. With this complexity in mind, the Strategy is designed to offer flexibility and resilience whilst outlining actions to achieve key corporate performance indicators and responsible waste management objectives.

It does this through giving consideration to the current and projected regulatory, economic environmental and community contexts and the implications of these on MSC waste services. The Strategy was written at the time when the Queensland Waste Levy is coming into effect, the Queensland Container Refund Scheme has just commenced, and offshore recyclable commodity restrictions have been imposed. The Queensland Government is considering the introduction of landfill bans on waste streams including clean construction and demolition waste (C&D), and domestic green waste. These changing regulatory settings highlights the dynamic nature of the waste industry, and the way Waste Strategies need to be flexible enough to account for pending future changes, at the same time as focusing on the provision of a fundamentally sound waste management system which maintains basic public environmental health outcomes.

The analysis of these waste management drivers along with MSC's waste profile has resulted in the identification of key strategic focus areas for MSC. These strategic focus areas reflect the need for waste reduction, advocating for economic opportunities in the circular economy, and the requirement for investment in waste infrastructure and services for the future whilst fostering community and regional partnerships. MSC is also recognised as a key focus as having a lead role in the community in respect to managing its own waste.

From these key strategic focus areas, actions have been derived for implementation over the long term to achieve the objectives of this Strategy. Whilst comprehensive, it is recognised that the flexibility to make reactive decisions is best provided for through a set of guiding principles. This will ensure that the sum of decisions made over the lifespan of this Strategy are not ad-hoc, but contribute to our corporate vision of a growing, confident and sustainable shire. Decisions made in consideration of financial sustainability, service to the community, sound asset management principles, environmentally sustainable development and transparent governance including the waste hierarchy will ensure a sound and resilient waste management service.



Over the course of this Strategy's 10 year term, MSC will navigate key waste management contracts which have significant influence over the waste management services provided to the community. This will be done whilst constantly exploring opportunities to recycle waste streams through alternative models. MSC will evaluate investments in infrastructure and devise the most economically prudent waste services for the benefit of the community and the environment.



Figure 2 Kerbside collection waste being unloaded at Mareeba Waste Transfer Station.

## 1. Background

Mareeba Shire Council (MSC) is located in Far North Queensland, west of Cairns.

MSC provides local governance for a geographically dispersed population of **21,557** persons across an administrative area of 53,457 square metres, (ABS.gov.au, 2018).

The main commercial and administrative centre of the shire is Mareeba, which is located 64 km west of Cairns, and has a population of **8,271** (ABS.gov.au, 2018). Most of the shire's remaining population reside in and around smaller towns and districts of Kuranda, Dimbulah, Koah, Speewah, Bibbohra, Mt Molloy, Julatten, Mt Carbine, Mutchilba, Irvinebank, Watsonville, Almaden and Chillagoe.

MSC seeks to implement enabling infrastructure to develop Mareeba as an industrial and service hub whilst promoting the Shire as a desirable lifestyle destination. To support these objectives, MSC is looking to ensure a sustainable waste service into the future.

In recent decades, the service delivery model for MSC's waste services has significantly grown in complexity from traditional local government waste collection and disposal services to providing a major waste disposal facility accepting domestic and commercial waste from the Cairns region.

This complexity led MSC to undertake a Waste Service Situation Analysis and Risk Identification Review in 2015 to identify and prioritise management issues affecting the provision of waste services. The resultant report (the Pacifica Report) provided a number of findings, including a key priority to develop a Waste Management Services Strategy that will ensure a sustainable waste service delivery over the long term.

The *Waste Reduction and Recycling Act 2011* also requires local government to prepare and implement a Waste Reduction and Recycling Plan. MSC embraced the business need to prepare a Waste Management Strategy that would also fulfil this statutory obligation.

Aurecon were engaged to undertake fundamental waste strategy planning work whereby a workshop was undertaken with key Council officers, followed by analysis of Mareeba Shire's waste collection and treatment data.

Concurrently, Far North Queensland Regional Organisation of Councils (FNQROC) engaged Arcadis to develop a Regional Waste Management Prioritisation and Resource Recovery Options Report (Arcadis Report). The Arcadis Report will assist FNQROC member councils to make informed decisions regarding the future development and improvement of the region's waste and resource recovery sector, based on evidence of need and prioritisation of options according to the greatest benefits.



### 1.1. What is the Waste Management Services Strategy and How Will It Be Used?

This Waste Management Strategy firstly describes the legislative, economic and community context in which MSC operates its current waste management services. These are considered to be the waste management drivers relevant to Mareeba Shire. A baseline description of the shire's waste profile is then given providing some quantification of waste generation trends and finances. Combined, the waste industry drivers and the shire's waste profile are shaped into key strategic focus areas and broad strategic objectives. These are then considered against a set of waste management guiding principles that align to our corporate performance indicators, Figure 3.

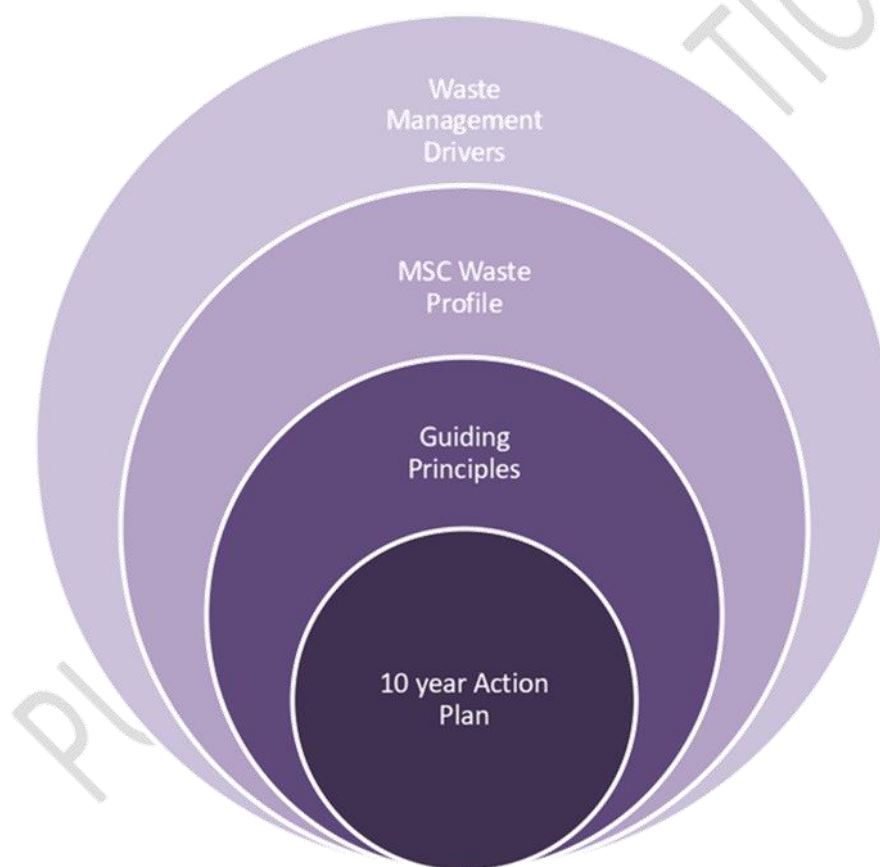


Figure 3 MSC Waste Strategy Methodology

Out of these strategic focus areas, a set of key actions, contained in Table 7, to be planned for and implemented over the next ten (10) years emerged that will:

- Outline the waste management service for a ten (10) year period and forecast the service beyond the Waste Management Contract 1396 with SUEZ;
- Identify appropriate waste management infrastructure required to accommodate future population growth and to provide a foundation for future waste management planning decisions;
- Develop plans to deal with any residual risk identified in the Pacifica Report;
- Integrate customer service, asset management, safety and environmental responsibilities;
- Build on the opportunities and constraints identified in state and regional waste investigations;
- Meet regulatory requirements under the *Waste Reduction and Recycling Act 2011* about waste planning;
- Develop contingency, flexibility and capacity to respond to change in Queensland and Australian Government Waste Policy; and
- Integrate community aspirations about waste services and provide meaningful information and education.

Thereupon, this Strategy will be used to inform a number of corporate management plans and tools as summarised in Figure 4:

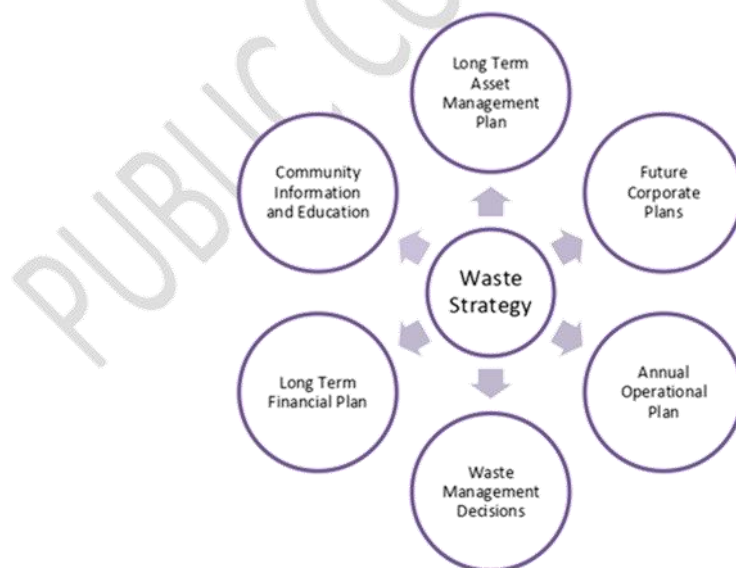


Figure 4 Waste Strategy Relationship

The Waste Strategy key strategic focus areas and action plan will link with and inform the Asset Management Plan to strengthen Council's long term financial sustainability for waste services. Under the direction of the Waste Strategy, the Asset Management Plan will boost Council's ability to:

- Implement an integrated risk-based asset management strategy to deliver an optimal balance between affordability and levels of service for waste services,
- Develop and implement waste asset management planning documents that consider the services and the associated service levels, costs and risks,
- Set waste fees at a level that ensures waste assets can be maintained at their agreed service level in accordance with the Waste Strategy, the Asset Management Plan, and Long Term Financial Plan,
- Systematically review, update and report on the performance of the waste asset management plans and long term financial plan including the underlying assumptions, discount rates and growth rates, and
- Communicate progress towards achieving best practice waste asset management to internal and external stakeholders.



*Figure 5 Mareeba Landfill*

## 2. Waste Management Service Drivers

Service drivers such as environmental and economic regulation, external policy setting, and the desire to implement a best practice system combine with community expectations to provide the context of the waste management service as it is today, and shape how it will be delivered in the future, Figure 6. This section discusses these drivers and their implication(s) to Mareeba Shire Council.

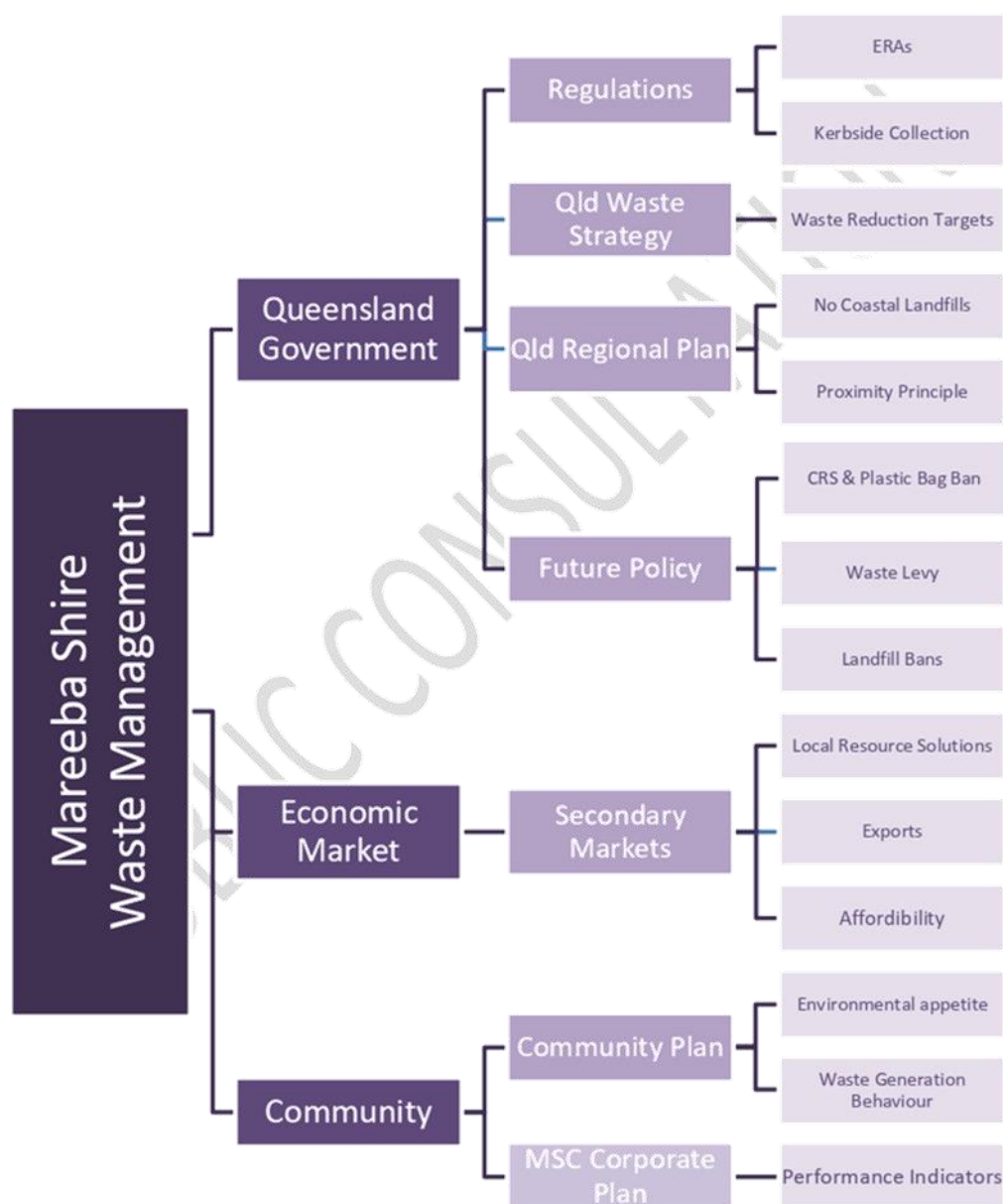


Figure 6 Waste Management Service Drivers



## 2.1. Queensland Waste Strategy

The Queensland Waste Avoidance and Resource Productivity Strategy (2014–2024) (Queensland Strategy) commits Queensland to becoming a national leader in avoiding unnecessary consumption and waste generation, adopting innovative resource recovery approaches, and managing all products and materials as valuable and finite resources.

The Queensland Strategy sets overall objectives to reduce waste generation per capita by 5% and waste to landfill by 15%. It also recognises the state's size and decentralised population requires flexible solutions, including local materials reuse and, in some cases, different regional recycling targets, Table 1.

Waste Stream	Generation 2014-15 (tonnes)*	Recycling rate 2014-15	Recycling target (2024)
Municipal Solid Waste (MSW)	2,551,321	31.2%	50% state-wide > metro – 55% > regional – 45% > remote – improve practice
Commercial and Industrial Waste (C&I)	2,587,756	41.3%	55%
Construction and Demolition Waste (C&D)	3,299,966	54.7%	80%

Table 1 Queensland's baseline waste numbers and 2024 targets

\* Based on facilities reporting to the State of the Waste Report 2015, which does not provide complete coverage of the industry

It is possible that these targets may be reviewed by the current and future State governments over the term of this Strategy especially with the introduction of any Queensland waste levy (see section 2.2.4). It is MSC's intention that this Strategy is flexible and robust to adapt to external drivers whilst balancing the fundamental provision of a public health service to the community.

### MSC Implication:

It is in Mareeba's best economic interests to encourage waste reduction and diversion in line with the current policy, to encourage partnerships and development that stimulates the processing of recovered resources within the regional economy.

## 2.2. Future Queensland Government Policies

The State Government is currently considering a number of waste policy options which could have an impact on the way waste is managed in the region in the future, and the recovery of resources from waste. A brief discussion of the key policies being considered is provided below.

### 2.2.1. Landfill Disposal Bans

The *Waste Reduction and Recycling Act 2011* makes provision for the introduction of landfill disposal bans in Queensland and recently undertook stakeholder consultation and a preliminary cost benefit analysis that indicates that banning the following materials would be viable from a financial perspective:



- Sorted concrete,
- Tyres,
- Municipal green waste.

These materials were deemed feasible to ban from landfills given the access to secondary markets and/or the small quantities that are currently being disposed of to landfill.

*MSC implications:*

- MSC already provides for separation and recovery of green waste at transfer stations, so the volume being landfilled is minimal. Source separation of green waste is incentivised by providing this disposal option at no charge to the customer.

Any green waste in the general kerbside bin is recovered through the Advanced Resource Recovery Facility (ARRF) under the current waste management arrangements with SUEZ, Cairns Regional and Douglas Shire Councils. No further green waste material is accepted by the ARRF.

While mulch from green waste has potential beneficial uses, there are limited markets for the product and creates operational issues with stockpiled materials. A business analysis and evaluation is required, either separately or part of an organics plan, to assess the product and any further market potential e.g. any perceived quality issues, value adding opportunities (such as addition of blood and bone) to increase value and demand.

- MSC is currently separating clean concrete and using it on site at Mareeba Landfill. At Chillagoe Landfill, concrete waste is being stockpiled. The external market outlets for recovered concrete are very limited and would require significant development. Furthermore, the relatively small quantities received mean that processing costs are high.
- Minimal impact is expected for tyres as they are already source separated and recycled albeit at a cost to Council. Tyre reprocessing into crumb for inclusion in asphalt and playground products etc is an established technology and may be a secondary market area to be encouraged to establish in the Shire.

*2.2.2. Container Refund Scheme*

The Queensland Government has recently established a state-based container refund scheme (CRS) intended to reduce littering and to improve source separation of recyclable materials. The management and financial impacts on councils are not yet clear. The CRS could potentially divert valuable materials away from existing recycling systems, reducing overall MRF volumes which may potential drive MRF gate fees up. Three Container Refund Points (CRPs) will operate across the Mareeba local government areas, being Mareeba and Kuranda.

*MSC implications:*

- MSC currently offers container recycling at its WTSs but does not have a Material Recovery Facility. Whilst some of the recyclables are anticipated to be diverted from this Council service, there is little immediate impact anticipated except for potential nuisance issues at Container Refund Point (CRP) sites. The CRS may result in a lower viability in offering standalone alternative recycling collection methods such as the Kuranda recycling hub. Conversely, the CRS may offer opportunity for Council to require Container Refund Operators to provide recycling bins for containers that are not accepted through the scheme. Alternatively, MSC may consider providing a recycling hub service adjacent to a container refund point.

*2.2.3. Lightweight plastic shopping bag ban*

In conjunction with the CRS, the Queensland Government has introduced a plastic bag ban. Like the CRS, it is intended to reduce littering and the harmful impacts of plastic bags on wildlife. Plastic bags less than 35 micron in thickness are being targeted due to their lightweight and includes compostable or biodegradable bags.

Whilst the immediate management and financial impact will be upon retailers, experience from other states has shown a risk of retailers opting to provide a thicker micron thickness plastic bag instead.

*MSC implications:*

Overall the number of plastic bags should decline, resulting in less process waste being produced in the ARRF and subsequently being landfilled in Mareeba Landfill. However, some residents may use the thicker reusable bags offered by the major retailers as bin liners resulting in more plastic waste. Education around waste reduction should include handy tips about what residents can use for bin liners instead of reusable bags.

*2.2.4. Waste Levy*

It is likely that a waste levy may be reintroduced during this term of Queensland Labor Government (2017 - 2020). The establishment of a waste levy estimated at \$70/ MSW tonne was tabled in Parliament March 2018 and is set to pass parliament late 2018. The levy is in response to the public exposure of the movement of NSW waste cross borders to Queensland in 2017 to avoid paying NSW landfill levies. For the Queensland Labor Party, it will deliver on their commitment to introduce a market-based mechanisms to reduce waste to landfill, and to make recycling more cost effective (State Policy Platform, 2017).

While any levy in the future will increase the cost of sending waste to landfill, it may also promote the growth and development of secondary markets, improve the feasibility of resource recovery options and potentially provide funding for improved waste infrastructure.

*MSC implications:*

- The implication for MSC is for the Mareeba Landfill gate fee to increase by the waste levy amount.
- The cost of disposal of dry bulky MSW at Springmount post Mareeba Landfill closure will increase.
- The State Waste Levy will be charged in addition to the current price structure of the Waste Disposal Agreement with SUEZ.
- There may also be costs associated with administering the waste levy. Dependent upon the legislative requirements, MSC may need to establish a weighbridge at Kuranda, a Resource Recovery Area at Mareeba, CCTV, survey stockpiles and establish and maintain data reporting systems.
- Council will need to be ready to submit applications to the State for Levy Ready funding.
- A review of the current fees and charges should be undertaken to ensure the true cost of the waste levy to Council is managed.
- Transport to the Cairns MRF or other diversion activities may also become more viable, increasing the economic incentive to divert recyclable commodities.
- Department of Environment and Science (DES) may introduce an updated Queensland Waste Strategy which may contain revised waste reduction targets. This Strategy, in later sections, aligns MSC targets with the current Queensland waste reduction targets. MSC targets may need to be revised and action measures assessed for their adequacy in reaching those revised targets.

## 2.3. Regulatory Context

### *2.3.1. Environmental Protection Act 1994*

The *Environmental Protection Act 1994* (EP Act) is the overarching legislation in Queensland that sets the framework for achieving ecologically sustainable development and managing the impacts of various activities, including disposal and management of waste. The EP Act also establishes a system of licences, referred to as 'environmental authorities' (EAs), for conducting particular activities including various waste management activities.

*MSC implications:*

- MSC holds an Environmental Authority to undertake waste disposal activities at numerous sites although the majority have now been converted into transfer stations. At these sites, MSC is liable for rehabilitation and aftercare for up to 30 years. The Mareeba Landfill is authorised to accept up to 100,000 tonnes per year whilst the small rural sites are authorised to receive no more than 5,000 tonnes per year. The licence also authorises MSC to undertake composting and soil conditioner manufacturing at its Mareeba Landfill site.

### *2.3.2. Waste Reduction and Recycling Act 2011 and Regulation 2011*

The *Waste Reduction and Recycling Act 2011* is the principal legislation to promote waste reduction and resource recovery as a shared responsibility in order to minimise the impact of waste generation and disposal.

The *Waste Reduction and Recycling Regulation 2011* outlines the management requirements for certain waste types, the obligations for operators of waste sites and requirements for waste data reporting. In accordance with the regulation, Council has designated waste benefitted areas for waste collection services.

### *2.3.3. Planning Act 2009*

The *Planning Act 2009* (SPA) is the key legislation that coordinates planning and development approvals within Queensland. It establishes State Planning Regulatory Provisions (SPRPs), to support the implementation of regional plans, and State Planning Policies (SPP), which express the policies on specific matters of State interest. The Planning Act also allows for the designation of land for future community infrastructure to fast track the development approval process.

*MSC implications:*

- There is no Council managed land designated for future waste management activities however it is not anticipated that MSC would require another landfill site within the next 10 years

## **2.4. Regional Planning Context**

While land use planning is primarily the responsibility of local government, the state has an interest in ensuring that broader regional outcomes are achieved through the application of state policy in local planning.

The purpose of regional plans is to identify regional outcomes to help achieve state interests. Regional policies are used to facilitate these outcomes by addressing existing or emerging regional issues, such as competition between land uses. Regional plans are developed through collaboration with local governments, key industry groups and the wider community to ensure the aspirations of all regional stakeholders are considered.



The *Far North Queensland Regional Plan 2009* covers Cairns, Mareeba, Yarrabah, Wujal Wujal, Douglas, Tablelands and Cassowary Coast. On waste management infrastructure, the plan states its support for the proximity principle:

*The proximity principle—fostering and encouraging local solutions for waste management and resource recovery—will be encouraged where feasible. The focus will be more on providing local facilities rather than regional, such as transfer stations. Recycling and other waste recovery facilities may need to be regional to achieve economies of scale and for proximity to transport infrastructure. Landfill facilities should also be regional, but these are the least preferred method on the waste hierarchy. (Dilgp.qld.gov.au, 2018, p110)*

The plan also comments on the siting of landfills in the region, noting:

*The preferred location for any future landfill facilities is the western side of the Great Dividing Range, removed from the wet tropics, the coastline and Great Barrier Reef. Any future landfills should be located in geologically stable areas that are not flood prone or adjacent to areas of high ecological significance.*

*An integrated and coordinated network for sustainable waste management and resource recovery is adopted across the region to achieve greater resource use efficiencies and effectiveness, and better environmental, social and economic outcomes. (Dilgp.qld.gov.au, 2018, p110)*

*MSC implications:*

- The Regional Plan assures a continued need into the future for any landfill infrastructure to be located within the Mareeba Shire. Currently there are the two landfills - Springmount Waste Facility and Mareeba Landfill. With the contractual arrangement for Mareeba Landfill set to end in 2020, Springmount Landfill would be the only landfill servicing FNQ regional Councils. It has at least 60 years capacity setting it up to be the major regional landfill. There is a risk, however that it may create an overreliance on an external, privately run landfill.

## 2.5. Economic Market Context

In conjunction with legislative incentives, the recycling and end-of-waste market is driven by the demand for the resources. Arcadis (2016) found that generally the local secondary market is limited



and under developed in Far North Queensland (FNQ) which presents a significant constraint on resource recovery. Additionally, MSC identified through a community survey in 2015 that ratepayers have a very limited desire to pay for recycling services in Mareeba Shire which also presents little economic incentive to collect and process recyclables.

Existing local secondary markets consist of local mulch production from green waste, compost production through the Cairns Advanced Resource Recovery Facility (ARRF), glass recycling at the Cairns Material Recovery Facility (MRF), scrap steel and biosolids beneficial reuse. Significant constraints exist for the development of local reprocessing solutions, including the low tonnage of feedstock material meaning MSC cannot achieve economies of scale, a lack of demand for the end product, limited ability to produce diverted product to required specifications, and the cost incurred by Council, rather than revenue, to transport the materials.

The bulk of Mareeba Shire's domestic recyclables are transported to the Cairns Materials Recovery Facility where materials are sorted and rail freighted to re-processors in southern markets.

China, as a developing nation, has long been the recipient of recyclables due to its demand for resources and low cost of import and processing. In recent years, the environmental and human health impact of processing recyclables in China has become apparent and from early 2018, China ceased accepting post-consumer plastics.

Joint local government initiatives or partnerships through FNQROC provide a viable economic outcome for Council to achieve economies of scale regionally with subsequently lower costs, as presently the case for biosolids management, organics resource recovery and kerbside collection. Ferrous and non-ferrous metals, on the contrary, generates revenue for Council and likewise, partnerships through FNQROC produce a more profitable outcome.

#### *MSC implications:*

- MSC should continue to work with FNQROC to develop the feasibility of secondary markets in the region and encourage industry to establish within Mareeba Shire.

## 2.6. Community Drivers

### *2.6.1. Mareeba Shire Corporate Plan (2018 - 2022)*

Through adoption of this Strategy, Mareeba Shire Council will deliver waste services consistent with the Mareeba Shire Council Corporate Plan 2018- 2022 and this document in turn will inform future Corporate Plans. The key strategic areas of the Corporate Plan are integrated into the guiding principles of the Waste Strategy to inform future waste management decisions and to align performance outcomes with the Corporate Plan.

The Corporate Plan 2018 - 2022 specifically sets the following key performance indicator for waste:

#### **EAE1 Environmentally responsible and efficient waste and wastewater management**

- Promote the minimisation of waste the community creates.

*MSC Implication:*

- MSC has commenced community engagement themes around "Rethink your waste, Reduce it" and "Your Waste Our Environment". These are displayed on the JJ Richards rubbish trucks. MSC can build upon this message through community engagement to promote waste minimisation.
- Effective promotion of waste minimisation should entail analysis of waste generation data and monitoring of waste volumes processed at WTSs, consideration of population growth, infrastructure and service requirements to divert waste resources from landfilling.

*2.6.2. Tablelands Community Plan 2021*

As part of the review of the Community Plan in 2016, specific feedback was sought from community regarding the most important waste issues for MSC in the long term. A range of issues were identified by the community representatives but by far the most popular feedback item from those who attended was for improved recycling services followed by ensuring good accessibility (opening hours) to a waste disposal facility.

The recommendation for improved recycling services was consistent across all localities and included recommendations for kerbside recycling, recycling hubs and being able to recycle more goods, Figure 7

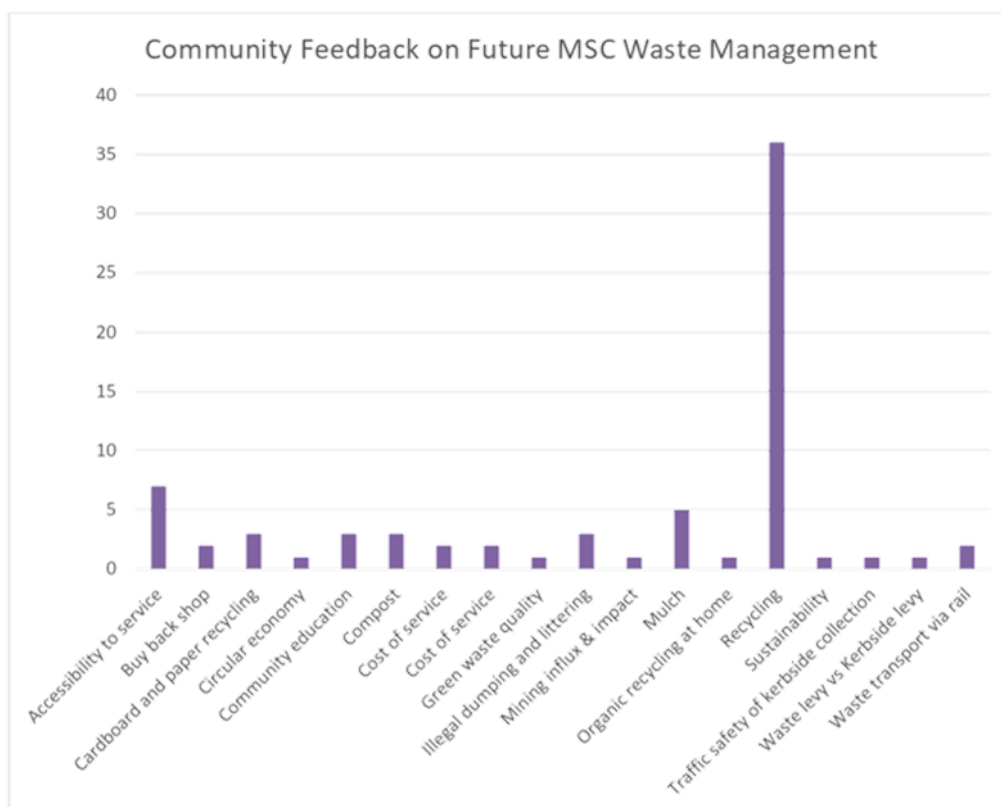


Figure 7 Community recommended most important waste issues for MSC

The positive recommendation for recycling during the Community Plan feedback process was generally consistent with a survey that MSC undertook in 2015 to understand the desire for a kerbside recycling service. This survey was an "opt in" style survey that explored whether ratepayers that received a kerbside waste collection service were willing to pay for an additional recycling service. Ratepayers were given a choice of fee levels that they would consider acceptable for the service. These fee levels were based on an assessment where the service would be considered feasible if a certain number of positive responses were received for a corresponding fee level. Of 6,393 invited to survey, only 323 positive responses were received, with overall feedback indicating there was a limited desire by respondents to pay for an additional service. As a result, the recycling service was deemed economically unviable and was not further progressed.

The survey was limited however in that it did not gauge support for recycling initiatives in general and did not survey those in rental accommodation which accounts for about a third of residential tenure in Mareeba Shire (ABS.gov.au,2018).

The survey did highlight anecdotal evidence that some ratepayers were satisfied using the recycling services offered at WTSs. However, feedback from the Kuranda district identified access to this service was difficult due to its location in Koah and subsequently MSC moved to implement a

Recycling Hub at the Community Precinct in Kuranda, Arara St. The recycling hub has been very successful with service levels increasing.

### 3. Mareeba Shire Waste Profile

This section of the Strategy outlines the existing waste infrastructure, services, contracts, waste generation trends and waste finances.

#### 3.1. Current Waste Infrastructure

MSC manages the following waste infrastructure assets using a combination of internal staff and external contractors:

*Table 2 MSC Waste Infrastructure*

Asset	Management
Almaden Transfer Station	External Contract
Dimbulah Transfer Station	External Contract
Mutchilba Transfer Station	External Contract
Irvinebank Transfer Station	External Contract
Julatten Transfer Station	External Contract
Kuranda Transfer Station	External Contract
Mareeba Transfer Station	External Contract
Mt Carbine Transfer Station	External Contract
Mt Molloy Transfer Station	External Contract
Mareeba Landfill	Internally operated under SUEZ Waste Disposal Agreement.
Chillagoe Landfill and Transfer Station	External Contract
Old Mareeba Landfill	Internally managed

Waste infrastructure is primarily funded through the MSC Waste Management Levy charged each rateable period. Currently \$154 per year per rateable property provides funds to assist with the operation and management of the waste transfer stations and landfills. The fee also allows residents to dispose a ute load or trailer load of domestic waste to these facilities for no additional charge.

In addition to the Waste Management Levy, revenue from external contracts such as scrap metal recycling and waste fees and charges also contribute to the Waste Fund.

The recent history of major infrastructure changes within Mareeba Shire are presented in Table 3.

Table 3 History of Major Waste Infrastructure Changes

Year	Site	Change	Reason	Investment \$M
2018	Chillagoe Landfill	Conversion to a manned secured facility	Capacity issues, unauthorised burning, no separation of wastes	0.02
2018	Leachate System Upgrade	Collection of leachate from OML and active landfill to sewage treatment plant.	Implementation of final cover system on OML and groundwater contamination preventative measure.	1.3
2018	Old Mareeba Landfill	Final Cover System and the subsequent creation of a large void available for landfilling activities.	Regulatory compliance, minimisation of groundwater contamination and other potential environmental harm.	6.0
2018	Mareeba Landfill	Construction of Surface Waters Treatment System.	Regulatory Compliance to minimise discharge of sediment laden waters off site.	0.5
2017	Almaden Landfill	Closure of small traditional trench landfill and implementation of transfer station in town.	Site was unmanned and easily accessible from the highway leading to improper use of the site, illegal burning and poor waste management behaviour.	0.1
2017	Kuranda WTS	Upgrade and reconfiguration	Upgrade capacity for waste receipt due to increase in services and the need to rectify functional issues.	0.2
2005	Irvinebank, Mt Molloy, Mt Carbine Landfill	Final cover systems and conversions to WTS.	To provide feedstock for new Waste Management Contract.	-

### 3.1.1. The Mareeba Landfill

The Mareeba Landfill site is comprised of:

- the active landfill (Cells, 2,3 and 5) which is fully lined, and includes systems for groundwater and leachate collection and pumping,
- the Old Mareeba Landfill, now rehabilitated and in its post closure care period, and
- the Waste Transfer Station.



The Mareeba Landfill primarily receives waste that is not able to be processed at the ARRF under the Waste Disposal Agreement (WDA) with SUEZ (*note - this contract is outlined in Waste Management Services*). It also receives dry bulky municipal solid waste (MSW) from MSC WTSSs, and C&I waste.

This landfill unit is set to close in 2020 with the expiration of the WDA where SUEZ will fulfil their contractual obligation to design and construct the final cover system for the landfill.

In 2017 (calendar year), a total of 36,264.96 tonnes of waste was landfilled in Mareeba Landfill, whereby SUEZ contributed just over 32,000 tonnes. This has been a dramatic reduction from previous years where waste landfilled was approximately 75,000t per year. The reduction in landfilling was due to a change in the WDA made in 2017, Figure 8.

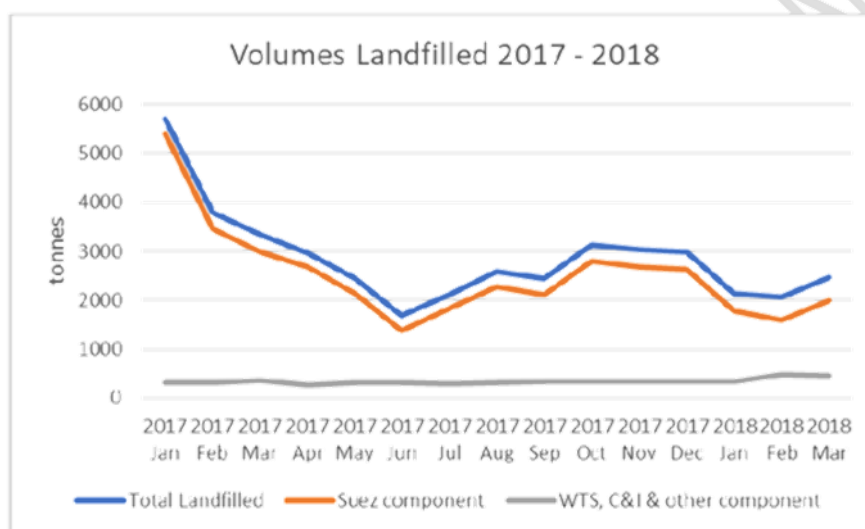


Figure 8 Landfilled volumes 2017 to date.

Prior to the change to the WDA, the Site Development Plan for the Mareeba Landfill showed a higher design height for the landfill and additional cells, 4 and 6, to the south of the site. These cells may only be developed if certain Environmental Authority conditions can be met that relate to odour management issues and more broadly environmental risk management.

In 2020, with the closure of the Mareeba Landfill under the WDA, approximately 4,000t of materials which are currently directed to landfill will require redirecting to either a new cell at the landfill, or to a third party.

In 2018, Council undertook an assessment of waste management options to identify the best value for money option over 20 - 30 years for that 4,000t of waste. Four options were assessed; upgrade the waste transfer station and direct the waste to a third party, commission a new landfill cell at the Old Mareeba Void (*note- this area is described below*), commission cells 4 and 6 for either putrescible or non-putrescible waste. That assessment identified that upgrading the waste transfer station is the best value for money option conditional upon Council maintaining the ability to recommence landfilling under the Environmental Authority if needed due to a third party gate fee

price hike.

### 3.1.2. The Old Mareeba Landfill (and Void)

The Old Mareeba Landfill (OML), located on the active Mareeba Landfill site, is comprised of a raised waste disposal mound overlaying traditional backfilled trench style gullies. It commenced receiving waste approximately in the mid 1980's and ceased waste receipt in the early 2000's. It is an unlined landform and received its final cover system in 2018. The OML is now in its post closure care period.

The consolidation of waste from the unlined informal Old Mareeba Landfill created a larger than expected void providing a discrete air space of 41,083m<sup>3</sup> and opportunity for further landfilling. Operationally, the void is difficult to manage in the wet system and presents a structural risk to the infrastructure such as the leachate system and the northern bund wall. As such, the void requires filling. An assessment of landfill options at Mareeba Landfill identified that developing the void air space is more economically feasible than developing new cells associated with the current landfill unit as there is no financial cost to excavate and there are proximity constraints imposed by the environmental authority in relation to residential dwellings immediately to the south of the new landfill site (the potential for odour nuisance, groundwater and gas management risks issues).

The operational need to fill the void must be balanced by the whole of life cost for a landfill and the need for the upgrade to the existing transfer station. The upgrade to the waste transfer station will take priority with the use of the void as a landfill in the future if Council identifies financial incentive to do so. In the interim, Council will look to filling the hole operationally with clean earth or clean earthen materials such as bricks pavers, ceramics or concrete.

### 3.1.3. Chillagoe Landfill

MSC also operates a small traditional unlined trench landfill at Chillagoe which receives domestic and commercial waste. Concrete, tyres, batteries, ferrous and non-ferrous metals and green waste are separated, stockpiled or transported for recycling. Due to limited resources, this landfill was unmanned until 2018 and as result, illegal burning and unauthorised dumping of waste occurred at the site.

The current Chillagoe landfill trench is expected to reach capacity within the next year (by 2019), much sooner than expected due to the reestablishment of the Mungana mine site. The implications of developing new compliant landfill cells with leachate systems will be a significant cost to Council. Due to this reason, capacity issues and the waste management issues at the landfill, Council moved to secure and man the site and introduce fees and charges consistent with other MSC manned sites. There are now no unmanned waste disposal sites in Mareeba Shire.

Since the introduction of the supervision and fees and charges, Council has met opposition from the township and its commercial operators but it did provide economic incentive for the mining camp to minimise landfilling in the MSC Chillagoe landfill. The mining camp now manages the bulk of its waste through a third party.

A Site Development Plan for Chillagoe Landfill had been prepared and options for the development of further cells were included however Council financially modelled two different waste scenarios;

conversion to a waste transfer station or development of new fully engineered, compliant landfill cells with a Queensland Waste Levy ready weighbridge. The Waste Transfer Station model was identified as the best value for money option over the longer term again subject to Council maintaining the ability to recommence landfilling if needed due to a third-party gate fee price hike (Resource Innovations, 2018).

#### 3.1.4. Waste Transfer Stations

MSC currently owns and operates, through external contracts, ten (10) Waste Transfer Stations: Kuranda, Mareeba, Irvinebank, Julatten, Mt Carbine, Mt Molloy, Dimbulah, Mutchilba, Almaden and Chillagoe (*note - Mareeba and Chillagoe operate as a Landfill and a waste transfer station*).

These waste transfer stations offer at least one bin for wet domestic waste disposal and one bin for dry bulky waste disposal. Transfer Stations also offer recycling collection points for a wide range of commodities but not all services are provided at all sites.

The Mareeba Waste Transfer Station is the primary waste transfer station for the Shire, processing Mareeba township waste, all waste from the other WTSs, all kerbside collection waste, and Mareeba Landfill waste. The Mareeba WTS is the only transfer station with a weighbridge. In the 2017 calendar year, the WTS processed:

- 56,269 tonnes total waste.
- 3900 tonnes dry bulky waste and 613 tonnes processable waste from all WTSs
- 5,117 tonnes kerbside waste
- 38 tonnes domestic recyclables
- 3,405 tonnes green waste
- 43 tonnes tyres
- 23 kL waste oil
- 25 tonnes used lead acid batteries
- 1200 tonnes ferrous scrap metal
- 32 tonnes agricultural plastic

The Mareeba WTS is currently at capacity with Roll On and Roll Off bins overfilling on the weekends and the site's layout is not conducive to effective supervision by waste transfer station staff. As result, waste is being deposited on the ground, in the wrong bins, and staff are inefficiently having to double handle the waste. The WTS will require a reconfiguration and upgrade in the near future to accommodate these issues and to accommodate increased transfer activities when the Mareeba Landfill closes, and to be able to divert more waste from landfill to be waste levy ready.

Kuranda WTS is the next largest WTS is Mareeba shire receiving domestic, commercial and recycling self-haul. The site receives substantial amounts of scrap metal, green waste and recyclables. It is also

nominated site under the *Queensland Biosecurity Act 2014* to receive green waste from invasive ant restricted areas. This site is at risk of waste being dropped off by Cairns residents, under charging, theft and nuisance break ins. Kuranda WTS may also require a weighbridge under the proposed waste levy to address the commercial and industrial component of waste received at this site.

#### 3.1.5. Kuranda Recycling Hub, Arara Street.

In addition to the waste transfer station provided for Kuranda, a domestic recycling collection point is offered at the Kuranda Community Precinct. This was offered shortly after the outcome of the recycling survey in 2015 due to the pro-recycling stance from the community, the non-central location of the transfer station, and accessibility issues (Kuranda WTS is located in the locality of Koah). The site is well used and MSC has had to increase the service level at this Recycling Hub due to volumes received. The hub has very clear infographic signage there is minimal contamination with non-recyclables.

### 3.2. Waste Management Services

MSC delivers kerbside collection services, transfer station operation and landfilling waste services to the community. It is party to a number of waste management contracts most significantly, the Kerbside Collection Contract with JJ Richards, SUEZ 1396 Waste Management Contract and the SUEZ Waste Disposal Agreement.

Under these contracts, municipal solid waste streams sourced either through the kerbside bin collection in Designated Benefited Areas or at MSC waste transfer stations is transported to the ARRF in Cairns where putrescible waste (treatable waste) is processed to produce agricultural compost. SUEZ recovers a minimum of 50% of organics from this waste stream to produce saleable agricultural compost. Waste that enters this processing stream that cannot be composted e.g. plastic bags (process waste) and is then transported to Mareeba Landfill and Remondis' Springmount Waste Management Facility for landfilling, Figure 10.





Figure 9 Mayor Tom Gilmore welcoming the new kerbside collection trucks.

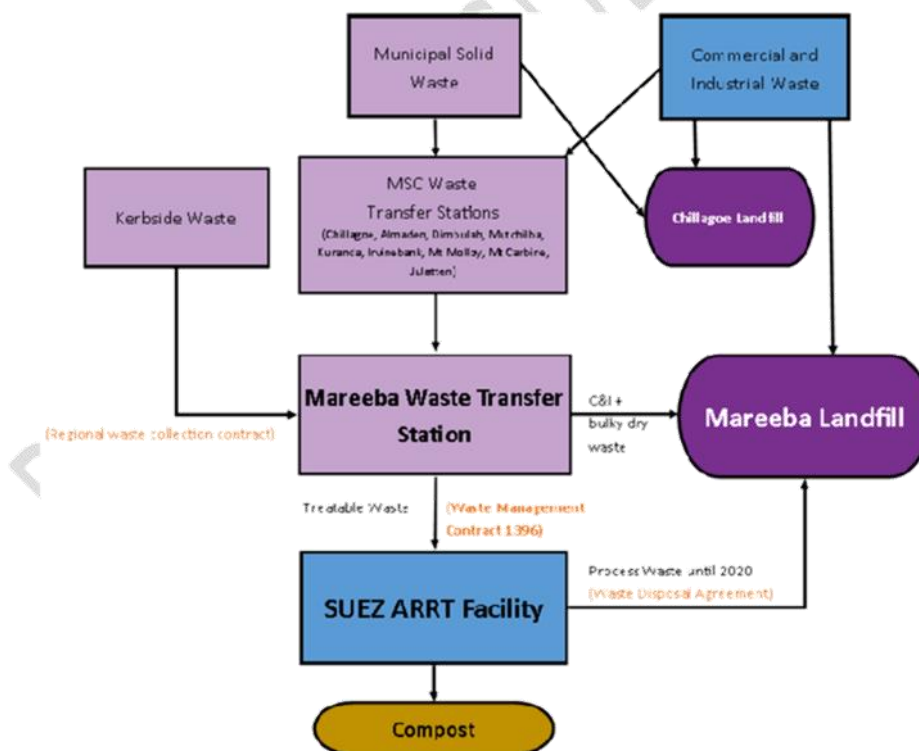


Figure 10 Mareeba Shire Waste Flows 2018 - 2026



A brief description of each of the services provided is outlined in Table 4 . These services must be delivered in compliance with relevant legislative requirements and contractual obligations.

Service provided as at 2018	Delivery model
<b>Kerbside Collection Service</b>	External Contract
<b>Waste Transfer Stations (Chillagoe, Almaden, Irvinebank, Dimbulah, Mutchilba, Mareeba, Kuranda, Mt Molloy, Julatten, Mt Carbine)</b>	External Contracts for transport of bins and day to day operation of the WTS
<b>Mareeba Landfill Waste Disposal Facility 50,000 – 100,000 tonnes per year</b>	Waste Disposal Agreement Contract with SUEZ.
<b>Waste Disposal Facilities 2000 – 5000 tonnes per year (Chillagoe)</b>	Internal
<b>Ferrous metal</b>	FNQROC contract
<b>Non-ferrous metal</b>	Opportunistic Secondary Market
<b>Used Lead Acid Battery</b>	FNQROC contract
<b>Domestic Recyclables (eg Plastic, glass, aluminium)</b>	CRC MRF
<b>Hydrocarbon waste oil, oily waste</b>	External Contract
<b>Tyres</b>	External Contract
<b>E-waste</b>	Opportunistic Secondary Market
<b>Green waste</b>	External Contract
<b>Agricultural plastics</b>	Opportunistic Secondary Market

Table 4 Mareeba Shire Council Waste and Resource Recovery Services as at 2018

### 3.2.1. Waste Disposal Agreement

In March 2006, MSC entered into a Waste Disposal Agreement (WDA) with CEC Resource Recovery Pty Ltd, now SUEZ. In 2017, the WDA was renegotiated after SUEZ terminated the contract and MSC conducted a Waste Service Situational Analysis and Risk Assessment. The contract is has an expected worth of \$1.1M in annual revenue for Council, depending on the quantity of waste disposed under the agreement.

Broadly, the WDA outlines the contractual requirements of SUEZ to design, construct and cap waste cells at the Mareeba Landfill and the requirements of MSC to operate the cells, manage the environmental impacts of the site and accept waste from SUEZ (with the exception of a 10,000 tonne per year allowance for Mareeba's waste to be disposed of within the SUEZ constructed landfill cells).

The term of the WDA is until November 2020 whereby SUEZ will implement the final cover system and the landfill will enter into a Post Closure Care period.

### 3.2.2. Waste Management Contract No 1396

MSC is also a party to a separate contract, the Waste Management Contract, Contract No. 1396 (Contract No. 1396), between Cairns Regional Council, Douglas Shire Council, the Cairns Waste Management Group and CEC Resource Recovery (now SUEZ) where kerbside and self haul

putrescible waste is digested into compost of agricultural value. Contract No.1396 requires SUEZ to accept, transport, treat and dispose of this waste from the participating Councils.

Contract 1396 is scheduled to expire on 14 August 2026 unless there is a default by the contractor, Cairns Regional Council commits a substantial breach of the Contract, or SUEZ is unable or unwilling to perform the work required under the contract or remedy a default.

In the event that Contract 1396 terminates prior, MSC will assess the economic feasibility of disposal options during the WDA contract contingency period.

MSC is party to the Contract 1396 until 2026 with no option for termination or opting out for convenience. Despite the cost, the Contract provides a higher value outcome for the organic waste stream and with the previously outlined waste drivers is expected to continue the need for organics recovery into the future. Organics recycling requires significant capital investment, business modelling and contract development. Long term organics planning must commence now to ensure a smooth transition in 2026. Mareeba Shire offers suitable location for the solution due to the proximity to waste streams and proximity to the agricultural sector and there is less risk for associated environmental nuisance issues.

MSC should continue to work with other regional Councils to plan for the organics future and explore the Shire's capacity to site the facility and assess composters capability to tender in 2026. MSC should consider green waste as an additional feedstock to this organics solution also. A public - private partnership may also be considered to encourage the establishment of the organics recycling facility which will result in the development of additional jobs within the shire.

### 3.2.3. Kerbside Collection Contract

MSC provides kerbside collection services via an external contract to residences within Designated Benefitted Areas in the localities of Kuranda, Mareeba, Mutchilba, Dimbulah, Julatten and Mt Molloy. Currently, the service is for one 240L mobile garbage bin (MGB) per residence per week. The areas are designated under the *Waste Reduction and Recycling Act 2011* provisions through Council's budget process. The ability to designate areas under this legislation was set cease in July 2018 and as such Council, consistent with other Queensland local authorities, has transferred power to a local law.

In 2018, MSC entered into a nine (9) year kerbside collection contract with JJ Richards, with the opportunity to extend the contract for two additional years. This contract has a whole of life cost of approximately of \$8.8M. Further significant collection cost is incurred through the transport of this waste under Contract No.1396; the cost of participating in this contract is approximately \$750K per annum varying with waste volumes transported.

The collection contract is principally funded through the Waste Collection (kerbside) levy charged to each eligible property, every rateable period; \$278/year per service (one MGB lift per week).

Council will continue to monitor for uncharged services by conducting random audits. Council will also look at rationalising the benefitted areas and service modelling to improve service efficiencies whilst being mindful of contractual assumptions with JJ Richards i.e. the contract cost per service is

dependent upon a minimum number of pickups and variations to this can increase cost.

#### 3.2.4. Other Contracts

MSC also currently manages its WTS through external contracts through to 2020 with the option to extend for a further two years. This coincides with the end term of the WDA contract with SUEZ in 2020. The aligning of termination dates reflects the need to review the impact on MSC's Waste Management Levy and the economic sustainability of managing the WTS externally.

Recyclables are managed through a number of external contracts and opportunistic partnerships with other Councils or external organisations.

Pacifica estimated the cost to Council of other various formal arrangements to be approximately \$360K pa.

PUBLIC CONSULTATION

### 3.2.5. Recycling

At the time of preparing this Strategy, MSC offer recycling services for:

- Domestic recyclables: plastic containers, glass, cans and tins,
- Green waste
- Electronic waste (computers, printers, televisions),
- Waste hydrocarbon oil,
- Tyres,
- Used Lead Acid Batteries
- Ferrous and non-ferrous scrap metal including degassed gas bottles, and
- Agricultural plastics including fluming, trickle tape, plastic insecticide drums.

These services are provided through WTSs and a recycling hub in Kuranda. Not all services are available at all sites. No domestic kerbside recycling is offered in Mareeba Shire and the Council does not offer a Commercial and Industrial recyclables collection service, Figure 11

In recent years, the number of commodities that can be recycled has increased and WTSs have had to accommodate additional resource recovery areas e.g. e-waste, agricultural plastics. It is likely, especially with the potential re-introduction of a waste levy, that the number of recyclable commodities will continue to grow. As such, WTSs will need flexibility to accommodate the segregated resources for transport e.g. extra bays, bins, sheds.

Currently all domestic recyclables are transported to Cairns MRF where goods are sorted and on-forwarded to secondary markets in southern centres. MSC recovered 92 tonnes of domestic recyclables in 2017, increasing from 70 T in 2014/2015. This represents a 32% increase in the recycling rate since 2014. Including organic waste recycling at the ARRF and mulching of green waste, MSC is only recycling about 23% of its total volume of waste, well below the State Waste Strategy's target of a 45% recycling rate by 2024.

Contamination rates of recyclables provided by MSC are low and are consistently below the Cairns Regional Council's acceptance criteria of 15%. This is primarily attributed to the fact that customers who participate in recycling at the WTS or Kuranda Recycle Hub do so voluntarily, and as such are generally more environmentally motivated to follow the correct practice.

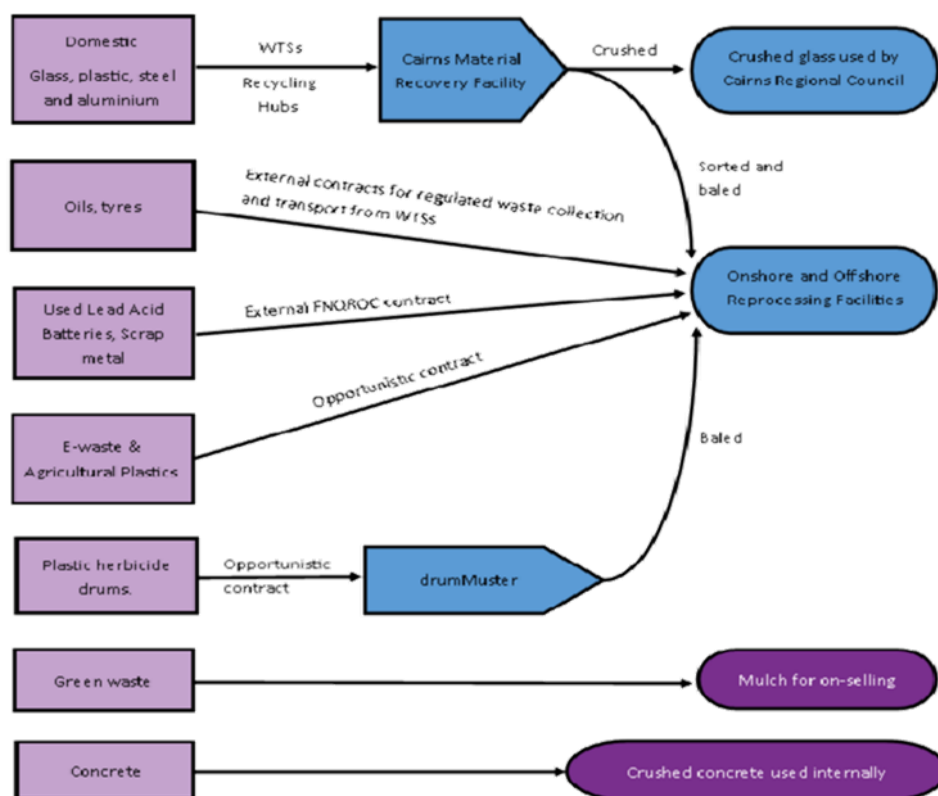


Figure 11. Recycling Waste Flows

### 3.2.6. Disaster Waste Management

MSC offers key waste management services in response to disasters to manage the public health risk associated with the large amounts of waste that is generated. Normal waste management facilities may be overwhelmed or may be cut off and alternative arrangements need to be made. In this situation, the Local Disaster Management Group will look to MSC Waste Services for alternatives.

Where the waste management hierarchy and public health issues conflict, measures to protect human health such as incineration and landfilling are the preferred methods of management as outlined in the Disaster Management Public Health Sub Plan. However, it would be prudent to have pre-planned scoped out alternative sites per locality or services for the management of waste and these be reviewed each year. It is also necessary to be prepared for the treatment of hazardous wastes such as asbestos.



### 3.3. MSC Waste Finances

To enable the provision of waste services to the community, MSC Waste raises revenue principally via Council imposed rates, the Waste Disposal Agreement (WDA) with SUEZ, interest in investments, and gate fees. This revenue stream offsets capital waste infrastructure upgrade, renewal, operation and maintenance expenses.

An internal analysis of the waste finances over the previous 3 year period has found that overall, the waste fund is downsizing yet remains sustainable. Key findings of that analysis were:

- Finances are being managed prudently in each respective waste management area.
- The kerbside collection waste financial trend is stable where revenue is sufficiently covering expenses.
- Landfill and transfer station revenue has recently decreased due to the decline in income under the WDA and the addition of the increased cost of environmental compliance to operate a landfill responsibly. However, it is important to note that it is predicted to stabilise over the term of the WDA.
- Despite market fluctuations, scrap metal continues to provide a revenue stream for MSC and this not expected to alter over the long term.

Going forward, it would be prudent to undertake a major review of fees and charges to ensure that the true cost of waste management has been updated and considered over the long term for financial sustainability. This will enable a good platform for decision making around market changes such as the introduction of a State imposed waste levy. Further, MSC must ensure that revenue is captured at each WTS in line with the current fees and charges and that recycling activities aim to be as cost effective or neutral as possible.

### 3.4. MSC Waste Production Trends

The Australian Bureau of Statistics (2018) identified that the total volume of waste generated in Australia each year has been growing faster than annual GDP growth and that of the total waste produced, less than a third (29%) originated from households and other municipal sources. Waste from the commercial and industrial sector accounted for 33%, whilst the construction and demolition sector accounted for 38%.

Waste data from Mareeba Shire Council's annual waste survey for the Queensland Government (2014 - 2017) suggests that municipal solid waste generated within the shire generally fits this profile whilst waste received for landfilling is heavily skewed towards commercial and industrial. This is predominantly due a number of factors including but not limited to:

- Mareeba Shire's contractual relationship under the WDA to receive commercial and industrial waste,
- There are two major landfills operating within the Shire (waste quantity and type received is split), and

- Mareeba Shire consists of remote rural and rural regional centres where a declining construction industry is greatly outweighed by the primary industry sector (.idcommunity, 2018).

Waste data collected via the Mareeba Landfill weighbridge shows that Mareeba Shire currently produces just under 35,000 tonnes annually including all MSW, C&I, C&D, green waste and recyclables. This figure does not include the tonnage received from the Cairns ARRF under the Waste Disposal Contract with SUEZ. Annually, each kerbside collection service contributes an average of 771kg, and at a 2.5 person per dwelling average for Mareeba (ABS,2018), each person throws out 310kg in the wheelie bin each year or 6kg each week.

Residents also dispose of waste at the WTSs and generate commercial and industrial waste e.g. when visiting cafes. When considering waste generation rates at WTSs and C&I rates, each person generates an average of 1458kg/year. This compares well to Queensland's baseline figure of 1900 kg/year. Despite this, there are economic incentives for MSC to continue to explore opportunities for further waste reduction. For instance, waste reduction measures will result in a lowering of transport costs to external processing / disposal facilities and will also help conserve remaining airspace MSC landfills.

The Australian National Waste Report 2016 identified that Queensland's waste generation is increasing at an average annual rate of 3.4%. Using this figure, Mareeba Shire is expected to produce just over 55,000t by 2026. Increasing waste generation is likely due to increasing consumerism and economic growth (ABS, 2018), Figure 122. 55,000T by 2026 also factors in Mareeba Shire's population annual growth rate of 1.2% (Queensland Government, 2018). Per person, waste generation will grow from 1458 kg/year in 2017 to 2260kg/year by 2026.

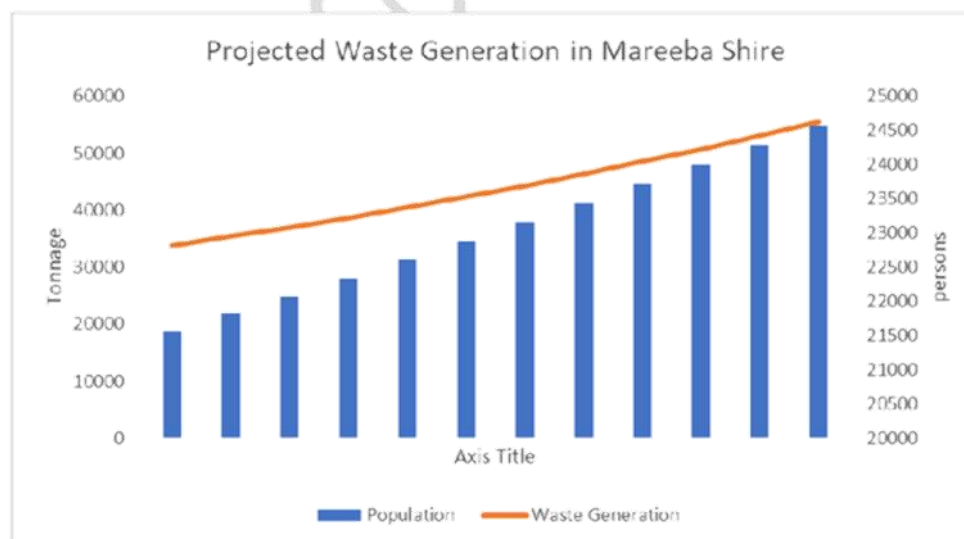


Figure 12 Projected Waste Production and Population Growth

### 3.5. Waste Data Gaps

#### 3.5.1. Waste Composition

MSC currently does not have any data about the typical composition of kerbside waste. Cairns has undertaken wheelie bin composition audits and have discovered the compositions nominated in *Table 5*. Generally, we can use these proportions to infer a typical composition of kerbside waste in Mareeba Shire's kerbside collection.

*Table 5 MGB composition data*

Waste	CRC Red Lid	CRC Yellow Lid	Estimated MSC content
Landfill (non-recoverable)	24 %	9 %	25 %
Recyclables	17 %	91 %	50 %
Organic / kitchen	59 %	-	25 %*

\* Cairns has a wetter climate and charges at its WTS for green waste receipt. 25% is more indicative of Mareeba's climate and no charge of green waste at WTSs.

At 50% recyclables composition, there is significant opportunity to reduce this waste going to landfill. There is incentive in diverting this waste to the Cairns MRF to minimise transport cost in the #1396 contract and the proposed waste levy. There is value in undertaking a kerbside waste composition audit to confirm this and identify opportunities for organics processing.

#### 3.5.2. Waste Asset Register

The Pacifica Report identified that waste services did not have its waste asset register up to date and as a result, the depreciation component attributed to waste services is understated. The inability to fully recognise depreciation for assets in use understates operating costs and overstates the surplus arising from the waste services activities.

Council now has an updated list of assets for waste and register review has been prioritised in the upcoming internal revaluation process. New waste assets are also now capitalised and captured in the waste asset register.

#### 3.5.3. Regional Waste Categorisation

The Arcadis report also identified that a regional approach to data management can provide significant benefits both directly and indirectly to FNQROC Council members. Good quality waste data is essential in planning waste services particularly at a regional collaborative level. It is understood that data inconsistencies may be occurring due to interpretation of waste categorisations. Council will continue to work with FNQROC Councils to build of waste data harmonisation.

## 4. Waste Management Services Guiding Principles

To deliver waste management services that are flexible and responsive to the dynamic waste environment and to be consistent with the MSC corporate strategies, a set of guiding principles are necessary to define waste management operations and to inform decisions.

It is envisioned that MSC officers will use these principles in making day to day decisions and in recommending items for Council adoption. Likewise, this strategy and its vision and guiding principles, once adopted, will inform Councillors in making decisions about waste management services.

### 4.1. Guiding Principle One: Financial Sustainability

The environmental impacts of waste generation are many and complex to solve, ranging from littering, consumption of resources and pollution. These impacts have consequential financial implications for Council responding to these issues. Council will aim to strike an optimal balance between affordability, levels of service and risk management to provide a waste management service that meets the community's environmental health needs.

### 4.2. Guiding Principle Two: Community Service

Waste Services will promote responsible waste management throughout the shire whilst retaining flexibility in how services and facilities are delivered to reflect community's diversity, to ensure equitable access and to allow beneficial partnerships.

MSC will promote responsible waste management consistent with the themes of "Your Waste, Our Environment" and "Rethink Your Waste, Reduce It". The aim of these programs is for community to better understand their waste generation behaviour and adopt ways to reduce the volume of waste produced.

Waste Services will also be responsive to the community's waste during natural and manmade disasters through the implementation of a Disaster Management sub-plan for Waste Management.

### 4.3. Guiding Principle Three: Beneficial Infrastructure

To deliver responsible waste management services that are responsive to the community's needs over the long term, Council will manage and plan for appropriate and regulatory compliant infrastructure in accordance with sound asset management principles.

### 4.4. Guiding Principle Four: Environmentally Sustainable Development

To support the growing population and local economy, Council's Waste Services must anticipate and respond to that growth in its waste services whilst acknowledging the negative impact that inappropriate waste management can have on the economy.

Waste presents opportunities in "closing the loop" where all waste is considered valuable as a resource or for its inherent energy and is kept in the economy for as long as possible and out of

landfills i.e. the circular economy. New waste and resource management initiatives present the opportunity for Council to promote economic growth within the Shire.

#### 4.5. Guiding Principle Four: Reduce, Reuse, Recycle

Council will make sound decisions based on this Strategy to achieve regulatory compliance and improved waste reduction aligned with the industry waste hierarchy principles, Figure 133, balanced against community aspiration, long-term financial and asset sustainability, and the provision of affordable levels of service.

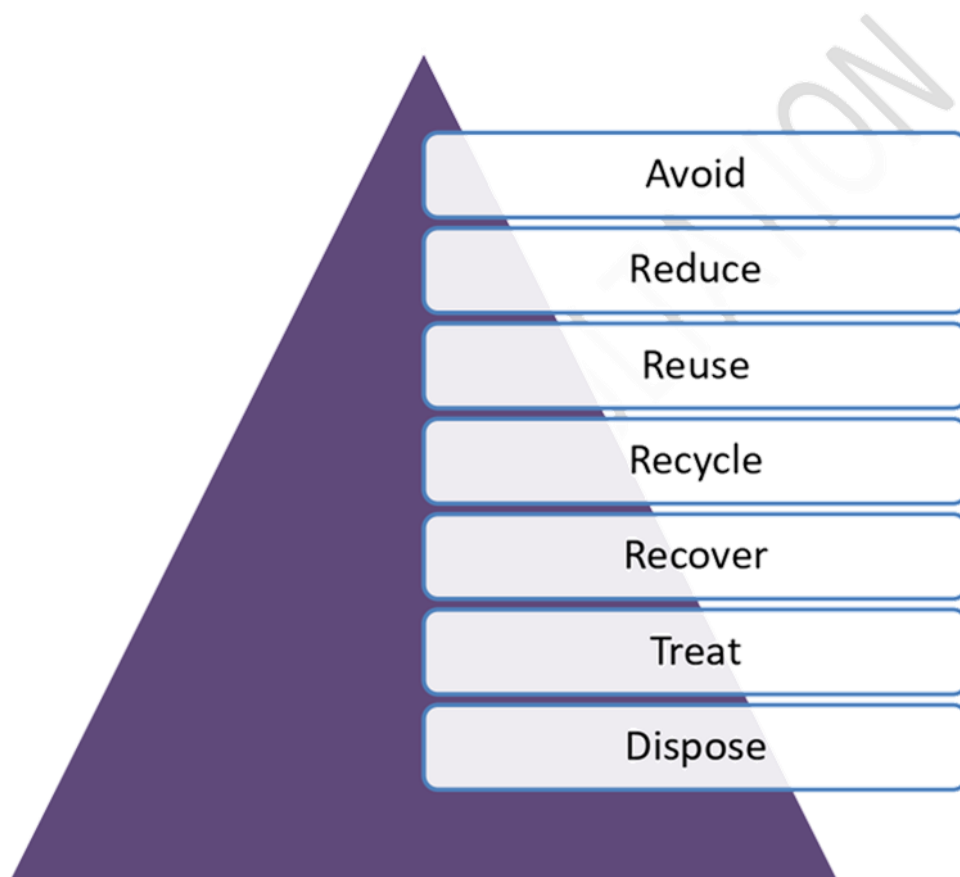


Figure 13 The Waste and Resource Management Hierarchy, Queensland Waste Avoidance and Resource Productivity Strategy (2014 - 2024)



## 5. Key Strategic Focus Areas and Action Plan:

Key strategic focus areas have been developed to merge the implications of the waste management service drivers and the impacts of Mareeba Shire's waste generation trends on its waste infrastructure and services.

These strategic focus areas will lead to action items that outline the waste infrastructure and service needs and any business planning actions necessary to ensure a financially sustainable and community minded waste management service for Mareeba Shire.

The strategic focus areas and key objectives are:

➤ **Waste Reduction:**

*Encourage and support the community to reduce waste generation and to divert recyclable commodities from landfill.*

➤ **Circular Economy Opportunities:**

*Advocate for the establishment of secondary resource processing markets into our region.*

➤ **Waste Infrastructure:**

*Ensure infrastructure is equipped to responsibly process wastes streams and resources into the future to provide an essential environmental health service for the community.*

➤ **Littering and Illegal Dumping:**

*Minimise the impact of littering and illegal dumping on the environment and our community.*

➤ **Community and Regional Partnerships:**

*Foster partnerships with local governments, community organisations and private entities to provide cost effective arrangements consistent with the strategic focus areas.*

➤ **Council's Own Waste:**

*Provide leadership in waste management within the shire in recognising Council's own contribution to the waste generation volumes and to identify and implement opportunities to divert wastes from landfill.*

### 5.1. Waste Reduction

The MSC current waste profile and waste generation trend clearly indicates that measures must be taken to try and prevent the volume of waste that will require processing and treatment within 10 years. At a minimum, waste reduction is necessary as a prudent financial measure to prevent the burden of cost to the community from transport and landfilling.

The Queensland's Waste Strategy 2014 – 2024 sets targets aimed at tackling waste generation and optimising opportunities for recovering, reusing or recycling material. While it is possible that these targets may be reviewed by the current and future State governments, MSC understands that the adoption of the target is currently voluntary, and therefore, in the absence of internally driven targets, those contained within the state strategy for rural and regional areas provide a useful guide. The targets are summarised in Table 6 below.

Measures to achieve these waste reduction targets can be realised through source separation, resource recovery at WTSs and through key behaviour education and management in community. These actions are outlined in Table 7 (Action Plan).



*Figure 14 Waste reduction measures are required for kerbside collections*

Table 6 MSC Waste Reduction Targets



[Type here]

Waste Stream	Measure	Qld 2012-13 recovery baseline	MSC 2015 baseline	Qld 2024 target	MSC 2024 targets
<b>All general waste</b>	Reduction in per capita generation	1.9 tonnes general waste per person per year	Total: 1.45T/pers/year;	Reduce (by 5%) to 1.8 tonnes per person per year	5% reduction/ person / year: Total: 1.25T/pers/year
<b>Municipal solid waste (domestic)</b>	Improved recycling rate	33% state - 37% metropolitan - 30% regional centre	0.003T/person/yr	50% state - 55% metropolitan - 45% regional centre - Improve practices as much as practicable for remote areas	Mareeba & Kuranda 45%  Elsewhere - Any positive increase.
<b>Commercial and industrial waste</b>	Improved recycling rate (not including regulated waste recycling eg cooking oil, waste oil)	42% state	1.47T /person/year C&I with no recycling.	55% state	55%*
<b>Construction and demolition waste</b>	Improved recycling rate	61% state	893T	80% state	80%*
<b>Landfill diversion target</b>	Reduction in the amount of waste going to landfill	4,675,000 tonnes to landfill	4264T landfilled to Mareeba Landfill	Reduce by 15% over life of strategy	15%*
<b>Problem or priority waste wastes</b>	Improved management of each waste	Individual baselines to be developed		Individual measures to be developed	Divert as regional opportunities arise

*# Although MSC is set to reach this target before 2024, the rate of recycling is low and efforts can be made in this area.*

*\* Noting that Council does not provide a C&I waste collection service but can advocate for increased recycling rates through pricing incentives.*





# Waste Management Services Strategy

2018—2027



The circular economy approach aims to keep waste materials being recycled in the economy at their highest value use for as long as possible. Where waste generation avoidance and reduction is not achievable, circular economy thinking addresses the next tier approach in the waste management hierarchy; reuse and recycling.

There are economic benefits in the Circular Economy where the Queensland Treasury (2018) found that for every 10,000 tonnes of waste recycled; at least 9.2 jobs are created. Comparatively, for every 10,000 tonnes landfilled, there are only 2.8 FTE jobs produced. Likewise, it is expected that diversion and recycling activities will produce financial savings post 2020 with the closure of Mareeba Landfill. Diversion activities will also become more important when the Queensland waste levy be reintroduced.

Actions to maintain resources within the circular economy include diversion from landfill, enhancing opportunities for recycling and encouraging secondary markets in the region, Table 7. Mareeba, is ideally located to seize opportunity for its community in this growing industry. Its proximity to surrounding Councils and to the agricultural sector particularly lends itself to locating a major organics processing facility within the shire. Recycling jobs are sustainable jobs covering a cross section of technical, commercial and operational skill sets and the industry is continuing to grow. Between 2013 - 2018 the waste management industry has grown by 0.7% (ibisworld.com.au, 2018)

Initiatives such as business reviews or value adding are required to make green waste processing more viable and able to be produce a marketable end product, especially in light of potential landfill bans on the product.

### 5.3. Waste Infrastructure

There is an overarching need to update the waste asset register to adequately capture the true cost of depreciation and not overestimate any surplus. This was identified in the Pacifica Report.

#### 5.3.1. Mareeba Landfill

Mareeba Landfill is the last remaining Council operated engineered landfill servicing the Atherton Tablelands, Cairns Regional Council and Douglas Shire Council regions. This landfill, being managed under the WDA, is set to receive a final cover system at the expiry of the contract in 2020.

By 2020, MSC must either cease landfilling activities and have an upgraded waste transfer station ready or have a new cell ready to service its own WTS dry bulky waste (until 2026) and to continue to receive C&I waste.

Post closure, the final landform of the capped Mareeba Landfill will potentially provide opportunity for value adding through solar farming and greenhouse gas reduction schemes such as the current Emission Reduction Fund. These technologies and funds have the ability to offset operational costs associated with post closure.

### 5.3.2. Mareeba Waste Transfer Station

Mareeba Waste Transfer Station, located on the Mareeba Landfill site currently receives a high volume of traffic (est. 1600 vehicle movements per week) and processes just under 400t per week in addition to the WDA process waste from SUEZ.

The Mareeba Waste Transfer Station has reached operational and physical capacity and exceeds its capacity on weekends. The transfer station requires upgrade as soon as practicable due to the following existing reasons:

- The bins are overflowing on the weekends with excess waste left on the floor around the bins which is then double handled to the landfill on Monday mornings.
- The tipping floor is frequently at capacity and has no contingency space for truck breakdowns or for disaster events.
- The traffic management has been deemed as an unacceptable risk as it can be difficult to manoeuvre through the site and potential conflicts with trucks, machines and vehicles.
- The gate house is very small and does not provide safety for the operator.
- There are no ready-made areas for stockpiling of individual recyclables as services are made available to Mareeba (e.g. current e-waste area). This can lead to contamination of the commodity and potential non-acceptance by the recycling agent.
- The ability to supervise customers as they unload their waste is required, especially on weekends. Currently MSC rostered staff spend most of the day cleaning up and separating contamination from waste stockpiles and bins despite customers receiving clear instructions at the gatehouse. The current layout of the WTS does not allow for efficient supervision.
- The leachate from the tipping floor undergoes no treatment prior to being irrigated on adjacent gardens.

These issues will be heavily compounded as waste generation volumes increase and will have an unacceptable public health risk. Upon the expiry of the WDA, the transfer station will also require capacity to process the waste streams that would have been landfilled prior.

### 5.3.3. Other Waste Transfer Stations

Little to no infrastructural changes are expected for the other waste transfer stations except Kuranda. There is ample space at all transfer stations and the stations are meeting the needs of the community. At Kuranda, it is expected that further recycling and diversion activities will commence over the next ten years, as is the trend now, and that planning will need to commence towards the end of this period for a reconfiguration. It would be prudent to time the concept planning before the expiry of the 1396 Waste Management Contract.

#### 5.3.4. Chillagoe Landfill

The current site development plan for the Chillagoe Landfill is for the development of future trench cells. Financial modelling has been completed and has identified that the development of the site into a transfer station is the more financially sustainable option.

Like Mareeba Landfill post closure, the Chillagoe landfill may also provide an opportunity to solar farm.

#### 5.3.5. Recycling Hubs

With no community desire to pay for kerbside recycling but a need to divert and segregate recyclables due to the rising cost of landfilling, an effective alternative collection models should be explored. Recycling hubs have proven effective in other centres and may be complimentary to the CRS refund point network. The Kuranda recycling hub has proven effective with acceptable contamination rates. Recycling hubs will also compliment the Container Refund Scheme.

### 5.4. Littering and Illegal Dumping

Littering and illegal dumping are disruptive to Council's activities in that waste must be cleaned up to avoid safety issues and environmental harm. Investigation and removal of illegal waste and littering is resource intensive and there is an associated cost.

Littering and illegal dumping reports are investigated by Council and result in two scenarios:

1. Evidence is obtained of the responsible party and an infringement notice is issued under the Waste Reduction and Recycling Act and Regulation.
  - More frequently this scenario in Mareeba shire involves municipal solid waste.
2. No evidence is obtained and Council cleans up the waste at its own cost. Photos are taken and the waste is removed to the closest waste transfer station.

Council is to be mindful that costs over \$5000 can be reimbursed under the Orphan Incidents Reimbursement Scheme administered by the Queensland Department of Environment but is conditional e.g. reimbursement will not cover local government officers time or illegally dumped tyres.

Data capture of illegal dumping is limited to Council's Customer Request Management (CRM) database and an activity code for human resource cost capture. CRM records are to note the volume cleaned up and the time spent on that activity. Likewise, the disposal or waste transfer cost to Council is consumed in the total operational spend for waste services.

Council anticipates an increase in illegal waste dumping and littering with the introduction of the proposed State waste levy. Better records will be required to advocate for reimbursement for clean-up of illegal waste dumping due to the introduction of the State waste levy.

Chewko Road is the site of an old landfill and is subject to illegal dumping. Over the last decade, Council have placed boulders and the state government has erected signage. There is some circumstantial evidence that this signage resulted in some decrease in dumping.

In any compliance effort, education is always a good first step and would be a sound pre-emptive action to take prior to the State's waste levy coming into effect. Better signage regarding illegal dumping would be beneficial.

## 5.5. Community and Regional Partnerships

### 5.5.1. FNQROC

MSC is a member of FNQROC and participates in the Waste Management Subgroup to collaborate and make informed decisions regarding the future development and improvement of the region's waste and resource recovery sector. A platform for waste management collaborations between FNQROC Councils was set by the Arcadis Report which detailed a regional situational analysis and identified priority regional waste streams and opportunities.

Arcadis found that all councils in the region struggle with access to secondary markets and transport costs, and the increasing costs and difficulties in developing new waste infrastructure. Other issues included concern about affordable landfill airspace, limited infrastructure and small, dispersed population bases, and that these all impact on a council's ability to deliver and operate viable networks of resource recovery facilities to achieve strategic ambitions.

MSC will continue to work together in a cooperative, coordinated and proactive manner as membership in FNQROC provides MSC with the opportunity to create economies in scale for waste and resource recovery initiatives evidenced by the regional contracts for ferrous scrap metals, used lead acid batteries and biosolids. MSC views the priorities and actions outlined in the Arcadis Report as new opportunities to expand upon these collaborations and consider them to be consistent with its key strategic areas and action items.

### 5.5.2. LAWMAC

LAWMAC provides an opportunity to participate and interact with other local government authorities and waste management industry professionals in the spirit of knowledge sharing and best practice waste management. As such, MSC will continue to hold membership with this waste body whilst it is advantageous to Council's corporate knowledge.



### 5.6. Council's Own Waste

Council recognises that it is a leading community organisation and that it has a role to play as a leader and promoter of waste minimisation and recycling, not just in the services provided to its residents but also in the waste generated through its own activities.

To do this MSC works internally within its functional areas to raise awareness, identify unnecessary waste generation and work to implement initiatives to reduce, reuse and recycle.

## 6. Action plan

The following action plan, summarising the actions from the Key Strategic Focus Areas abovementioned and will guide the short, medium and long-term management of waste in the Mareeba Shire.

Whilst these timeframes are intended to assist in prioritising decisions, actions and infrastructure investment, it is recognised that the waste management industry is always changing and a degree of flexibility is required to accommodate Council's operational, resource, environmental and social constraints. It is also by no means an exhaustive list of actions that Council may undertake over the next years, as new unforeseen opportunities may arise. As such, the action plan is to be reviewed at least every 3 years.



*Figure 15 Upgraded Kuranda Waste Transfer Station 2017*



Table 7 MSC 10 year Waste Action Plan



# Waste Management Services Strategy

2018—2027

[Type here]

Key Strategic Area	Action Item	Action Description	Guiding Principle		Year Programmed										
			Environmentally Sustainable Development	Infrastructure Community	Financial Sustainability	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Waste Reduction and Circular Economy Opportunities	WR 1	Discovery of uncharged services.	X		X										
	WR 2	Noncollection of rubbish next to MGBs and MGBs if lids not closed.	X		X										
	WR 3	Response to problem areas where MGBs require labelling.	X	X	X										
	WR 4	Rationalise designated kerbside collection service areas and/or service model.	X	X	X										
	WR 5	Green waste business analysis and evaluation	X	X	X										
	WR 6	Assessment of impact of QLD Waste Levy on Waste contracts and service delivery.	X	X	X										
	WR 7	Investigate opportunity to establish recycling for non accepted containers under CRS (including MGB waste composition audit).	X	X	X										
	WR 8	Problem waste pricing incentives	X	X	X										
	WR 9	Community information and education		X	X										
	WR 10	Advocate for establishing secondary market locations in Mareeba Shire.	X	X	X										
	WR 11	Encourage C&I and C&D sectors to recycle.	X	X	X										
	WR 12	Diversification of Buy Back Resources	X	X	X										
	WR 13	Identify opportunity to include minimum recycled content to encourage secondary market establishment in the Procurement Policy.		X	X										
	WR 14	Long term MSW disposal / processing strategy	X	X	X										
	WR 15	Long term organics plan	X	X	X										
Waste Infrastructure	WI 1	Old Mareeba Landfill Post Closure Care		X	X										
	WI 2	Mareeba Landfill Assessment of ability to recommence landfilling after a period of no deposition on site.	X	X											
	WI 3	Chillagoe Landfill - Secure and staff site, introduce fees and charges.	X	X	X										
	WI 4	Financial modelling and service options assessment - Mareeba landfill closure, WTS operations, Chillagoe landfill, fees and charges review.	X	X	X										
	WI 5	Alternative disaster waste management sites and services planning		X	X										
	WI 6	Waste Assets register review (for prioritisation in the internal revaluation process therefore year programmed is estimated)	X	X	X										
	WI 7	Chillagoe Landfill - new cell vs transfer station and construct.	X	X	X										
	WI 8	Mareeba Waste Transfer Station Reconfiguration	X	X	X										
	WI 9	Kuranda Transfer Station - waste levy ready	X	X	X										
	WI 10	OML Void - clean earthen only and recommence landfilling if req'd.	X	X	X										
	WI 11	Closure of engineered Mareeba landfill (cells 2, 3, 5).	X	X	X										
	WI 12	Investigate Mareeba Landfill Cells 2-5 Post Closure Care including solar / gas options.	X	X											
	WI 13	Kuranda Transfer Station - efficiency review (pre #1396 contract expiry)	X	X	X										
Littering and Illegal Dumping	ID 1	Create data capture opportunities to identify true cost of illegal dumping and littering to Council	X	X	X										
	ID 2	Preempt state waste levy impacts and implement preventative measures as far as practicable eg education campaign.	X	X	X										
	ID 2	Educational signage at Chewko Road and other potential hotspots.	X	X											
Community and Regional Partnerships	RP 1	Participate in FNQROC's Waste Management Group to develop efficiencies in regional waste management services: data harmonisation, regional waste strategy, regional organics and MSW strategy.	X	X	X										
	RP 2	Continue membership in LAW MAC to better understand the waste business context and emerging issues.	X	X	X										
Council's Own Waste	CW 1	Undertake waste audits at depots and treatment plants with a view to implementing the waste hierarchy.	X	X	X										
	CW 2	Offices & Libraries - Introduction of domestic recycling segregation.		X	X										
Legend															



# Waste Management Services Strategy

2018—2027

ABC News. (2018). *Organised network shifting waste to 'dumping capital of Australia' to avoid tariffs*. [online] Available at: <http://www.abc.net.au/news/2017-08-07/four-corners-australias-organised-waste-trade/8782866> [Accessed 10 Apr.2018].

Abs.gov.au. (2018). *2016 Census*. [online] Available at: <http://www.abs.gov.au/websitedbs/censushome.nsf/home/2016> [Accessed 11 Apr. 2018].

Abs.gov.au. (2018). *4102.0 - Australian Social Trends, 2007*. [online] Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/0/E1E64A4DB813BC8BCA25732C00207FF7> [Accessed 10 Apr. 2018].

Aurecon (2017), *draft Waste Strategy Mareeba Shire Council, June 2017*.

Aurecon (2010), *Waste Strategy Mackay Regional Council, February 2010*.

Australian Bureau of Statistics (2011), *QuickStats - Australian Bureau of Statistics 2011 census data*. [online] Available at: <http://www.abs.gov.au/websitedbs/censushome.nsf/home/quickstats> [Accessed 2018].

Australian National Waste Report, 2016, [online] Available at: <https://www.environment.gov.au/system/files/resources/d075c9bc-45b3-4ac0-a8f2-6494c7d1fa0d/files/national-waste-report-2016.pdf>

Abs.gov.au. (2018). *1370.0 - Measures of Australia's Progress, 2010*. [online] Available at: [http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0~2010~Chapter~Waste%20per%20person%20\(6.6.3\)](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0~2010~Chapter~Waste%20per%20person%20(6.6.3)) [Accessed 11 Apr. 2018]. Cairns Regional Council (2018), *Waste Reduction and Recycling Strategy 2018 - 2027*

Department of Environment and Energy (2017), *National Television and Computer Recycling Scheme, Queensland Government 2017*.

Department of Environment and Heritage Protection (2017), *Queensland Waste and Recycling Strategy, Queensland Government 2017*.

Dilgp.qld.gov.au. (2018). [online] Available at: <https://www.dilgp.qld.gov.au/resources/plan/far-north-queensland/fnq-regional-plan-2009-31.pdf> [Accessed 18 Apr. 2018].

EC Sustainable (2017), *Cairns Domestic Waste and Recycling Characterisation Audit 2016, 2017*.

Economy.id.com.au. (2018). *Businesses by industry | Mareeba (S) | economy.id*. [online] Available at: <https://economy.id.com.au/fnqroc/number-of-businesses-by-industry?sEndYear=2015&BMID=40&WebID=190> [Accessed 11 Apr. 2018].

Ibisworld.com.au. (2018). *Waste Treatment and Disposal Services – Australia Industry Report | IBISWorld*. [online] Available at: <https://www.ibisworld.com.au/industry-trends/market-research-reports/electricity-gas-water-waste-services/waste-treatment-disposal-services.html> [Accessed 10 Apr. 2018].

Mareeba Chamber of Commerce (2018) *Mareeba Chamber of Commerce Economic Snapshot, Mareeba*.



Queensland Labor, 2017, Putting Queenslanders First State Platform 2017

Queensland Treasury, Queensland Government Statistician's Office (2015), *Population growth highlights and trends, Queensland, 2015 edition*.

Queensland Government Statistician's Office, Queensland Treasury (2018), *Queensland Regional Profiles: Resident Profile for Mareeba (S) Local Government Area*

Queensland Treasury Corporation (2018) *Interim Report: Economic opportunities for Queensland waste industry - version for public release*.

Resource Innovations (2018) *Mareeba Landfill Void*.

Resource Innovations (2018) Mareeba Landfill Future Options Assessment.

Pacifica Chartered Accountants, 2014 *Waste Services Situation Analysis and Risk Identification Review*.

SUEZ Recycling and Recovery (2017) ARRT Facilities, SUEZ Recycling and Recovery Pty Ltd.

Wmaa.asn.au. (2018). *Media Releases*. [online] Available at:  
[https://www.wmaa.asn.au/Public/Media\\_hub/Newsroom/Media\\_Releases/Public/Media\\_hub/Media\\_Releases.aspx?hkey=409c3920-212c-40d6-97a2-28724a396888](https://www.wmaa.asn.au/Public/Media_hub/Newsroom/Media_Releases/Public/Media_hub/Media_Releases.aspx?hkey=409c3920-212c-40d6-97a2-28724a396888) [Accessed 11 Apr. 2018].



# WASTE STRATEGY 2018 - 2027

MAREEBA SHIRE COUNCIL

## OUR KEY STRATEGIC FOCUS AREAS

### OUR VISION

Waste management for the community that enhances liveability and protects the environment.

### OUR MISSION

To provide cost effective waste services to the community through collaborative relationships and accountable governance.

### OUR GUIDING PRINCIPLES

Financial Sustainability

Community Service

Beneficial Infrastructure

Environmentally Sustainable Development

Reduce, Reuse, Recycle



#### WASTE REDUCTION



Encourage and support waste reduction and to increase recycling.

#### CIRCULAR ECONOMY OPPORTUNITIES



Advocate for the establishment of secondary resource processing markets into our Shire.

#### WASTE INFRASTRUCTURE



Ensure infrastructure is equipped to responsibly process wastes and resources into the future to provide an essential environmental health service for the community.

#### LITTERING AND ILLEGAL DUMPING



Minimise the impact of littering and illegal dumping on the environment and our community.

#### COMMUNITY AND REGIONAL PARTNERSHIPS



Foster partnerships to provide cost effective arrangements consistent with the strategic focus areas.

#### COUNCIL'S OWN WASTE



To lead in waste management by example.



**9.7 INFRASTRUCTURE SERVICES, WASTE OPERATIONS REPORT - NOVEMBER 2018**

**Date Prepared:** 4 December 2018

**Author:** Manager Water and Waste

**Attachments:** Nil

---

**EXECUTIVE SUMMARY**

The purpose of this report is to summarise Council's Waste activities undertaken by the Infrastructure Services Department during the month of November 2018.

**RECOMMENDATION**

That Council receives the Infrastructure Services, Waste Operations Progress Report, November 2018.

**BACKGROUND**

The following is a 'snapshot' of the waste activities undertaken during the month of November 2018.

**1. Waste Operations**

- 5,528 vehicles entered Mareeba waste facility (to drop off or pick up waste)
- 700 vehicles deposited waste to Mareeba Landfill (total)
- 131 Suez vehicles deposited waste to Mareeba Landfill
- 42 Suez vehicles removed waste from Mareeba Waste Transfer Station (WTS) to recycling facility in Cairns
- 380 m<sup>3</sup> of mulch (purchased) removed from Mareeba WTS (62 m<sup>3</sup> in bulk sales and 318 m<sup>3</sup> in small lots)
- Current Mareeba Landfill Compaction Rate of 0.84 tonnes per cubic metre.
- 3.94 Tonnes of recyclable material transferred to Cairns MRF from Mareeba WTS
- All transfer stations and Mareeba landfill are currently operational

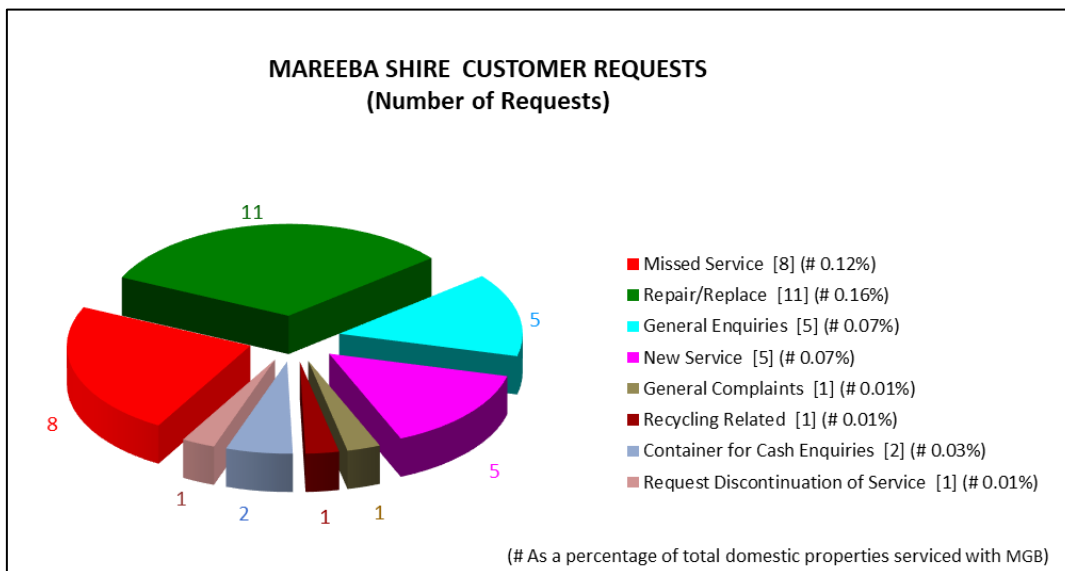
**2. Environmental Summary**

The 2017-2018 annual interpretative report has been received for environmental monitoring.

Council officers have communicated these interpretative results to the Department of Environment and Science (DES) and will be seeking amendments to the Environmental Authority in 2019. These amendments aim to make the monitoring requirements and limits more meaningful building on the interpretative results of the last 4 years.

**3. Customer Service Waste Statistics**

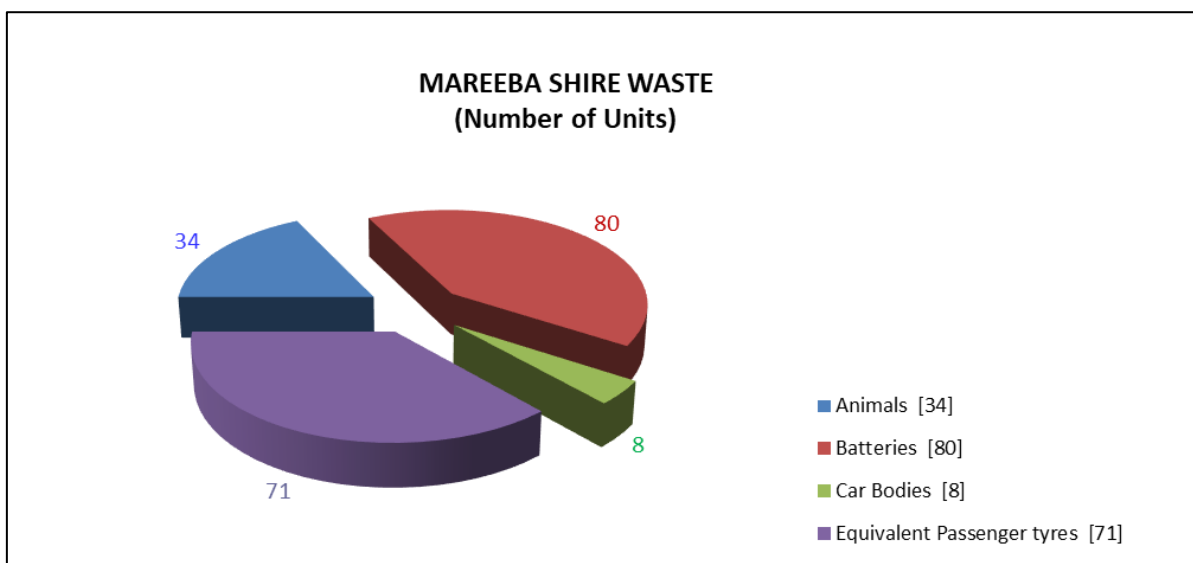
The following graph displays customer requests logged in the Customer Request Management (CRM) system during the month of November 2018. The number of requests in relation to missed services decreased compared with the previous month, following a successful media campaign which notified of changes to collection days and reminded residents that bins must be put out the night before collection day.

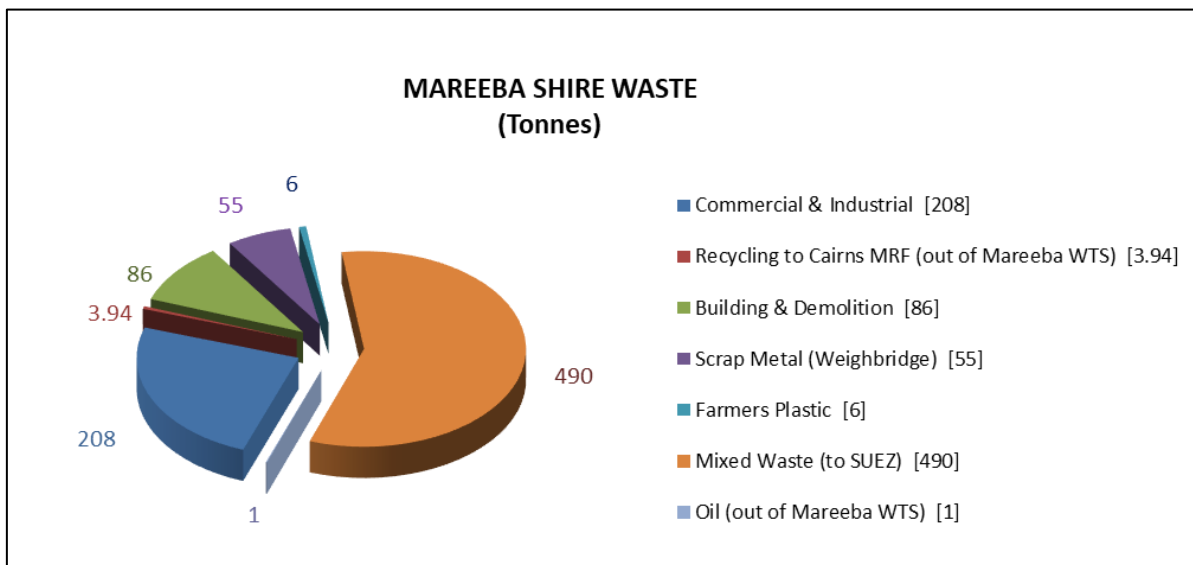


#### 4. Waste Collected at Each of the Transfer Stations

Waste material collected at each of the waste transfer stations is either deposited directly to the Mareeba landfill, recycled or transported to the Suez facility in Cairns for processing.

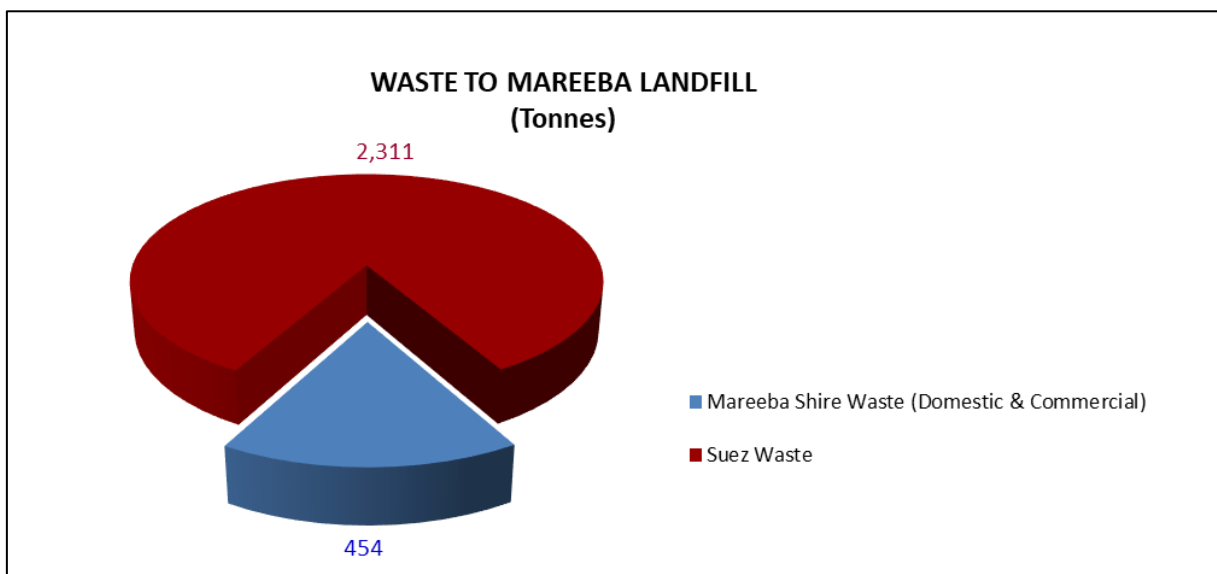
The following pie charts are separated into waste received as whole units and waste received as accrued tonnage.





## 5. Waste to Mareeba Landfill

The Mareeba Shire waste shown in the pie chart below is the waste collected at each of the waste transfer stations (Mareeba included) and deposited directly to the Mareeba landfill. The commercial waste shown below is derived from the Suez recycling plant in Cairns and deposited into the Mareeba landfill.



## 6. Budget - Waste

### Revenue

	Annual Budget (\$)	YTD Budget (\$)	YTD Actual (\$)
MGB Service	2,160,544.00	1,078,605.35	1,086,885.17
Unserviced Levy	1,525,462.00	762,731.00	765,704.95
Commercial Disposal	1,223,500.00	509,791.70	356,956.39
Waste Interest	50,000.00	20,833.35	10,922.36
Recycling - Metal	110,000.00	45,833.35	132,018.73
<b>Total</b>	<b>5,069,506.00</b>	<b>2,417,794.75</b>	<b>2,352,487.60</b>

### Expenditure



	Annual Budget	YTD Budget	YTD Actual
Landfills	1,468,914.46	614,340.28	585,390.29
WTS	1,249,214.49	520,288.81	532,648.38
Collection & Transport Costs	800,000.00	333,333.35	272,863.59
Recycling	40,000.00	16,666.65	17,191.04
NCP Admin Charges	201,804.00	84,085.00	84,085.00
<b>Total</b>	<b>3,759,932.95</b>	<b>1,568,714.09</b>	<b>1,492,178.30</b>

**RISK IMPLICATIONS****Environmental**

Council holds an environmental authority issued under the Environmental Protection Act 1994 to operate landfill facilities.

**LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

Nil

**FINANCIAL AND RESOURCE IMPLICATIONS****Capital**

Nil

***Is the expenditure noted above included in the current budget?***

Yes

**Operating**

Nil

**LINK TO CORPORATE PLAN**

**Community:** an engaged community which supports and encourages effective partnerships to enhance the liveability of the shire and the wellbeing of residents in communities which are resilient and prepared for unforeseen events.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**IMPLEMENTATION/COMMUNICATION**

Nil

## 9.8 INFRASTRUCTURE SERVICES, WATER AND WASTEWATER GROUP MONTHLY OPERATIONS REPORT - NOVEMBER 2018

**Date Prepared:** 5 December 2018

**Author:** Manager Water and Waste

**Attachments:** Nil

### EXECUTIVE SUMMARY

The purpose of this report is to summarise Council's Water and Wastewater activities undertaken by the Infrastructure Services Department during the month of November 2018.

### RECOMMENDATION

That Council receives the Infrastructure Services, Water and Wastewater Progress Report for the month of November 2018.

### BACKGROUND

#### 1. Capital and Maintenance Works Projects

Mareeba CBD Water Main Project is progressing well with the new water main on Byrnes S installed and commissioned. Asphalt, linemarking, street trees and landscaping works have been completed. Work has commenced on the Rankin Street water main upgrade from the Byrnes Street intersection to Constance Street, with works due to be completed by the end of December.



#### 2. Budget - Water

##### MSC Water Income to Month of November

	<i>Annual Budget (\$)</i>	<i>YTD Budget (\$)</i>	<i>YTD Actual (\$)</i>
Water Rates	3,326,023.00	1,663,011.50	1,674,544.65
Water Interest Earned Const Wks	25,000.00	10,416.65	24,821.83
Water NCP Internal Revenue	300,400.00	125,166.70	125,166.70
Water 3rd Party Works	45,000.00	18,750.00	43,218.44
Water Sundry Income	35,000.00	14,583.35	24,578.46
<b>Total</b>	<b>3,731,423.00</b>	<b>1,831,928.20</b>	<b>1,892,330.08</b>

**MSC Water Expense to Month of November**

	<b>Annual Budget (\$)</b>	<b>YTD Budget (\$)</b>	<b>YTD Actual (\$)</b>
Water Treatment Plant Op/ Maintenance	3,192,059.50	1,406,598.48	1,299,187.62
Water Reticulation Op/ Maintenance	1,692,403.82	695,321.43	613,368.47
Water NCP Admin Charges	272,300.00	113,458.35	113,458.25
<b>Total</b>	<b>5,156,763.32</b>	<b>2,215,378.26</b>	<b>2,026,014.34</b>

**3. Budget - Wastewater****MSC Wastewater Income to Month of November**

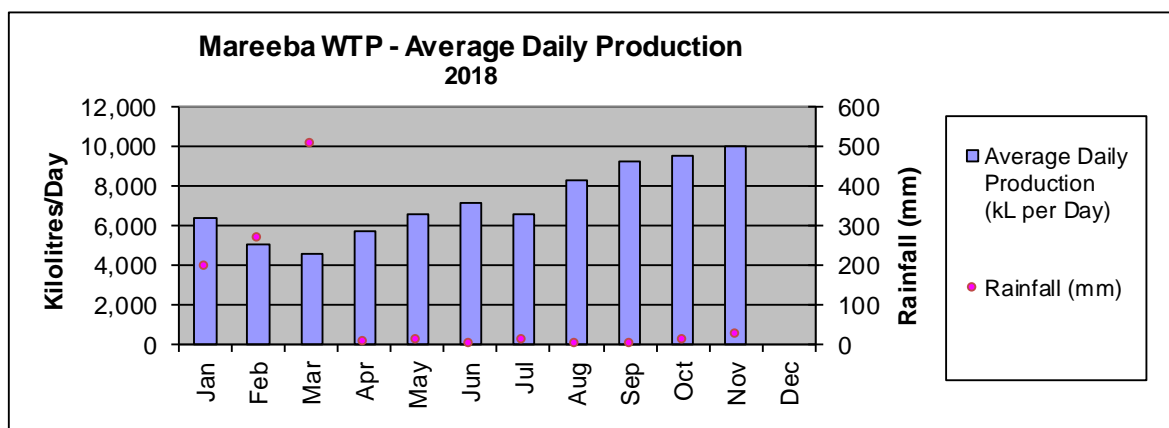
	<b>Annual Budget (\$)</b>	<b>YTD Budget (\$)</b>	<b>YTD Actual (\$)</b>
Wastewater Rates	4,777,524.00	2,388,762.00	2,394,267.20
Wastewater Interest Earned Const Wks	85,000.00	35,416.65	-3,640.24
Wastewater NCP Internal Revenue	38,000.00	15,833.35	15,833.30
Wastewater NCP Community Service Obligation	119,400.00	49,750.00	49,750.00
<b>Total</b>	<b>5,019,924.00</b>	<b>2,489,762.00</b>	<b>2,456,642.32</b>

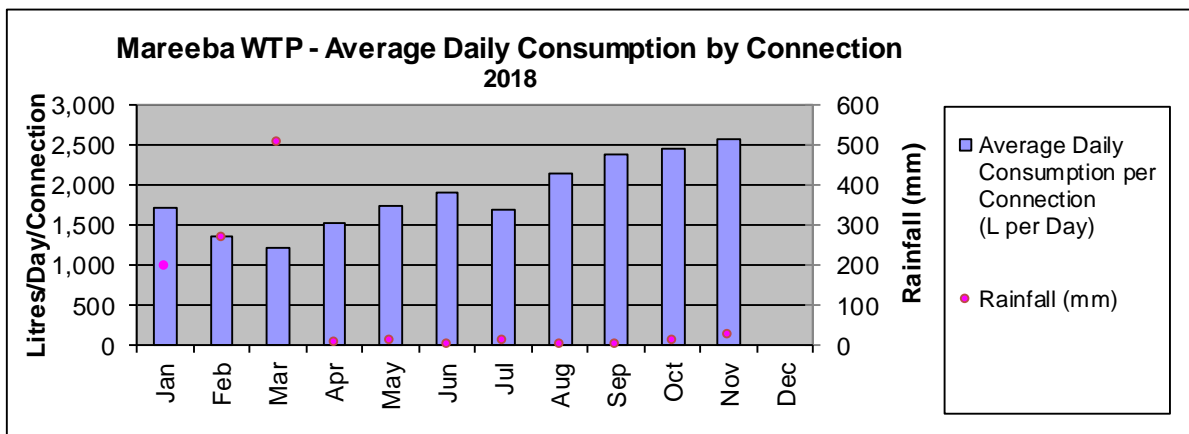
**MSC Wastewater Expense to Month of November**

	<b>Annual Budget (\$)</b>	<b>YTD Budget (\$)</b>	<b>YTD Actual (\$)</b>
Wastewater Treatment Plant Op/Maintenance	2,156,801.10	926,156.43	755,916.45
Wastewater Reticulation Op/ Maintenance	1,622,563.88	676,557.71	656,025.75
Wastewater NCP Admin Charges	163,300.00	68,041.65	68,041.65
<b>Total</b>	<b>3,942,664.98</b>	<b>1,670,755.79</b>	<b>1,479,983.85</b>

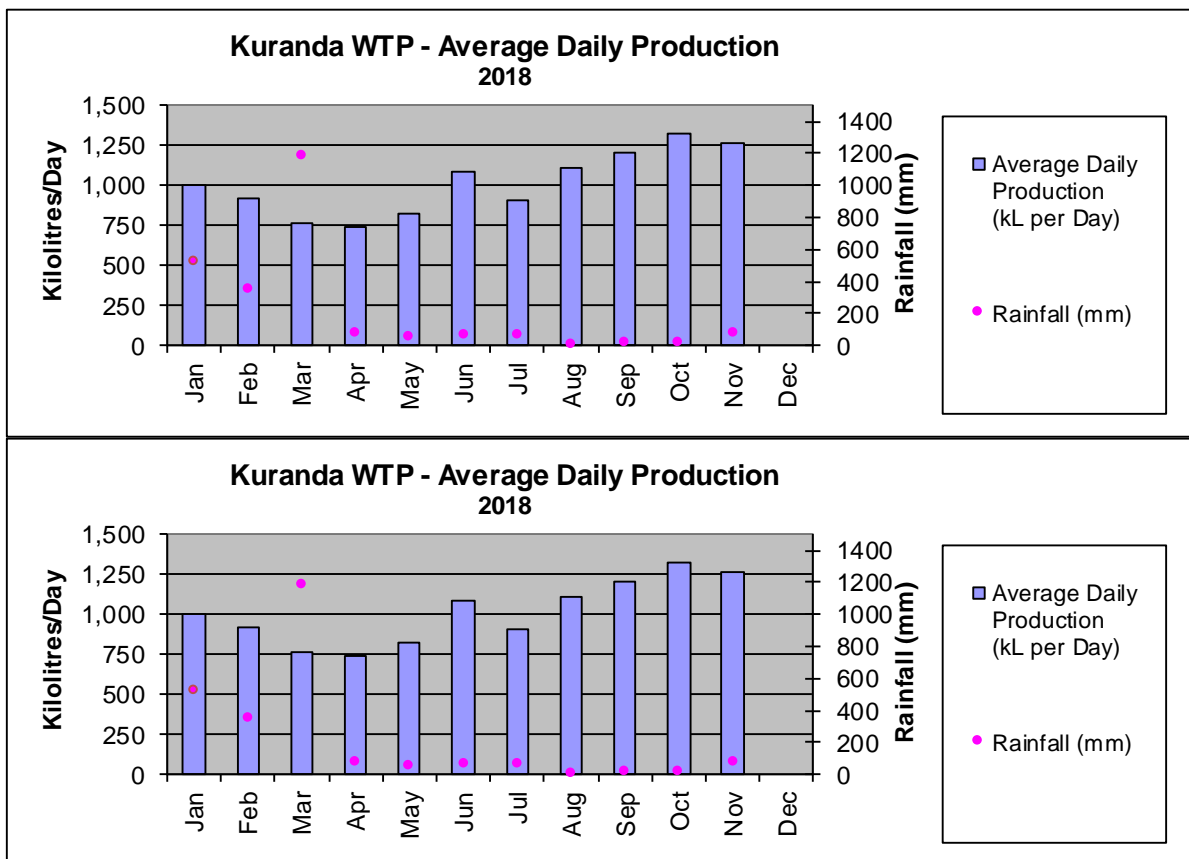
**4. Chlorine Residual Readings**

November 2018	Chlorine Residual Readings 2018												
	Australian Drinking Water Guidelines Maximum 5mg/L												
	Fri 2nd	Mon 5th	Wed 7th	Fri 9th	Mon 12th	Wed 14th	Fri 16th	Mon 19th	Wed 21st	Fri 23rd	Mon 26th	Thu 25	Fri 30th
	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)	Free Cl (mg/L)
Mary Andrews Park Mareeba	0.77	1.13	1.10	1.14	1.16	0.91	1.05	0.86	1.09	1.06	1.19	0.98	1.14
Wylandra Drive Mareeba	0.68	0.64	0.59	0.63	0.67	0.58	0.61	0.56	0.51	0.54	0.59	0.63	0.52
Gregory Terrace Kuranda	1.12	1.18	0.91	1.08	1.00	1.15	1.19	1.15	1.08	1.18	0.84	0.68	0.60
Mason Rd PS Kuranda	1.28	1.24	1.22	1.19	1.26	1.32	1.26	1.15	1.26	1.29	0.92	1.00	1.00
Chillagoe	1.10	0.95	1.25	1.20	1.18	1.20	1.22	1.23	1.19	1.20	1.20	1.20	1.18
Dimbulah	1.15	1.22	1.19	1.20	1.22	1.43	1.26	1.35	1.16	1.12	0.99	1.09	1.14

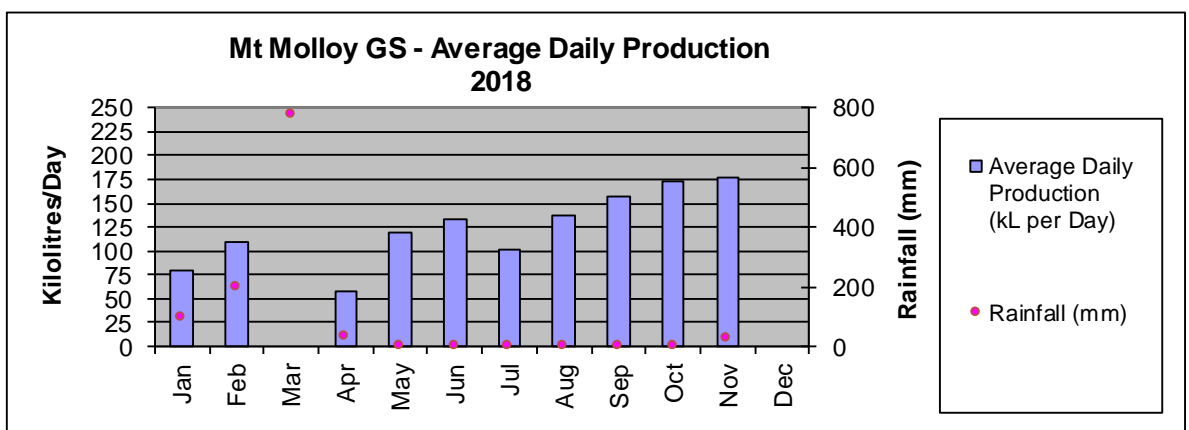
**5. Mareeba Water Supply Scheme – Operations Data**

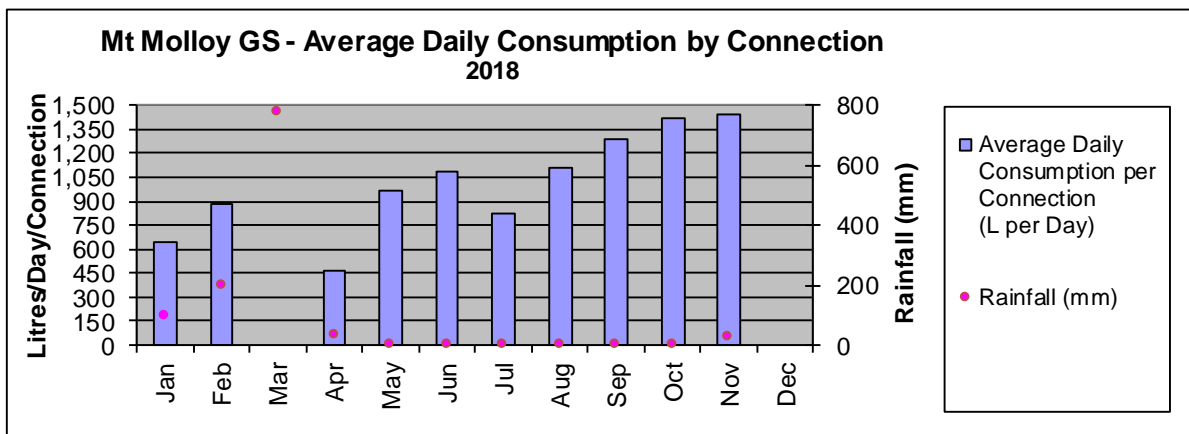


## 6. Kuranda Water Supply Scheme - Operations Data

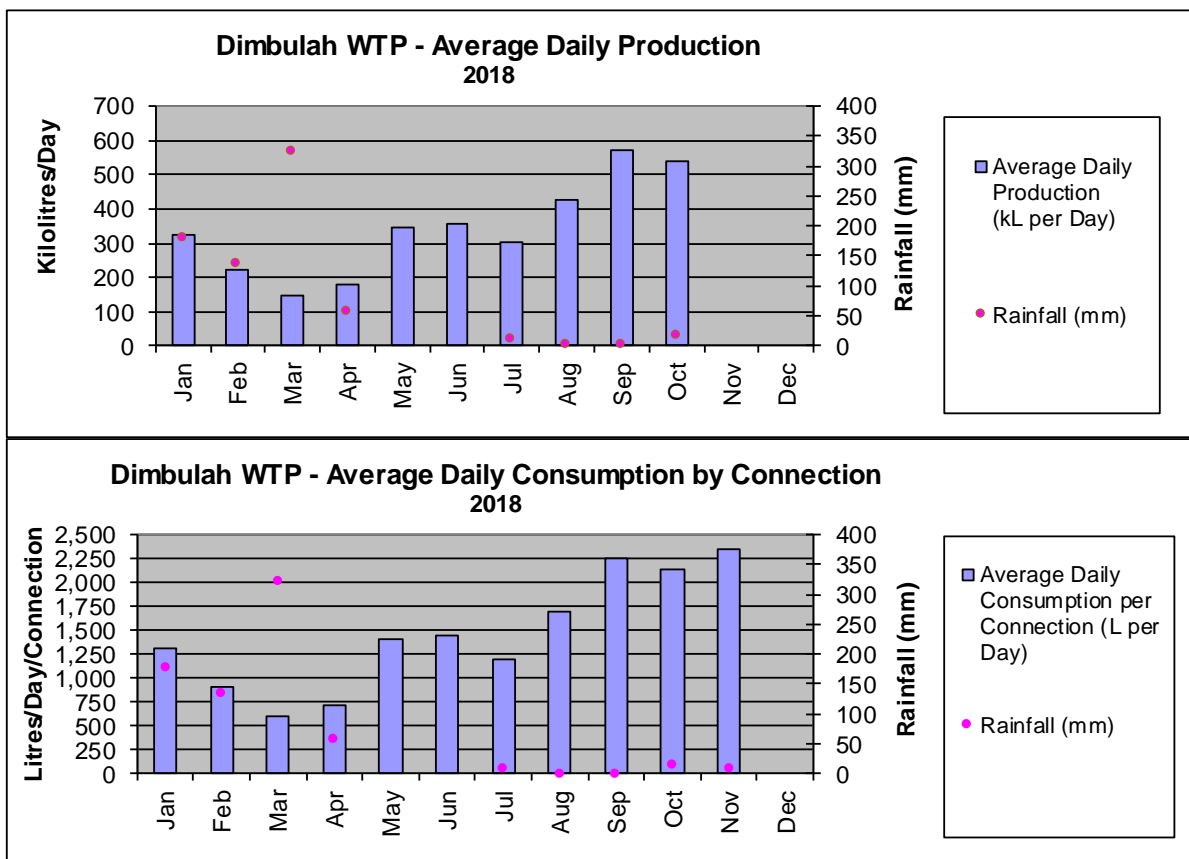


## 7. Mount Molloy Water Supply Scheme - Operations Data

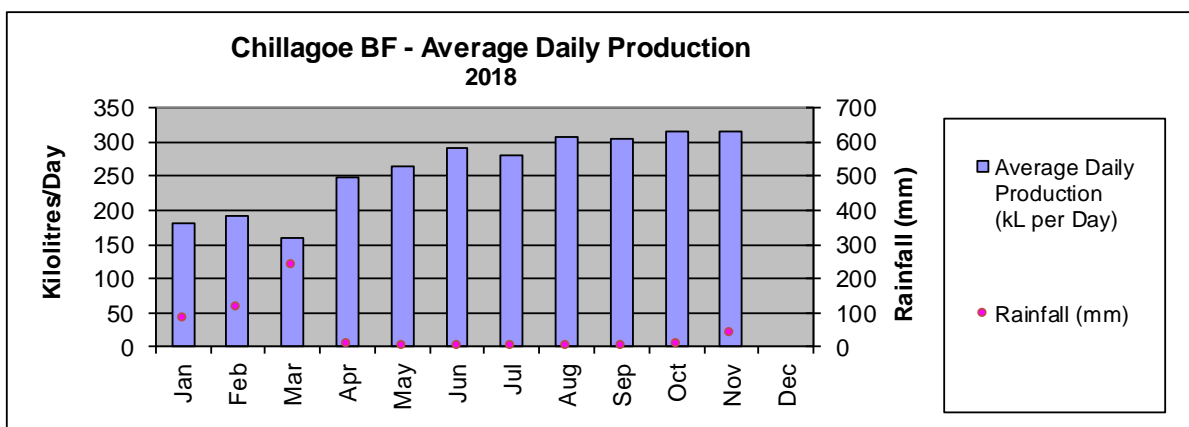




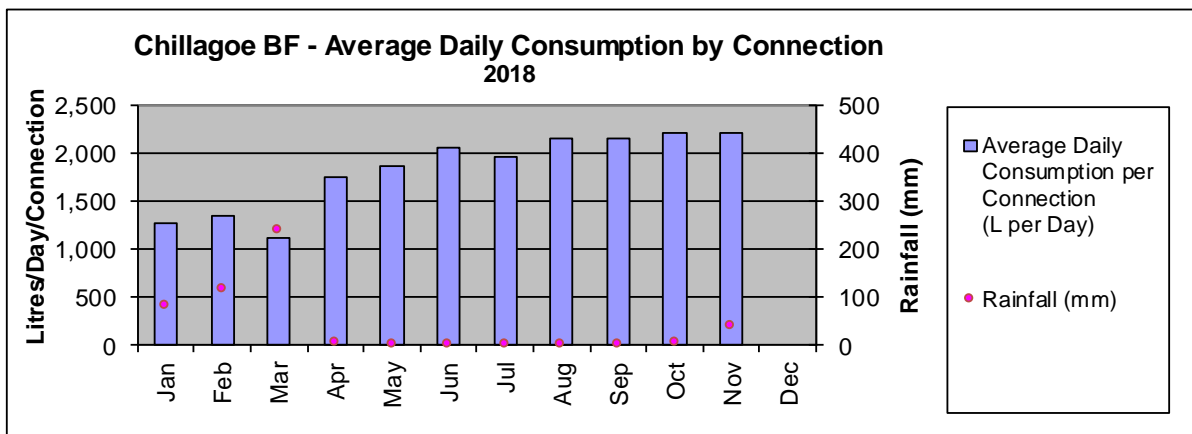
## 8. Dimbulah Water Supply Scheme - Operations Data



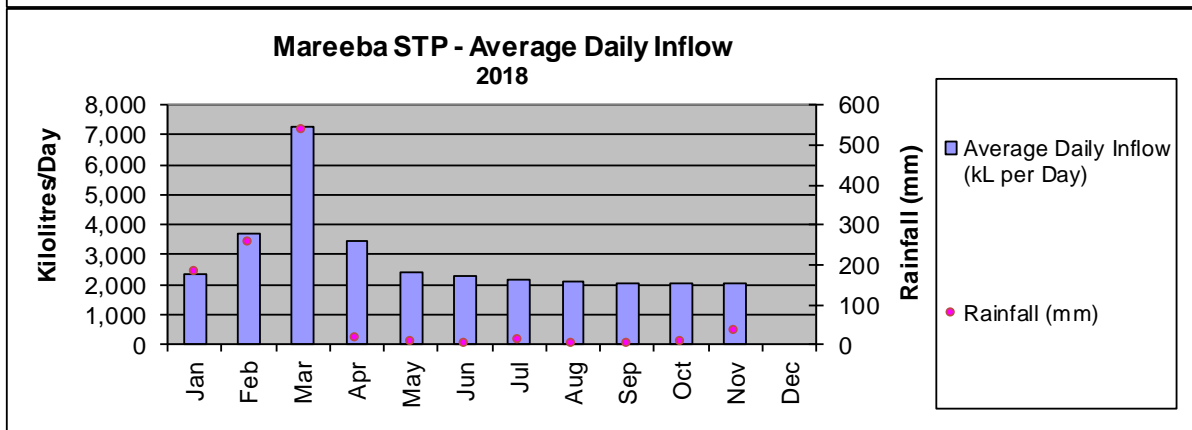
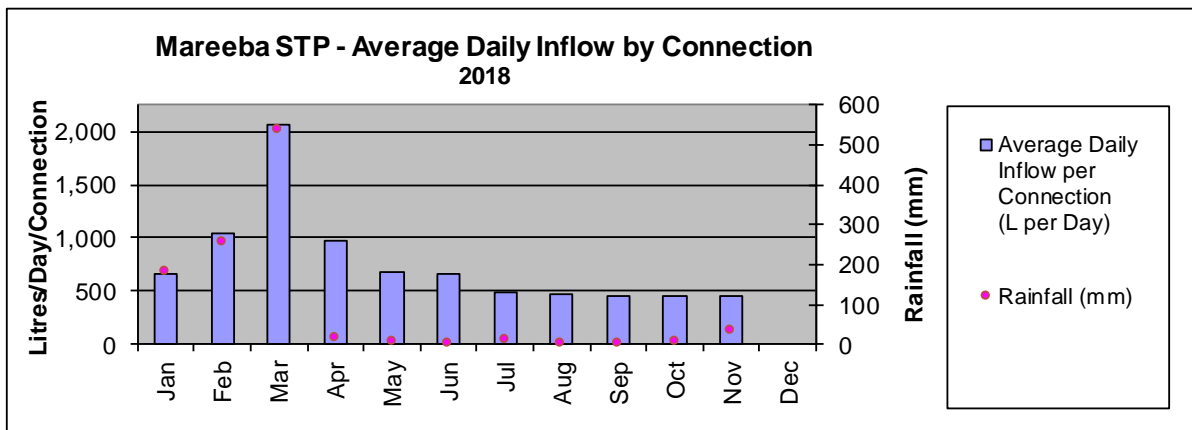
## 9. Chillagoe Water Supply Scheme - Operations Data



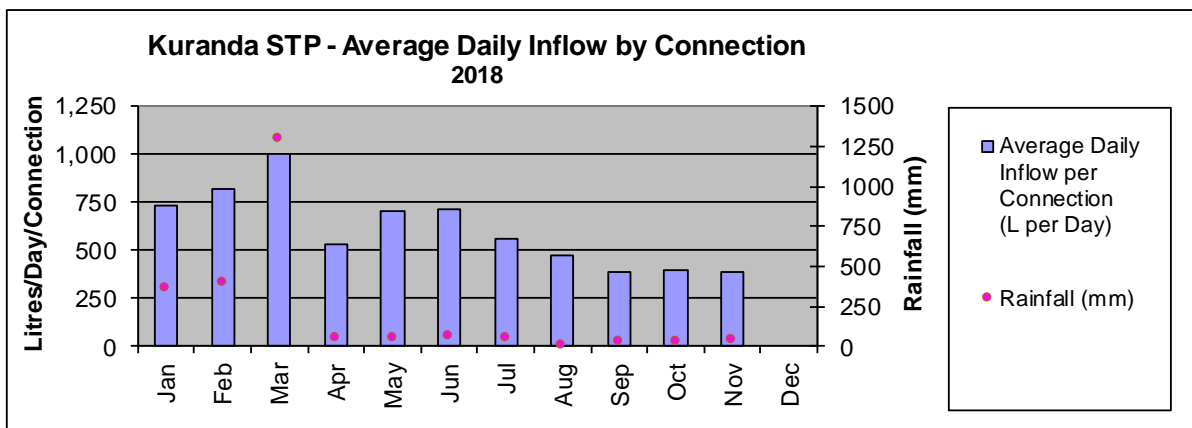


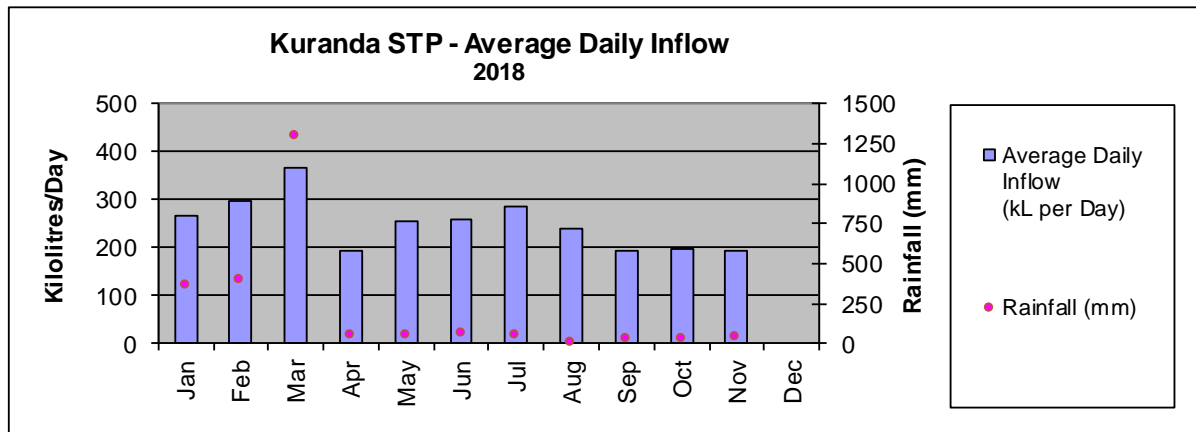


**10. Mareeba Wastewater Treatment Plant - Operations Data**



**11. Kuranda Wastewater Treatment Plant - Operations Data**





## RISK IMPLICATIONS

Nil

## LEGAL/COMPLIANCE/POLICY IMPLICATIONS

As a drinking water service provider, Mareeba Shire Council is required under the Water Supply (Safety and Reliability) Act 2008 to comply with various legislative and statutory requirements. Council holds an environmental authority issued under the Environmental Protection Act 1994 to operate water and wastewater treatment facilities.

## FINANCIAL AND RESOURCE IMPLICATIONS

### **Capital**

All capital works are listed in and funded by the 2018/19 Capital Works Program.

### **Operating**

All operational works are funded by the Section specific 2018/19 maintenance budgets.

## LINK TO CORPORATE PLAN

**Financial Sustainability:** A council that continuously looks for savings and opportunities while managing council's assets and reserves to ensure a sustainable future in a cost-effective manner.

**Community:** An engaged community which supports and encourages effective partnerships to enhance the liveability of the shire and the wellbeing of residents in communities which are resilient and prepared for unforeseen events.

**Transport and Council Infrastructure:** The provision of quality services and infrastructure for our growing community that is planned and managed using sound asset management principles.

**Economy and Environment:** A resilient economy that promotes and supports the shire's natural assets and local industry and encourages investment while preserving and future proofing for generations to come.

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

Nil

**KEY COMMUNICATION MESSAGES – INTERNAL USE ONLY**



## 10 OFFICE OF THE CEO

### 10.1 MAREEBA COMMUNITY HUB

**Date Prepared:** 11 December 2018  
**Author:** Chief Executive Officer  
**Attachments:** Nil

---

#### EXECUTIVE SUMMARY

The purpose of this report is to propose to Council a course of action that will lead to a Win/Win for the Community and the Mareeba and Memorial Bowls Club.

It is proposed that Council enter into an agreement to acquire the land and facilities on Anzac Avenue, Mareeba, from the Mareeba and Memorial Bowls Club Incorporated for the purpose of developing a hub for community services and activities including, but not limited to:

- Sport and recreation, including lawn bowling;
- Community services and training activities;
- Community events; and
- Library services.

#### RECOMMENDATION

That Council enter into an agreement with the Mareeba and Memorial Bowls Club Incorporated to acquire the land and facilities on Anzac Avenue, Mareeba, contingent on the following conditions:

- that cost estimates following a Quantity Surveyors report are within an affordable range;
- that Grant funding is approved for the construction of new facilities for the Bowls Club and Reconfiguration of the existing premises into a Community facility; and
- that the Tenders received for all these works being within the anticipated price range.

#### BACKGROUND

Following a change in strategic direction by the Mareeba and Memorial Bowls Club with the focus now being on the sporting rather than commercial aspect they have decided to dispose of their assets with a view to establishing a smaller clubhouse and synthetic covered bowling green.

For a number of years Council has recognised that the size of the current library facilities in Mareeba is insufficient to meet the demand from community. Council has therefore been seeking alternative accommodation options for this service but until now has not been able to find anything that is suitable and affordable.

As a Win/Win it is proposed that Council acquire the land and facilities on Anzac Avenue from the Mareeba Bowling Club for the purpose of developing a hub for community services and activities including, but not limited to:

- Sport and recreation, including lawn bowling;



- Community services and training activities;
- Community events; and
- Library services.

The following new and reconfigured facilities are required to transform the site into a community hub:

- Modifications to the main building to cater for Community services and training activities, a space for community events and recreational activities and provide space for a modern multi-faceted library service;
- Build new clubhouse and synthetic covered bowling green;

The Mareeba and Memorial Bowls Club Incorporated would be a community partner in the project and will be a key user group at the future Hub. They would be offered a long term renewable lease at peppercorn rates so they can continue to operate and deliver the important sporting and social activities the community requires at minimal cost to the users.

This proposal for the development of the Mareeba Hub is dependent on a number of factors. Firstly the various components will need to be costed for the grant application and need to fall within the affordability range of Council. Then the grant application must be successful for the new and reconfigured facilities. Then finally the prices that are submitted when the project is put to Tender must fall within the cost estimates.

Should any of these conditions not be met then the project will not proceed.

## **RISK IMPLICATIONS**

### **Financial**

Financial risks to Council will be managed through a legal agreement which provides for conditions, as set out above, to be met.

## **LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

A legal agreement (deed) will set out the acquisition arrangements including a number of contingencies such as confirmation of cost estimates, successful grant funding, and tendering outcomes.

## **FINANCIAL AND RESOURCE IMPLICATIONS**

### **Capital**

Minor structural and non-structural amendments to the facility will be required to purpose-fit a library service. Construction of the new clubhouse and synthetic bowling green will also need to be funded as part of this proposal.

### ***Is the expenditure noted above included in the current budget?***

No.

### ***If not you must recommend how the budget can be amended to accommodate the expenditure***

This proposal is subject to receiving a grant through the Local Government Grants and Subsidy program. Councils contribution will be provided for in the next financial years budget.

**LINK TO CORPORATE PLAN**

**Community:** An engaged community which supports and encourages effective partnerships to enhance the liveability of the shire and the wellbeing of residents in communities which are resilient and prepared for unforeseen events.

**IMPLEMENTATION/COMMUNICATION**

A Deed of Agreement will be prepared together with a grant submission to further advance this decision.



**10.2 AMENDMENT TO SUBORDINATE LOCAL LAW NO. 1 (ANIMAL MANAGEMENT) 2018**

**Date Prepared:** 18 December 2018

**Author:** Chief Executive Officer

**Attachments:** 1. Amending Subordinate Local Law No.1 (Animal Management) 2018 [↓](#)

---

**EXECUTIVE SUMMARY**

Since adopting the Local Laws, a typographical error has been identified in Subordinate Local Law No. 2 (Animal Management) 2018 (“SLL2”) that will affect Council’s ability to enforce certain provisions of the Local Law.

The error is in Schedule 1 of SLL2, which lists circumstances in which keeping animals are prohibited.

**RECOMMENDATION**

That Council:

1. propose to adopt Amending Subordinate Local Law No. 1 (Animal Management) 2018 (“**the Amending Local Law**”);
2. pursuant to section 257 of the Local Government Act 2009 (“**the Act**”), to delegate to the Chief Executive Officer of Council its powers to:
  - (a) under section 29(1) of the Act and Council’s Process for Making Local Laws, decide the public consultation requirements for the Amending Local Law and proceed with public consultation;
  - (b) under section 38 of the Act, section 15 of the Local Government Regulation 2012 and Council’s Process for Making Local Laws, decide whether a review of the Amending Local Law for anti-competitive provisions is required, and if one is required, how it is conducted.

**BACKGROUND**

Since adopting the Local Laws, a typographical error has been identified in *Subordinate Local Law No. 2 (Animal Management) 2018* (“**SLL2**”) that will affect Council’s ability to enforce certain provisions of the Local Law.

The error is in Schedule 1 of SLL2, which lists circumstances in which keeping animals are prohibited.

The relevant parts of Schedule 1 of SLL2 currently read as follows:

	<b>Column 1 Animal</b>	<b>Column 2 Circumstances in which keeping of animal or animals is prohibited</b>
1	Dog	(a) Keeping more than 1 dog is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex in an urban area.
2	Cat	(a) Keeping more than 2 cats is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex in an urban area.
3	Poultry	(a) Keeping poultry is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex in an urban area.  (b) Keeping more than 10 poultry is prohibited on a property greater than 450m <sup>2</sup> but less than 20,000m <sup>2</sup> in an urban area.  (c) Keeping more than 50 poultry is prohibited on a property greater than 20,000m <sup>2</sup> in an urban area.
4	Rooster	(a) Keeping a rooster is prohibited on a property that is less than 20,000m <sup>2</sup> or within a residential complex in an urban area.  (b) Keeping more than 1 rooster is prohibited on a property that is greater than 20,000m <sup>2</sup> in an urban area.
5	Noisy bird	(a) Keeping a noisy bird is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex in an urban area.  (b) Keeping more than 2 noisy birds is prohibited on a property in an urban area.
6	Caged bird	(a) Keeping more than 10 caged birds is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex, in an urban area.  (b) Keeping more than 60 caged birds is prohibited on a property in an urban area in an urban area.
8	Stock (excluding horses)	Keeping stock (excluding horses) is prohibited on a property that is less than 10,000m <sup>2</sup> within a residential complex in an urban area.
10	Horses	Keeping horses is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex in an urban area.



From an enforcement perspective, the issue with this drafting is that:

In the case of cats, dogs, poultry, roosters, noisy birds and horses, the prohibition applies to land of the area specified even if that land is not located within an urban area. Council's intention is for the prohibition to apply only to land located within an urban area;

in the case of stock (excluding horses), it suggests that stock is only prohibited within a residential complex in an urban area if the property is less than 10,000m<sup>2</sup>.

There is also an error in Item 6(b), in that the words "in an urban area" are repeated twice.

These parts of Schedule 1 of SLL2 should be amended to read:

	<b>Column 1 Animal</b>	<b>Column 2 Circumstances in which keeping of animal or animals is prohibited</b>
1	Dog	(a) Keeping more than 1 dog is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex, in an urban area.
2	Cat	(a) Keeping more than 2 cats is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex, in an urban area.
3	Poultry	(a) Keeping poultry is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex, in an urban area.  (b) Keeping more than 10 poultry is prohibited on a property greater than 450m <sup>2</sup> but less than 20,000m <sup>2</sup> in an urban area.  (c) Keeping more than 50 poultry is prohibited on a property greater than 20,000m <sup>2</sup> in an urban area.
4	Rooster	(a) Keeping a rooster is prohibited on a property that is less than 20,000m <sup>2</sup> or within a residential complex, in an urban area.  (b) Keeping more than 1 rooster is prohibited on a property that is greater than 20,000m <sup>2</sup> in an urban area.
5	Noisy bird	(a) Keeping a noisy bird is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex, in an urban area.

		(b) Keeping more than 2 noisy birds is prohibited on a property in an urban area.
6	Caged bird	(a) Keeping more than 10 caged birds is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex, in an urban area.  (b) Keeping more than 60 caged birds is prohibited on a property in an urban area in an urban area.
8	Stock (excluding horses)	Keeping stock (excluding horses) is prohibited on a property that is less than 10,000m <sup>2</sup> <u>or</u> within a residential complex, in an urban area.
10	Horses	Keeping horses is prohibited on a property that is less than 450m <sup>2</sup> or within a residential complex, in an urban area.

These issues can be corrected by drafting an Amending Subordinate Local Law.

### Anti-Competitive Provisions

Council has adopted a Local Law Making Process (“**the Process**”).

Part B, Item 3 of the Process states that:

*Council reviews the local law to identify any possible anti-competitive provisions, using the ‘Guidelines to assist Local Governments to identify possible anti-competitive provisions in proposed local laws and proposed local law policies’.*

A comprehensive review of possible anti-competitive provisions was carried out before the SLL was adopted in 2018. The amendments proposed in the Amending SLL have no further or additional impact to competition than what was contemplated by the comprehensive review already carried out by Council. The amendments are not of themselves anti-competitive. On that basis, no further review is necessary.

### Public Consultation

Part B, Item 5 of the Process states that:

*Council undertakes any appropriate community engagement in accordance with the Council’s Community Engagement Policy and Guide to Engagement.*

The recommended resolution delegates to the Chief Executive Officer the authority to decide the public consultation process.

Given the changes are very limited in nature, and aimed at merely clarifying the existing interpretation of the SLL, it is proposed that consultation comprise of:

- (a) advertising on Council's noticeboard and website;
- (b) notifying any persons who Council's Local Law Department considers may need to be specifically notified;
- (c) allowing interested parties approximately three weeks, ending 11 January 2018, to make submissions.

**LEGAL/COMPLIANCE/POLICY IMPLICATIONS**

Without the corrections the Local Law is subject to interpretation and legal challenge. These amendments clarify the Local Law.

**FINANCIAL AND RESOURCE IMPLICATIONS*****Capital***

Nil

***Operating***

Nil

**LINK TO CORPORATE PLAN**

**Governance:** Sound decision making based on effective frameworks and clear strategic direction to achieve regulatory compliance and affordable levels of service delivered to the community.

**IMPLEMENTATION/COMMUNICATION**

The proposed amendment will be advertised for public consultation and a Report will be tabled at the January 2019 meeting.

**Mareeba Shire Council  
Amending Subordinate Local Law No. 1 (Animal Management) 2018**

Contents

---

<b>Part 1</b>	<b>Preliminary</b>	<b>2</b>
1	Short title .....	2
2	Object .....	2
3	Commencement .....	2
<b>Part 2</b>	<b>Amendment of Subordinate Local Law No. 2 (Animal Management) 20182</b>	
4	Local law amended .....	2
5	Amendment of Schedule 1 (Prohibition on keeping animals) .....	2

mare0004\_181852\_005.doc

---

## **Part 1 Preliminary**

### **1 Short title**

This local law may be cited as *Amending Subordinate Local Law No. 1 (Animal Management) 2018*.

### **2 Object**

The object of this local law is to amend *Subordinate Local Law No. 2 (Animal Management) 2018* to correct typographical errors and achieve consistency.

### **3 Commencement**

This local law commences upon publication of the notice of *Amending Subordinate Local Law No. 1 (Animal Management) 2018* in the Gazette.

## **Part 2 Amendment of Subordinate Local Law No. 2 (Animal Management) 2018**

### **4 Local law amended**

This part amends *Subordinate Local Law No. 2 (Animal Management) 2018*

### **5 Amendment of Schedule 1 (Prohibition on keeping animals)**

- (1) Schedule 1, Item 1 (Dog), Column 2 —

After 'complex'—

insert—

,

- (2) Schedule 1, Item 2 (Cat), Column 2 —

After 'complex'—

insert—

,

- (3) Schedule 1, Item 3 (Poultry), Column 2, paragraph (a) —

After 'complex'—

insert—

,



- 
- (4) Schedule 1, Item 4 (Rooster), Column 2, paragraph (a) —  
After 'complex'—  
insert—  
,
  - (5) Schedule 1, Item 5 (Noisy bird), Column 2, paragraph (a) —  
After 'complex'—  
insert—  
,
  - (6) Schedule 1, Item 6 (Caged bird), Column 2, paragraph (b) —  
'in an urban area'—  
*omit.*
  - (7) Schedule 1, Item 8 (Stock (excluding horses)), Column 2 —  
*omit, insert —*  
(a) *Keeping stock (excluding horses) is prohibited on a property that is less than 10,000m<sup>2</sup> or within a residential complex, in an urban area.*
  - (8) Schedule 1, Item 10 (Horses), Column 2 —  
After 'complex'—  
insert—  
,

## **11 CONFIDENTIAL REPORTS**

### **RECOMMENDATION**

That Council considers the confidential report(s) listed below in a meeting closed to the public in accordance with Section 275 of the Local Government Act 2012:

#### **11.1 Sale of Land Due to Rates and Charges in Arrears**

This matter is considered to be confidential under Section 275 - h of the Local Government Act, and the Council is satisfied that discussion of this matter in an open meeting would, on balance, be contrary to the public interest as it deals with other business for which a public discussion would be likely to prejudice the interests of the local government or someone else, or enable a person to gain a financial advantage.



**12 BUSINESS WITHOUT NOTICE**

**13 NEXT MEETING OF COUNCIL**





## **14 FOR INFORMATION**

<b>14.1 SUMMARY OF NEW PLANNING APPLICATIONS &amp; DELEGATED DECISIONS FOR THE MONTH OF NOVEMBER 2018</b>
---

**Date Prepared:** 11 December 2018

**Author:** Senior Planner

**Attachments:** Nil

---

Please see below information.

**Summary of new Planning Development Applications and Delegated Decisions for November 2018**

<b>New Development Applications</b>					
Application #	Lodgement Date	Applicant/ Address	Property Description	Application Type	Status
RAL/18/0033	02/11/2018	Andrew & Keely MacMillan 13 Harte Close, Mareeba	Lots 18 & 19 on SP208342	Reconfiguration of a Lot (Boundary Realignment)	Decision Notice issued 9/11/2018
RAL/18/0034	06/11/2018	Gregory Carr, & Lyn Tyler C/- Freshwater Planning Pty Ltd 3 Coolsprings Close KURANDA	Lot 7 on RP733904	Reconfiguration of a Lot (1 into 2 Lots)	Decision making stage
RAL/18/0035	20/11/2018	Frank Harvie 2 Kearney Street MAREEBA	Lot 1 on RP719105	Reconfiguration of a Lot (1 into 2 Lots)	Public notification stage
MCU/18/0027	22/11/2018	Brobocka Pty Ltd C/- Planz Town Planning 5-7 Slade Street & 58 Chewko Road, Mareeba	Lots 12, 14 & 16 on NR7652	MCU Medium impact industry	Confirmation stage
MCU/18/0028	27/11/2018	Pioneer North QLD Pty Ltd C/- RPS Australia East Pty Ltd 144 Bower Road MAREEBA	Lot 21 on SP173509	MCU Extractive industry expansion	Confirmation stage

<b>Decision Notices issued under Delegated Authority</b>					
Application #	Date of Decision Notice	Applicant	Address	Property Description	Application Type
RAL/18/0033	09/11/2018	Andrew & Keely MacMillan	13 Harte Close, Mareeba	Lots 18 & 19 on SP208342	Reconfiguration of a Lot (Boundary Realignment)

November 2018 (Regional Land Use Planning)

OPW/18/0013	30/11/2018	P Gibbs	244 Kanervo Road, Koah	Lot 17 on SP219912	Operational Works (Roadworks & Drainage Works) for Development Permit DA/15/0045
-------------	------------	---------	------------------------	--------------------	--

**Change to Existing Development Approval issued**

Application #	Date of Decision	Applicant	Address	Property Description	Application Type
N/A					

**Referral Agency Response Decision Notices issued under Delegated Authority**

Application #	Date of Decision	Applicant	Address	Property Description	Application Type
CAR/18/0025	26/11/2018	B Omori C/- Emergent Building Approvals	Rosewood Drive, Kuranda	Lot 9 on RP727448	Referral agency response for operational works (vegetation clearing and subsequent bulk earthworks) assessable against the Environmental significance overlay code and Hill and slope overlay code.

**Extensions to Relevant Period issued**

Application #	Date of Decision	Applicant	Address	Property Description	Application Type
DA/14/0035	22/11/2018	M & K House	719 Speewah Road, Speewah	Lot 61 on N157483	Material Change of Use - Tourist Facility (5 x 1 Bedroom Eco-Cabins)
REC/10/0019	21/11/2018	S & R Brischetto	Kennedy Highway, Mareeba	Lot 1 on RP735319	Reconfiguring a Lot - Subdivision (1 into 3)

November 2018 (Regional Land Use Planning)

Survey Plans endorsed					
Application #	Date	Applicant	Address	Property Description	No of Lots
RAL/18/0020	27/11/2018	Frank Harvie	38 Atherton & Quill Streets, Mareeba	LOTS 21 & 22 ON SP217220 & EASEMENT A (CANCELLING LOT 2 ON RP729648)	1 into 2 Lots
RAL/18/0021	27/11/2018	Roxanne Voyce	29 & 33 Iluka Street, Mareeba	LOTS 951 & 952 ON SP244353 (CANCELLING LOT 95 ON M35645 & LOT 4 ON M35667)	Boundary Realignment
REC/08/0096 - RC2005/56	27/11/2018	Comaray Pty Ltd	Country Road & Annie Court, Mareeba	LOTS 9, 26 & 200 ON SP252407 (CANCELLING LOT 200 ON SP188083)	Staged development 2 new Lots

November 2018 (Regional Land Use Planning)