



Environmental Significance Overlay Review

Mareeba Shire Council

Final Report March 2018

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Environmental Significance Overlay Review

Prepared for the Mareeba Shire Council

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SUMMARY OF FINDINGS

The Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area is:

- a high value interface (ecotone) between the Wet Tropics rainforest and drier woodland ecosystems.
- 2. the narrowest section of the Wet Tropics corridor and there is significant environmental value in improving connectivity in the area.

Local, regional, state and federal groups including FNQROC, Terrain, JCU and CSIRO recognise that there are significant gaps in the technical knowledge of the environmental values of the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area.

Filling in the gaps in knowledge is the responsibility of organisations such as Terrain, JCU and CSIRO and not a direct responsibility of Council. There may be opportunities for Council and the Community to push for improved funding and support from the State and Federal Government.

The role of community groups in education and revegetation is an existing strength for the region and Council is in a position to provide ongoing recognition and support to these groups.

The Scheme does not have any influence over outcomes on land until a development application is lodged. The Scheme may identify areas of future vegetation but it is not the only and possibly not the best mechanism to get them planted.

The Council's planning scheme is a point of access to mapping including environmental values. The detailed mapping data is difficult to interpret effectively at a property or site-specific scale in the PDF maps available to the community. It is recommended that Council improve the community's access to detailed mapping data by developing an interactive mapping system that will deliver site specific property information including:

- a. General property descriptions and information;
- b. Map/s of the property showing location, zones, local plans, overlays and LGIP information.

The 2017 scheme does have a sound approach to development in the Julatten-Mount Molloy-Mona Mona-Kuranda-Speewah area e.g. Rural residential subdivision (where not in a precinct) is now impact assessable – this a strong policy direction and provides the wider community with the opportunity to object or appeal a decision to the Planning & Environment Court. The policy direction of the Planning scheme is strengthened by the support of the community.

Specific changes to the planning scheme text are recommended. No detailed changes to mapping are proposed. Filling in the gaps in knowledge is not a direct responsibility of Council and funding and support for research into this high value environmental area is required from the State and Federal Government.

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1.0 OVERVIEW AND BACKGROUND

1.1 Natural Environment

The review of the environmental significance overlay and strategic framework has a particular focus on the localities of Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah (proposed new Landscape Connectivity Precinct). This area is the focus of significant wildlife and vegetation management by local residents, community bodies, researchers and government agencies including the Wet Tropics Management Authority.

This area is recognised as the narrowest (east-west) section of the Wet Tropics corridor. Residential and agricultural activities can create barriers to movement e.g. fences and lack of vegetation connectivity and the Barron River creates a boundary to wildlife such as the cassowary. The region generally bounded by the localities of Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah is the point where Wet Tropics almost separates into northern and southern sections, which places pressure on the local biodiversity.

1.2 Policy Environment

The Mareeba Shire Council Planning Scheme was drafted in a time of government and policy change including:

- The amalgamation of the Mareeba Shire Council / Tablelands Regional Council (2008)
- The de-amalgamation of Mareeba Shire Council from the Tablelands (January 2014)
- The State Government push for a State wide planning scheme template (QPP) and a single State Planning Policy (December 2013).

The challenges of amalgamating 4 schemes into 1 scheme are always significant, and in the case of the Tablelands, this was compounded by the size of the local government area and the diversity of the area including demographic, employment and environmental considerations.

Work on the new single planning scheme reached the public consultation stage in early 2013 and 2,047 submissions were received, with 923 of the submissions of specific relevance to Mareeba Shire local government area.

When the Mareeba Shire Council (MSC) de-amalgamated from the continuing Tablelands Regional Council the public notification version of the draft TRC planning scheme became the draft Mareeba Shire Council Planning Scheme.

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MSC considered and workshopped all submissions received by TRC and minor changes were made to the draft planning scheme in response to some submissions and administrative amendments. The changes also reflected the State Planning Policy (SPP). In respect to the Environmental Significance Overlay of the draft MSCPS, the overlay mapping and code provisions transitioned from the Areas of Ecological Significance (AES) mapping to the Matters of State Environmental Significance (MSES) mapping. This was essentially at the direction of the State and significantly, the State Government's MSES mapping in general terms reduced the areas identified by the Environmental Significance Overlay in comparison with the previous overlay based on the State Governments AES mapping.

As part of the adoption of the planning scheme, the original submitters (Tablelands Regional Council) were notified of the changes made by the MSC. Subsequent to the submitters being advised of the amendments made to the draft MSCPS, several community groups and various community members made representations to Council and the Minister requesting that adoption of the draft MSCPS be postponed pending a review of the Environmental Significance Overlay to strengthen the protection of Matters of Local Environmental Significance in particular.

The Council resolved to adopt the Planning Scheme, noting that a delay in the implementation of the new Planning Scheme, would result in the ongoing application of the Mareeba Shire Planning Scheme 2004 which, comparatively, had limited development controls and environmental protections. With this view in mind, the MSCPS was adopted on 15 June 2016, with Council giving the commitment to review and update the Environmental Significance Overlay of the MSCPS, to include Matters of Local Environmental Significance which did not transition from the public notification version of the planning scheme.

The Mareeba Shire Council Planning Scheme (MSCPS) Sustainable Planning Act version was adopted by Council on 15 June 2016 and commenced on and from 1 July 2016.

The Planning Act – alignment amendment version of the Planning Scheme was adopted commenced on and from 3 July 2017.

The MSCPS includes an Environmental Significance Overlay which is based on the Queensland Department of Environment and Heritage Protection's Matters of State Environmental Significance (MSES) mapping and the requirements of the Queensland State Planning Policy. Council resolved to review matters of local environmental significance which did not transition from the public notification version of the planning scheme and consider recommendations for changes to the Planning Scheme including the Environmental Significance Overlay and Strategic Framework.

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2.0 STAKEHOLDER CONSULTATION

In addition to reviewing the submissions, select stakeholders were consulted to discuss opportunities and concerns to be addressed as a part of the project. Consultation included Travis Sydes (FNQROC) Gary Searle (Terrain NRM), Jax Bergersen (Kuranda Conservation Community Nursery Inc.) and Nadine O'Brien (Friends of the Earth). Broader Stakeholder engagement and Community meeting/s were not part of this stage, as the amended Planning Scheme including Environmental Significance Overlay and Strategic Framework will require public notification allowing for further input.

The feedback from stakeholders reinforced 2 considerations for the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area:

- 1. The value of the area as an interface (ecotone) between the Wet Tropics rainforest and drier woodland ecosystems.
- The value of improving connectivity of the narrowest section of the Wet Tropics corridor.

2.1 Biodiversity Values

The Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area is the interface (ecotone) between the Wet Tropics rainforest and drier woodland ecosystems. The interface between these two bioregions results a diversity of habitat and food sources, and unique pockets of vegetation.

The influence of the two bordering ecosystems, results in a higher density of plant and animal species. The interface of the two ecosystems – i.e. at the margins of the two ecosystems is where resilience is found. Resilience is likely to assist in response to natural hazards including bushfire, cyclones, drought, flood and changes in temperature. This increase in biodiversity and resilience is referred to as the "edge effect".

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Figure 1: the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area

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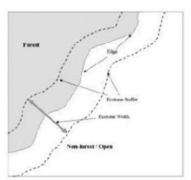
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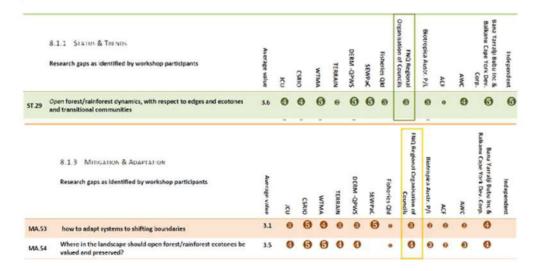
Ecotones and the "edge effect" are of great environmental importance. As well as providing an area for a large number of species, they often experience influx from animals looking to nest or searching for food. They may also be considered a habitat of greater genetic diversity and serve as bridges of "gene flow" from one population to another. Additionally an Ecotone can act as a "buffer-zone" protecting the neighbouring ecosystem from possible environmental damage.

There are recognised gaps in in biodiversity research, including:

- understanding the open forest / rainforest dynamics, with respect to edges and ecotones and transitional communities.
- Knowing where in the landscape open forest/rainforest ecotones should be valued and preserved.



These gaps are identified by local, regional, state and federal groups including FNQROC, Terrain and JCU and CSIRO. The *Gap Analysis Of Environmental Research Needs In The Australian Wet Tropics (2011)* is attached as **Appendix 1** of this report, as it provides further information into the magnitude and immediacy of the concern in relation to the need for greater understanding the open forest/rainforest dynamics, with respect to edges and ecotones and transitional communities. This is not a direct Council responsibility, however it may provide opportunities for partnerships with Universities and may also provide opportunities for Council and the Community to push for improved funding and support from the State and Federal Government. The relevant research gaps from the Report are provided as follows.



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The role of community groups in education and revegetation is an existing strength, and Council is in a position to provide ongoing recognition and support to these groups and is also in a position to encourage the State and Federal Governments to provide support including further research.

2.2 Connectivity Values

The Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area is recognised as the narrowest point in the Wet Tropics, it is the point where Wet Tropics almost separates into northern and southern sections, which places stress on species and also threatens their survival.

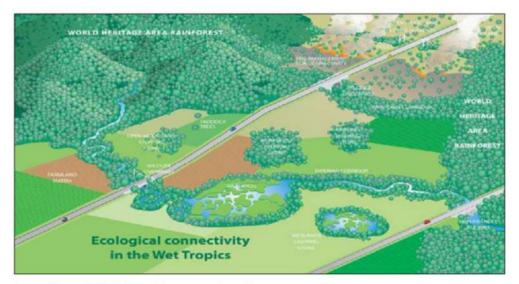
Ecological connectivity helps to 'future-proof' species resilience by allowing enough room to move and adapt to change and can have a wide range of benefits, including:

- increasing available habitat and quality of habitat
- increasing structural diversity of the forests and, therefore, species diversity
- · assist the movement of animal species through landscapes
- increasing the resilience and adaptability of ecosystems to threats and stresses such as weeds, feral animals, diseases, floods, cyclones and wildfire
- · allow seeds and fruits to colonise new areas and improve dispersal of plants
- promote healthy gene flows between sub-populations
- provide opportunities for animals and plants to adapt and find a range of ecological refugia and ecological niches and microclimates
- · allow colonisation of empty habitat niches and access to new and varied habitats
- · provide movement options in response to pressures such as extreme weather events
- improve the aesthetic amenity of the landscape

Animals and plants have an array of different movement patterns and accordingly, ecological connectivity can be linear corridors, but can also be patchwork.

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Source: Terrain NRM Ecological Connectivity Story Map

2.3 The Role of the Planning Scheme

The Planning Scheme reflects the existing and aspirational values of the community, sets the strategic direction for the Shire, and regulates development.

The Scheme sets up the 'go' and 'no-go' areas for different land uses. In the case of vegetation it can set the policy direction for values such as biodiversity and connectivity and the mapping can:

- a. Identify existing vegetation for protection and provide the mechanism for enforcement in the event of clearing.
- Identify strategic (future) vegetation corridors, it is a trigger for identifying areas for possible revegetation.

The role of the Planning Scheme. The Scheme may help inform a landowner or person wishing to undertake development as to where development should or should not occur. However, the Scheme does not actually have any influence over outcomes on land until a development application is lodged.

The Scheme may identify areas of future vegetation but it is not the only and possibly not the best mechanism to get them planted.

The role of mapping. Deficiencies in the current Planning Scheme Overlay maps can to an extent be attributed to the level of detail available and the source of the content. The discussion in this section of this report highlights the known gaps, and **Appendix 1** contains the *Gap Analysis Of Environmental Research Needs In The Wet Tropics*.

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The Council is not the owner of nor it is the generator of the mapping data. There is an imperative on the State Government and Research Agencies to undertake research and provide data that does not pick up the subtle interface (ecotones) between the Wet Tropics rainforest and drier woodland ecosystems.

The Council's planning scheme, is however a point of access to mapping at a property level. The format of the current mapping is accessible to the general public, however it is not reliable at a property level due to a variety of reasons including in ability to zoom in and the thickness of the lines. It is recommended that Council develop an interactive mapping system that will deliver site specific property information including:

- a. General property descriptions and information;
- Map/s of the property showing location and applicable zones, local plans, overlays and LGIP information;

A final mapping solution would be to include link outs to relevant sections of the Planning Scheme such as Tables of Assessment and Codes.

2.4 The Role of Council and Community

There is an increasing awareness of the value of maintaining and improving biodiversity and ecological connectivity across the landscape, which in turn also builds social and community connectivity at a range of scales and establishes healthy relationships between diverse community groups.

The capacity and willingness of the community to support biodiversity and ecological connectivity continues to be acknowledged and supported in the use of a range of different conservation tools and approaches and activities to establish and maintain healthy relationships between diverse community groups.

The role of Council. Outside of the Planning Scheme, Council has the capacity to influence biodiversity conservation in a number of ways and is including:

- · Minimise the impacts of urban development on biodiversity;
- Encourage the community to value, protect and restore biodiversity.
- Encourage the community to value, protect and restore ecological integrity and habitat connectivity and waterway health and aquatic biodiversity;
- Maintain and restore ecological integrity and habitat connectivity in Council owned or managed land such as reserves;
- Maintain and restore waterway health and aquatic biodiversity in Council owned or managed land;

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- Lobby the State Government and Research Agencies to establish a clear direction for valuing, protecting and restoring biodiversity in the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah region;
- Encourage the State Government and Research Agencies to establish a targeted strategy rather than a blanket strategy;
- · Strengthen partnerships with universities and CSIRO.

The role of the Community. The Community can:

- Hold the Council, landowners and developers accountable to the Scheme may identify
 areas of future vegetation. Recognising that the planning scheme is not the only and
 possibly not the best mechanism to get them planted;
- Increase habitat outside protected area estates and regenerate habitat corridors;
- Continue the outstanding work they do to build social and community connectivity at a range of scales and establishes healthy relationships between diverse community groups.
- Lobby the State Government and Research Agencies to establish a clear direction for valuing, protecting and restoring biodiversity in the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah region.

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3.0 DOCUMENT REVIEW

A review the Mareeba Shire Council Planning Scheme (2015 and alignment amendment 2017) has been undertaken. The review was to identify relevant references to environmental significance, biodiversity and the environment in general and included the:

- Strategic Framework.
- Tables of assessment especially for the overlay codes.
- The zone codes, particularly those relating to rural areas including the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone and rural residential zone codes.
- Environmental significance overlay code.
- Mapping including the agricultural land overlay, Bushfire hazard overlay, environmental significance overlay, flood hazards overlay, hill and slope overlay, Regional infrastructure corridors overlay and scenic amenity overlay.
- Planning Scheme Policies to identify relevant references to environmental significance, biodiversity and the environment in general.

The following documents have also been reviewed:

- Tablelands Regional Council Planning Scheme draft (2012) / adopted (2016) including Strategic Framework, Mapping, and Planning Scheme Policies to identify relevant references to environmental significance, biodiversity and environment in general.
- Submissions to Council TRC relating to Mareeba areas approx. relevant (923 submissions) during the public notification stage in relation to environmental significance, biodiversity and the environment in general.
- Recent Friends of the Earth (Kuranda), Terrain NRM & Kuranda Envirocare submissions to MSC in relation to the above.
- FNQ2031 Regional Plan.
- Planning Act 2016 and the Single State Planning Policy, to ensure that the deliverables
 of the project are consistent with the most recent legislation.

Of note, the **FNQ2031 Regional** Plan (p24-25) recognises that residential growth is to be centred in Mareeba with development within Kuranda and Myola to be is not supported:

- Kuranda is a small village activity centre set in the rainforest. It will continue to have a
 specialist tourism focus and focal point for the Cairns—Kuranda railway and Skyrail
 cable car. Densities will be kept low and building heights limited to maintain the village
 character and significant areas of ecological significance.
- Myola has been the subject of significant investigation and consultation in the past, including the Myola Feasibility Study in 2001, the Myola Planning Study completed in 2006 and detailed studies on the Kuranda Range Road. Myola is not considered

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necessary for urban development in the life of this regional plan. This position reflects the following considerations:

- there is sufficient land available elsewhere throughout FNQ to accommodate growth within the life of this plan
- the plan's policies promote consolidation of population growth around existing urban centres that provide employment and service opportunities
- oil vulnerability and rising fuel process have implications on satellite suburbs
- the proposed urban development at Myola could not be accommodated by the existing Kuranda Range Road and the cost of upgrading the Kuranda Range Road between Cairns and the northern Tablelands is unaffordable in the short to medium term, in a regional and state-wide context.
- The town of Mareeba has significant future growth potential. It has ample industrial land, a vibrant main street, and a pivotal role in agriculture and mining. Mareeba is relatively unconstrained by good quality agricultural land or areas of ecological significance and is well serviced by road, rail and air infrastructure. It is the primary urban centre for rural families living in the expansive west and north-west parts of the region.

The biodiversity conservation objective of the FNQ2031 Plan is to:

Protect, manage and enhance the extent, diversity, condition and connectivity of the region's natural areas to maintain ecological integrity and processes, reverse biodiversity decline and increase resilience to the expected impacts of climate change.

The Wet Tropics Conservation Strategy (2004) also provides guidance (non-statutory) for the protection of the Wet Tropics World Heritage Area values and the management of threats.

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4.0 POLICY TO MEET THE NEEDS OF COUNCIL & COMMUNITY

There are differences in the environmental and biodiversity provisions of the TRC Draft Planning Scheme 2012 and the MSC Planning Scheme 2017. A like for like comparison of the two schemes (prepared by Terrain NRM **Appendix 2**) provides a very good account of the changes and direction on improvements / changes to the scheme. It is also acknowledged that the significant changes in planning policy and legislation between the drafting of the 2012 Scheme and the 2017 Scheme does not allow a simple like for like amendment to 'fix' the Scheme.

There are a six key differences in the 2012 TRC draft and the 2017 MSC scheme:

- The overlay mapping of biodiversity areas in the 2012 TRC draft covers a much greater area of the Shire than the 2017 MSC scheme overlay mapping and includes consideration of areas of general and local environmental significance.
- Regional and local connectivity mapping is included in the 2012 TRC draft overlay
 mapping. They are only included in the strategic framework of the 2017 MSC scheme
 and the regional corridors are only mapped as centrelines, rather than the full polygons
 mapped in the 2012 TRC draft.
- 3. For the 2017 MSC scheme the strategic framework does not separate out regional and local habitat connectivity (which may not be a bad thing). The 2017 Scheme is an improvement on the 2015 draft scheme where regional and local habitat connectivity was only really a consideration for impact assessable development. The 2017 Scheme triggers connectivity in the Strategic Framework it is acknowledged that some subdivisions are now impact assessable and in Environmental Significance overlays for MCU (code and impact), ROL (code and impact), and operational works assessable applications.
 - Note: The value in reviewing the width of the wildlife habitat corridors on the Environmental Significance overlays is not achievable at this time, as the research gaps / gaps in knowledge do not allow for further detailed change.
- 4. Revegetation requirements are not specified for the 2017 MSC scheme and revegetation is unlikely to be required except for impact assessable development. There are planning scheme policies for Ecological Assessment Reports and Natural Area Rehabilitation and Revegetation.
- Ecological Reports are likely to be required for most applications that trigger the 2017 MSC scheme environmental significance overlay due to the lack of acceptable outcomes.
 - Note: This is a reasonable approach and the strategic framework and performance outcomes are well crafted to further inform the applicant and the assessment.
- The requirements on stormwater and wastewater discharge into waterways are improved in the 2017 MSC scheme.

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It is acknowledged that the 2017 scheme does have a reasonably sound approach to development in the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area. For example ROL (subdivision) in the rural residential area (where not in a precinct) is now impact assessable – this is a strong policy direction and provides the wider community with the opportunity to object or appeal a decision to the Planning & Environment Court. The policy direction of the planning scheme is strengthened by the support of the community.

Specific changes to the planning scheme text are recommended as follows. No detailed changes to mapping are proposed.

4.1 Strategic Framework - Text

Section 3.2 Strategic Intent

3.2.1 Setting the scene refers to the history and landscape of the Shire. A paragraph on the value of biodiversity and connectivity to strengthen the context for the scheme, at the end of the last paragraph as follows (new text underlined):

The end of the 20th century saw Mareeba Shire's tourism sector grow significantly, particularly around Kuranda (the "Village in the Rainforest"), with the ongoing development of the Kuranda Tourist Railway and the opening of the Cairns to Kuranda Skyrail in 1995. This period also saw the decline of the tobacco growing sector, due to broader trends, with the industry eventually ceasing in 2004.

Today, Mareeba Shire is dependent on a range of agricultural activities including the growing of coffee, sugar cane, tropical fruit, vegetables and nuts. Forestry, mining of gold and marble also contribute to the local economy. The tourism sector is another contributor to the local economy, providing depth and diversity to the economic fabric of the shire. Kuranda, Gateway to the Atherton Tablelands, is a key tourism location, underpinned by a strong creative economy. The natural environment directly supports tourism businesses, and indirectly supporting a substantial part of the regional economy. There is an increasing awareness of the value of maintaining and improving biodiversity and ecological connectivity across the landscape, which in turn also builds social and community connectivity at a range of scales and establishes healthy relationships between diverse community groups.

3.2.2 The way forward will also be strengthened by references to biodiversity and connectivity (<u>new text underlined</u>).

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Kuranda, Mareeba Shire's 'Village in the Rainforest' capitalises on its proximity to Cairns and continues to attract visitors in its own right as the gateway to Mareeba and the Tablelands. Tourism continues to strengthen for the savannah areas of the Shire, especially at Chillagoe and the Wheelbarrow Way, further solidifying Mareeba Shire's place on the tourism trail of Far North Queensland by capitalising on its unique hinterland tourism culture and array of small and large scale tourist experiences.

The shire is a living museum that is rich in historic and culturally significant places that signify the evolution of the Shire. Culturally significant places are protected and enhanced in contribution to the lifestyle offering of the shire and the tourist experience.

There is an increasing understanding of the biosocial and ecological value of the interface (ecotone) between the Wet Tropics rainforest and drier woodland ecosystems; and the importance of improving connectivity of the narrowest (east-west) section of the Wet Tropics corridor.

The capacity and willingness of the community to support biodiversity and ecological connectivity continues to be acknowledged and supported in the use of a range of different conservation tools and approaches and activities to establish and maintain healthy relationships between diverse community groups.

Council has the capacity to influence biodiversity conservation in a number of ways:

- Protect and restore ecological integrity and habitat connectivity;
- Protect and restore waterway health and aquatic biodiversity;
- Minimise the impacts of urban development on biodiversity;
- Encourage the community to value, protect and restore biodiversity.

Section 3.3 Settlement Pattern and Built Environment

3.3.1 Strategic Outcomes. References to environment and environmental values are predominantly in the context of the "Built environment" and the requirement for Residential development to respond to environmental values (s3.3.7.1). The reference to "environmental values" are predominantly in the context of to Residential Areas and Urban expansion areas.

This section of Strategic Framework also addresses the other zones including rural and rural residential however, the reference to environmental values are not as clear. The Strategic

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Framework can be strengthened so that non-residential / non-urban development would also require assessment against similar provisions as 3.3.7.1

Suggested Amendments to Section 3.3.1are as follows – <u>new text underlined</u>, text to be deleted shown in strikethrough:

- (4) Rural residential areas are intended to support rural residential development of varying densities, to prevent further fragmentation and alienation of rural areas, conservation areas and biodiversity areas and connectivity within the regional landscape. Rural residential areas predominantly should maintain the current density of development, with infill subdivision of rural residential areas generally limited to identified precincts areas where consistent with the desired character and where adequate services and infrastructure are available or can be adequately and cost-effectively provided. No new / greenfield rural residential subdivisions are created in the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah area shown as the Landscape Connectivity Precinct on the Zone Maps Northeastern Region (zm003) and Southeastern Region (zm004).
- (5) Primary industries in Rural areas are not compromised or fragmented by incompatible and/or unsustainable development, including but not limited to subdivision that results in a detrimental impact on rural productivity. The valued, relaxed rural lifestyle, character and scenic qualities of the rural area are preserved and enhanced. The rural area is largely maintained to its current extent, while accommodating development directly associated with or reliant on natural resources including rural activities and tourism. Rural areas protect the shire's agricultural area and ensure food security. Other rural areas predominantly remain agricultural grazing properties. Development including clearing of vegetation should retain ecological connectivity linkages.
- (9) Development considers and respects:
 - (a) topography;
 - (b) climate responsive design and solar orientation;
 - (c) efficient traffic flows and connectivity;
 - (d) efficient and sustainable infrastructure provision;
 - (e) environmental values;
 - (f) parkland and open space links;
 - (g) mixed lot sizes and dwelling types;
 - (h) water sensitive urban design;
 - (i) good quality agricultural land;
 - (i) the character and scale of surrounding development.
- (10) The Welcome Pocket Emerging Community land is developed to give priority to the environmental, biodiversity, connectivity and scenic values of the area.
- (11) The Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah locality within the Landscape Connectivity Precinct on the Zone Maps Northeastern Region

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(zm003) and Southeastern Region (zm004), is recognised as the narrowest (eastwest) section of the Wet Tropics corridor, it is the point where Wet Tropics almost separates into northern and southern sections and further residential and agricultural activities that create barriers to movement e.g. fences and lack of vegetation connectivity, are not supported.

- (12) Particularly in the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah locality there is a net gain of biodiversity values and connectivity.
- (13) Development does not compromise the current or future ability for ecological connectivity in areas identified as habitat linkages and ecological connectivity of the habitat linkages be enhanced when development occurs.
- (14) Biodiversity and connectivity works and projects are encouraged to be undertaken in partnership with community groups and research organisations to take advantage of, support and promote the ecological restoration techniques that have been refined in the area over more than 30 years of practical experience, adaptive management and scientific monitoring.

Section 3.3.4 Element—Village activity centre

- **3.3.4.1 Specific outcomes** can be strengthened with <u>new text underlined</u> and text to be deleted shown with <u>strikethrough</u>:
- (4) Growth is focused <u>as infill development</u> within the broader existing Kuranda village district. Further residential development in the Myola corridor is not supported within the life of the planning scheme.

Section 3.3.6 Rural villages

The provision can be strengthened with new text underlined:

3.3.6.1 Specific outcomes

(1) Biboohra, Irvinebank, Julatten, Koah, Mutchilba, Mt Molloy, Myola and Speewah are rural villages that have limited centre activities and other non-residential activities. Some rural villages include small clusters of activity in which limited, small-scale development may occur. Any growth within rural villages is limited and is proportionate to their current scale and does not result in the loss of vegetation.

Section 3.4 Natural resources and environment

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- 3.4.1 Strategic outcomes provisions can strengthened with new text underlined:
- (7) Development in the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah localities is responsive to the value:
 - (a) of the area as an interface (ecotone) between the Wet Tropics rainforest and drier woodland ecosystems; and
 - (b) of improving connectivity of the narrowest (east-west) section of the Wet Tropics corridor.

Section 3.4.4.1. Biodiversity Areas in the TRC draft (2012) specified that a net gain of biodiversity values is required for development that cannot avoid impacts on areas of high biodiversity significance. The provision now refers to no net loss, and the following amendment is suggested, <u>new text underlined</u> and text to be deleted shown with <u>strikethrough</u>:

- (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 a net gain in natural environment and biodiversity values is achieved.
- Section 3.4.5.1. Strategic rehabilitation and regional corridors. Both the current scheme and the 2012 draft require that development not compromise the ability for (future) ecological connectivity in areas identified as habitat linkages. However, the 2012 TRC draft went a step further requiring that ecological connectivity of the habitat linkages (within the subject site) be enhanced when development occurs. These provisions can be strengthened new text underlined and text to be deleted shown with strikethrough:
- (1) Ecological corridors are major existing habitat corridors that link key biodiversity areas within Mareeba Shire and greater Far North Queensland region. Development does not compromise the habitat connectivity of ecological corridors and may contribute to an expansion of these existing corridors.
- (2) Habitat linkages are strategically located future habitat corridors linking biodiversity areas within the shire. Development results in a net gain in ecological connectivity of habitat linkages (within the subject site) when development occurs and development does not compromise the ability to realise these opportunities for ecological connectivity through progressive revegetation of habitat linkages with native vegetation.

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4.2 Levels of Assessment

Section 5.5 Categories of development and assessment - Material Change of Use

The land where development may occur, within the localities of Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah (proposed new Landscape Connectivity Precinct) is zoned Rural or Rural Residential. In generally the uses in the zone would reasonably be expected to be self or code assessable e.g. animal keeping, cropping, horticulture etc. The changing of uses from code to impact assessable does provide opportunities for community input the one land use that could be changed from code to impact assessable is Transport Depot. The suggested changes are:

Within the Rural Zone and Rural Residential zone the use of Transport Depot is impact assessable if the premises is within the Landscape Connectivity Precinct (Localities of Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah Landscape shown as the Connectivity Precinct on the Zone Maps – Northeastern Region (zm003) and Southeastern Region (zm004).

Table 5.5.9—Rural zone

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development	
Transport	Accepted development subject to requirements		
depot	If: (a) complying with the relevant acceptable outcomes of the requirements; (b) vehicles associated with the use are registered to persons residing at the premises and are wholly contained within an area of the property not exceeding 300m²; and (c) setback a minimum of 10 metres from any property boundary; and if the premises is not within the Landscape Connectivity Precinct on Zone Maps Northeastern Region (zm003) and Southeastern Region (zm004).	Rural zone code Industrial activities code Works, services and infrastructure code	
	Code assessment		

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Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
	If not accepted development subject to requirements; and If the premises is not within the Landscape Connectivity Precinct on Zone Maps Northeastern Region (zm003) and Southeastern Region (zm004).	Rural zone code Industrial activities code Landscaping code Parking and access code Works, services and infrastructure code

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Table 5.5.10 - Rural residential zone

Transport	Accepted development subject to re	equirements
depot	If: (a) complying with the relevant acceptable outcomes of the requirements; (b) not within the 4,000m² precinct or the 1 hectare precinct; (c) on a lot greater than 2 hectares; (d) if vehicles associated with the use are registered to persons residing at the premises and are wholly contained within an area of the property not exceeding 300m²; and (e) setback a minimum of 10 metres from any boundary. and (f) if the premises is not within the Landscape Connectivity Precinct shown on Zone Maps Northeastern Region (zm004).	Rural residential zone code Industrial activities code Landscaping code Parking and access code Works, services and infrastructure code
	Code assessment	
	If not accepted development subject to requirements; and If the premises is not within the Landscape Connectivity Precinct shown on Zone Maps Northeastern Region (zm003) and Southeastern Region (zm004).	Rural residential zone code Industrial activities code

Section 5.6 Categories of development and assessment - Reconfiguring a Lot

The provisions relating to reconfiguring a lot are a good outcome for the Emerging community zone and parts of the Rural Residential zone, making new subdivision impact assessable. This is a genuine example of where the community consists of well-informed individuals and groups who are in a position to provide constructive input into development applications. Council is commended for this approach.

The same provision should be included for the Rural zone where:

- a. located in the Landscape Connectivity Precinct (Localities of Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah shown on the Zone Maps - Northeastern Region (zm003) and Southeastern Region (zm004); AND
- subdivision results in the creation of one or more additional lots with an area of less than 60ha.

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This approach will provide assessment triggers for vegetation clearing. The suggested amendments are provided in table 5.6.1 below.

An assessment has been undertaken of the number of lots within the proposed Landscape Connectivity Precinct (Localities of Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah shown on the Zone Maps - Northeastern Region (zm003) and Southeastern Region (zm004):

- 127 rural zoned lots within the proposed Landscape Connectivity Precinct shown on the Zone Maps - Northeastern Region (zm003) and Southeastern Region (zm004) greater than 60ha.
- Land within the proposed Landscape Connectivity Precinct shown on the Zone Maps
 Northeastern Region (zm003) and Southeastern Region (zm004) less than 60ha:
 - a. 3,400 total (all zones)
 - b. 678 Rural
 - c. 243 Rural Residential lots
 - d. 1010 Vacant lots.

Table 5.6.1—Reconfiguring a lot

Zone	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development	
Emerging	Impact assessment		
community zone	If not: (a) realigning the common boundaries of adjoining lots; or (b) creating an access easement.	The planning scheme	
Rural residential	Impact assessment		
zone	If: (a) not located in the 4,000m² precinct, 1 hectare' precinct or 2 hectare precinct; and (b) resulting in the creation of one or more additional lots.	The planning scheme	
Rural zone	Impact assessment		
	If: (a) in the Landscape Connectivity Precinct shown on the Zone Maps Northeastern Region (zm003) and Southeastern Region (zm004); and (b) resulting in the creation of one or more additional lots with an area of less than 60ha.	The planning scheme	
All zones other than the Emerging community zone or Rural residential zone <u>or Rural zone</u>	No change	Reconfiguring a lot code Relevant zone code Landscaping code Parking and access code Works, services and infrastructure code	

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Zone Categories of development and assessment		Assessment benchmarks for assessable development and requirements for accepted development	
Code assessr	ment		
Any reconfigur	onfiguring a lot not listed in this table. ring a lot listed in this table and not meeting the development and assessment" column.	ne description listed in the	

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Section 5.10 Categories of development and assessment – Overlays

Table 5.10.1—Overlays

Development	Categories of development ar assessment	Assessment benchmarks for assessable development and requirements for accepted development	
Environmental signif	cance overlay		
Material change of	Accepted development		
use, building work or operational work in an area of 'Wildlife habitat' identified on the Environmental significance overlay maps (OM-004a-o).	Where: (a) For a Dwelling House; and (b) Development is limited to existing cleared areas of the site; or (c) The development envelope for all residential activities on site is 800m² maximum, including sheds, swimming pool, on-site sewerage infrastructure and disposal areas.	-	
	Code assessment		
	Note—Where development is subject to impact assessment in sections 5.5, 5.7, 5.8 or 5.9, the category of assessment is not changed to code assessment, despite subsection 5.3.2 (8 of the planning scheme.	e overlay code	

4.3 Zone Codes

Section 6.2.9 Rural zone code

A new provision is included in the Rural zone code to inform siting of buildings and structures.

Table 6.2.9.3—Rural zone code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	
For accepted development subject to requi	rements and assessable development	
Siting, where not involving a Dwelling house. Note—Where for Dwelling house, the setbacks of the setbacks of the setbacks.		
PO2	AO2.1	

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- (b) access to sunlight and daylight for the site and adjoining sites;
- (c) privacy and overlooking;
- (d) air circulation and access to natural breezes;
- (e) appearance of building bulk; and
- (f) relationship with road corridors; and
- (g) avoid areas of habitat and native vegetation.
- (b) 10 metres from a boundary to an adjoining lot; and
- (c) 10m from vegetation.

A02.2

Buildings and structures, where for a Roadside stall, include a minimum setback of 0 metres from a frontage to a road that is not a Statecontrolled road.

4.4 Overlay Codes

Section 8.2.4 Environmental Significance Overlay Code

There are differences between the 2012 TRC Draft Overlay codes and the 2017 MSC Environmental Significance Overlay Code. However the differences are generally in drafting approach, rather than content, with the 2017 Scheme having stronger purpose statements and planning scheme policies to support the performance outcomes and acceptable outcomes.

The Planning Scheme Policy has less 'weight of effect' than the planning scheme code, and accordingly there are some elements of the Planning Scheme Policy that can be re-introduced into the Environmental Significance Overlay Code to provide certainty and clarity, as recommended below.

Table 8.2.4.3A - Environmental significance overlay code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	
For assessable development		
Biodiversity and Connectivity		
Development includes measures that minimises impacts of development on biodiversity and connectivity and provides ongoing protection to biodiversity and connectivity values.	AO9.1 Land mapped as Ecological Corridors, Habitat Links and Matters of State Environmental Significance are included within: (a) a covenant under the Land Titles Act 1994; or (b) dedicated to Council or State Government. Land required for bushfire hazard mitigation may be excluded from the covenant. AO9.2 Development: (a) retains native vegetation to the greatest extent possible; and (b) demonstrates retained biodiversity areas are large enough to maintain ecological values, functions and processes; and	

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Performance outcomes	Acceptable outcomes	
	(c) avoids alterations to natural landforms, hydrology and drainage patterns on the development site.	
	AO9.3 Landscaping and rehabilitation planting:	
	is undertaken with local provenance plants in undeveloped areas of the site where practicable before, during or immediately following completion of the development to achieve a net gain of revegetation of impacted values; and (b) maximises ecological connectivity between vegetation on the subject site and vegetation located on adjacent properties; and (c) provides for the requirements for native flora and fauna known to occur in the locality.	
PO10	AO10.1	
Development incorporates measures that avoid or minimise the disruption of wildlife and wildlife	Where appropriate, development incorporates: (a) vegetated buffers1; and	
habitat and allows for safe movement of wildlife through the site.	(b) fauna friendly fencing2; and (c) wildlife overpasses.	
	Development minimises the use of fencing for internal activities and for property boundaries.	

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¹ For guidance on revegetation for wildlife refer to Environment Australia's technical publication, Revegetation and Wildlife: A guide to enhancing revegetated habitats for wildlife conservation in rural environments.

² Fencing guidelines are presented on page 18 of the 'Significant Impact Guidelines for Endangered Southern Cassowary (Casuarius casuarius johnsonii) Wet Tropics population.



4.5 Mapping

The Council's planning scheme is a point of access to mapping including environmental values.

The detailed mapping data is difficult to interpret effectively at a property or site-specific scale in the PDF maps available to the community.

It is recommended that Council improve the community's access to detailed mapping data by developing an interactive mapping system that will deliver site specific property information including:

- a. General property descriptions and information;
- Map/s of the property showing location, zones, local plans, overlays and LGIP information.

As part of this project, Mangoesmapping has prepared a temporary online service delivering the above outcomes. This service is accessible to planning staff, as a project-specific resource. This mapping can be developed into a web-based resource for access across the Council and the generally community.

Schedule 2 Strategic Framework and Overlay Mapping

Specific changes to the planning scheme text are recommended to improve the assessment process for development within the Julatten, Mount Molloy, Mona Mona, Kuranda, Koah and Speewah localities – these are shown as the Landscape Connectivity Precinct on the Zone Maps - Northeastern Region (zm003) and Southeastern Region (zm004).

This review has found that the value in amending the width of the wildlife habitat corridors on the Strategic Framework Mapping and Environmental Significance overlays is not achievable at this time, as the research gaps / gaps in knowledge do not allow for further detailed change.

Filling in the gaps in knowledge is not a direct responsibility of Council and funding and support for research into this high value environmental area is required from the State and Federal Government.

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5.0 DELIVERABLES

- The project brief sought amended Environmental Significance Overlay mapping in MapInfo format. There are 2 main findings for this output.
 - This review does not recommend changes to the Environmental Significance Overlay mapping or Strategic Framework mapping at this time.

There are significant gaps in the technical knowledge that will inform future mapping amendments. This is recognised by organisations such as Terrain, JCU and CSIRO and it is these agencies who have the responsibility for filling in the gaps in knowledge – it is not a direct responsibility of Council. There may be opportunities for Council and the Community to push for improved funding and support from the State and Federal Government.

 The Council's planning scheme is a point of access to mapping including environmental values.

The detailed mapping data is difficult to interpret effectively at a property or site-specific scale in the PDF maps available to the community. It is recommended that Council improve the community's access to detailed mapping data by developing an interactive mapping system that will deliver site specific property information including:

- a. General property descriptions and information;
- Map/s of the property showing location, zones, local plans, overlays and LGIP information.

This report can be used in support of funding for improved mapping and improved access to mapping for the community.

- Amended Planning Scheme text in Microsoft Word format showing changes in <u>blue</u> underline for new text and red strike through for deleted text, in the following sections:
 - Strategic Framework:
 - 3.2.1 Setting the scene;
 - 3.2.2 The way forward;
 - 3.3 Settlement pattern;
 - 3.3.4 Element-Village activity centre;
 - 3.3.6 Rural villages;
 - 3.4 Natural resources and environment.
 - 5.5 Categories of development and assessment Material Change of Use:

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- Table 5.5.9-Rural zone
- Table 5.5.10 Rural residential zone
- 5.6 Categories of development and assessment Reconfiguring a Lot.
- 6.2.9 Rural zone code
- 8.2.4 Environmental Significance Overlay Code
- new Landscape Connectivity Precinct on the Zone Maps Northeastern Region (zm003) and Southeastern Region (zm004).
- 3. The project report in Microsoft Word format, of (including one hard copy):
 - · all changes to be made to the planning scheme
 - the new locality map to be overlaid onto the zone map
 - other recommendations.
- 4. A .SHP dataset for the new Landscape Connectivity Precinct on the Zone Maps -Northeastern Region (zm003) and Southeastern Region (zm004) for use in alternative GIS software, attributed and symbolised to the QPP specification, for MSC to share with the DLGP.

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6.0 REFERENCES

APPENDIX 1: GAP ANALYSIS OF ENVIRONMENTAL RESEARCH NEEDS IN THE WET TROPICS

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APPENDIX 2: TERRAIN NRM SUBMISSION ON ENVIRONMENTAL AND BIODIVERSITY PROVISIONS

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APPENDIX 3: PROPOSED NEW ZONING MAPS

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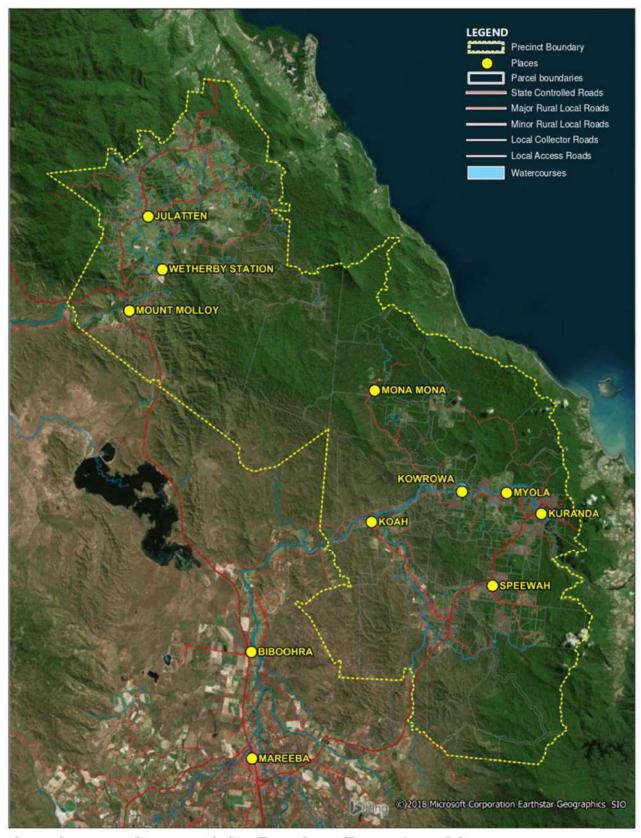


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Landscape Connectivity Precinct Boundary Map







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