



**RAPID CREEK LANDCARE GROUP INC.**

**SUBMISSION TO:  
PROPOSAL TO AMEND NT PLANNING SCHEME PA2015/0400**

**REZONE SECTION 5249 AND PART SECTION 4295**

**FROM OR (ORGANISED RECREATION) AND PS  
(PUBLIC OPEN SPACE) TO CN (CONSERVATION)**

**10 JULY 2017**



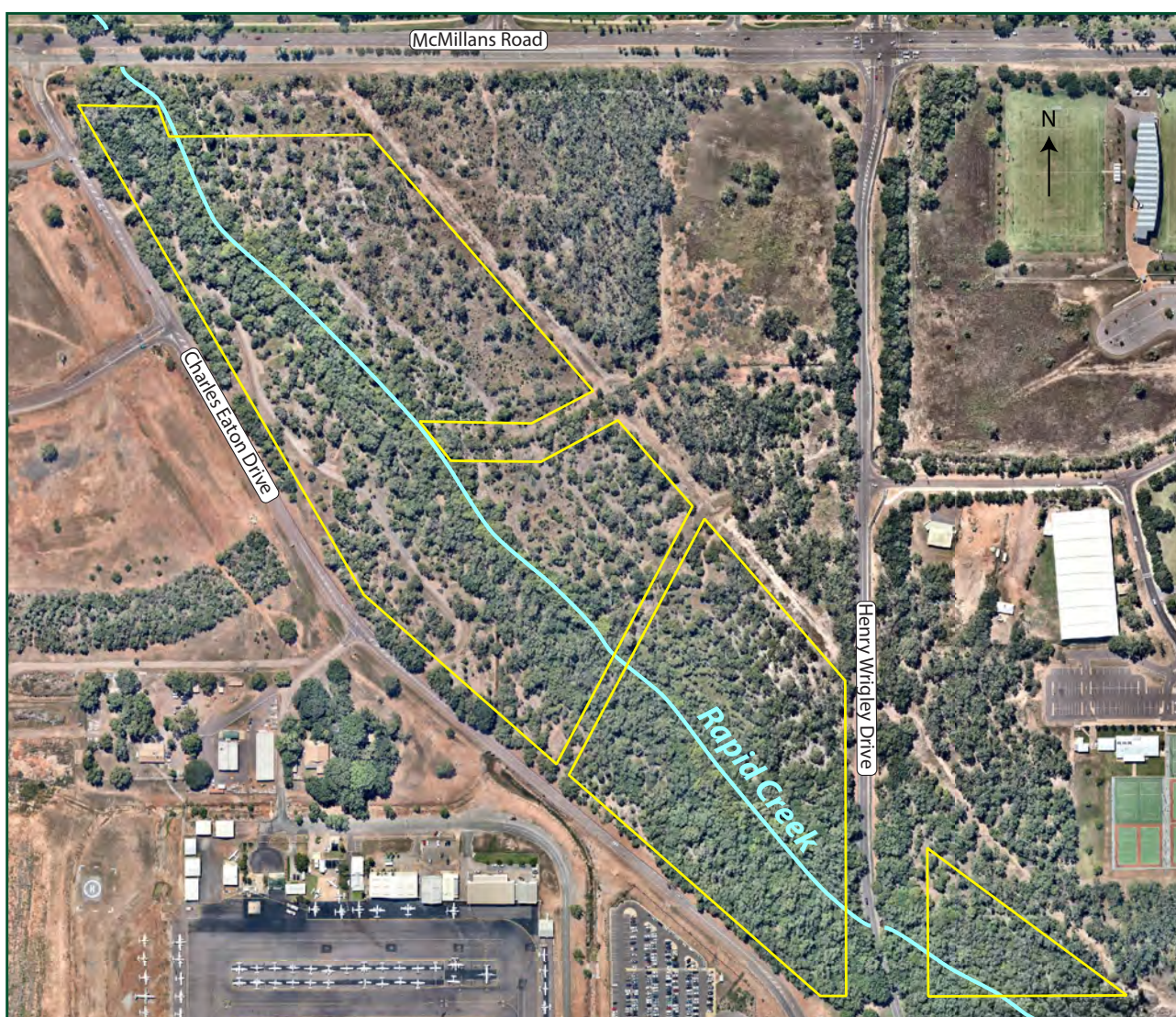


## RAPID CREEK LANDCARE GROUP

The Rapid Creek Landcare Group's members help look after Rapid Creek through working bees, by promoting awareness about the creek and by advocating for better management throughout the catchment. The group works to implement the *Rapid Creek Management Plan*<sup>[2]</sup>. The group's *Report to the Rapid Creek Water Advisory Committee*<sup>[9]</sup> documents their recent projects and achievements and their website<sup>[10]</sup> provides more information.

## SUBJECT AREA FOR CONSERVATION ZONING

The subject area for Conservation zoning is shown in Figure 1. It is highly valued by the landcare group's members and the wider community as it is rare and special to have such an asset in the middle of a capital city. The area contains significant and sensitive native vegetation providing important habitat for wildlife. The area is also valued for its aesthetic and passive recreational attributes. The landcare group has worked with the City of Darwin over the past three years towards gaining Conservation zoning over this unique asset. The group commends the City of Darwin for applying to rezone the area to Conservation and looks forward to the Minister approving the amendment.



**Figure 1: The subject area for Conservation rezoning (outlined in yellow)**



## RAPID CREEK CATCHMENT

The subject area falls within the Rapid Creek catchment (Figure 2). It contains the most significant stretch of monsoon rainforest at Rapid Creek. Apart from the subject area, the land alongside Rapid Creek is already zoned as Conservation:

- From the mouth of the creek to Trower Road Rapid Creek is encompassed within Casuarina Coastal Reserve which is all zoned Conservation.
- From Trower Road to McMillans Road land within 50 metres of the creek is zoned as Conservation; most of this is City of Darwin land. This 100 metre 'conservation corridor' was achieved following sustained community lobbying which highlighted the value Rapid Creek has within the Darwin community.
- Apart from the City of Darwin sections in question, upstream from Henry Wrigley Drive the riparian corridor is on Australian Government land and not subject to the *NT Planning Scheme* <sup>[7]</sup>. All land within 75 metres of the creek on Darwin International Airport land is 'zoned' as Conservation within the *Darwin International Airport Master Plan* <sup>[3]</sup> which is regulated by Australian Government legislation; this land is managed as the airport's Rapid Creek Reserve. The remaining land is owned by Defence and effectively managed for conservation purposes, this is unlikely to change.



Figure 2: Rapid Creek catchment (outlined in pale blue)



## RAPID CREEK MANAGEMENT PLAN

The *Rapid Creek Management Plan*<sup>[2]</sup> was developed in 1994 and updated in 2000. The plan was reviewed and implemented by the Rapid Creek Catchment Advisory Committee (which met from 1996 to 2013) and is a key reference document for the newly formed Rapid Creek Water Advisory Committee.

The plan has strategies that include habitat conservation through managing remnant vegetation communities and adjoining open space using revegetation, regeneration, weed and fire management and access control. The City of Darwin currently manages the subject area using these strategies. Conservation zoning will formalise existing practices and ensure a rationale and community expectation for an ongoing commitment to appropriate management into the future.

## LARRAKIA

“The Rapid Creek Landcare Group acknowledges the Larrakia people as traditional owners and custodians of Gurumbai. Gurumbai is the Larrakia name for Rapid Creek and means elbow, referring to the shape of the creek at the saltwater end, towards the mouth of the creek. Larrakia people know that long time Darwin residents also call this creek ‘Freshwater’, the Larrakia name for all freshwater is Karoewa.”<sup>[10]</sup> Larrakia people highly value the subject area as part of the only significant freshwater system in Darwin and continue to utilise Rapid Creek resources there. Conservation zoning and appropriate management will ensure future generations of Larrakia will have the ability to maintain their cultural heritage at Rapid Creek.

## REMNANT NATIVE VEGETATION

The subject area contains high value remnant vegetation as shown in Figure 3. The information comes from the *Remnant Vegetation Survey Darwin to Palmerston Region*<sup>[1]</sup> (the areas alongside Charles Eaton Drive showing no remnant vegetation cover have been revegetated since the survey). The remnant vegetation communities include monsoon rainforest, lophostemon open forest, eucalypt woodland and sorghum grassland.

Some of the best monsoon rainforest in Darwin is found here including the healthiest stretch of monsoon rainforest in the Rapid Creek catchment. The NT Government has determined that monsoon rainforests are sensitive vegetation communities. They state that 13% (604 species) of the Northern Territory’s flora species occur in monsoon rainforests, that they are highly diverse and significant vegetation communities and that “development should be excluded from areas where rainforest patches are present”<sup>[4]</sup>. The NT Government also lists riparian vegetation as sensitive and recommends actions to minimise disturbance and retain vegetation<sup>[5]</sup>. As the vegetation in the subject area is both monsoon forest and riparian vegetation Conservation zoning is the most appropriate form of zoning.

The *Rapid Creek Management Plan* discusses the monsoon rainforest community, its significance in the catchment and the need for its careful management and protection. It also states “... the most interesting species in this community is *Syzygium angophoroides* which is indicative of permanent fresh water. It is unusual to find this species so close to the coast, it is typical in deep, moist gullies on the escarpment edges of Litchfield and Kakadu.”<sup>[2]</sup>

These trees grow to 20 metres high and are particularly prevalent in the subject area where they line the banks of Rapid Creek. They have a distinctive pink-red papery bark and their fibrous roots contribute to bank stability and assist with preventing erosion (Figure 4).

The fringing open forest, woodland and grassland provide an important transitional zone and buffer to the monsoon rainforest, protecting it from negative urban influences. It is extremely important that these areas are also protected and managed under Conservation zoning to ensure their own integrity and longevity, but also to protect the monsoon rainforest. These communities are often burnt and it is important that management continues to minimise fire reaching the monsoon rainforest where it can cause degradation, Conservation zoning will assist with this.



**Figure 3: Remnant native vegetation in the subject area**

## WILDLIFE

The native vegetation in the subject area provides habitat for a great range of wildlife. In particular the monsoon rainforest is a refuge for many species. The monsoon rainforest provides food for fruit eating (frugivorous) birds; the NT Government states “Reduction in the rainforest estate is a major threat to dependant frugivorous birds”<sup>[4]</sup>.



The Rufous Owl (*Ninox rufa*) is currently roosting in the monsoon forest in the central part of the subject area. This rare species is Australia's only exclusively tropical owl and it requires thick vegetation to roost in during the day. Its presence highlights the significance of this important monsoon forest and the need to protect it through Conservation zoning. The landcare group published the *Rapid Creek Birdwatching List*<sup>[8]</sup> to highlight the range of bird species in the catchment and to encourage community awareness about the wildlife.

## WATER QUALITY

The *Rapid Creek Management Plan*<sup>[2]</sup> discusses strategies for maintaining and improving water quality at Rapid Creek. These include retaining vegetation, limiting development, using planning controls, reducing erosion, weed management and controlling access. Conservation zoning of the subject area will assist in achieving the aims of these strategies.

The *Darwin Harbour Water Quality Protection Plan* has actions which further strengthen the argument for Conservation zoning in the subject area (Rapid Creek flows into Darwin Harbour). The actions for water quality protection "... are directed at reducing soil erosion; minimising off-site sediment transport; supporting protection of native vegetation; particularly alongside waterways, and the maintenance of ecological processes ..." <sup>[6]</sup>.

## AESTHETIC, RECREATIONAL AND EDUCATIONAL VALUES

The subject area provides a visually appealing backdrop within Darwin's busy urban environment including the entrances to the Darwin International Airport. As the *Rapid Creek Management Plan* states, "The diversity of remnant vegetation communities ... has resulted in a rich scenic environment with aesthetic qualities that are generally high" <sup>[2]</sup>.

The subject area is utilised by members of the community for activities including walking, cycling, relaxing, picnicing and birdwatching. People are often observed spending quiet time here in the tranquil settings by the creek. The carparks provided by the City of Darwin along the access road parallel to Charles Eaton Drive provide relatively easy access to the creek. Other users explore the rest of the subject area when seeking longer walks through more undeveloped areas. Rapid Creek is also utilised as an educational resource by primary, secondary and tertiary students and by community groups such as Junior Rangers. Management under a Conservation zoning will enhance these appropriate uses of the area and this will subsequently increase community surveillance.

## IN CONCLUSION

Rapid Creek is an extremely highly valued environmental asset with its entire catchment being contained within the City of Darwin. It needs strong protection into the future. In recent years Rapid Creek Landcare Group members have been very distressed at illegal and legal clearing of native vegetation in the catchment, particularly in the upper reaches of the catchment. Whilst the subject area is basically managed for conservation at the moment, and is currently not at risk from development (it falls within the recently updated 1 in 100 year flood zone and has extremely limited potential for development), Conservation zoning will provide stronger protection and an assurance of appropriate management into the future. The Rapid Creek Landcare Group strongly supports the proposal to rezone Section 5249 and part Section 4295 to CN (Conservation).

## REFERENCES

1. Brock, J. 1995. *Remnant Vegetation Survey Darwin to Palmerston Region*. Greening Australia N.T.
2. Clouston. 1994. *Rapid Creek Management Plan*. Darwin City Council and Greening Australia.
3. Darwin International Airport. 2010. *Darwin International Airport Master Plan*.
4. Department of Land Resource Management. 2010a. *Sensitive Vegetation in the Northern Territory: Monsoon Rainforest*. Northern Territory Government, Darwin.
5. Department of Land Resource Management. 2010b. *Sensitive Vegetation in the Northern Territory: Riparian Vegetation*. Northern Territory Government, Darwin.
6. Department of Land Resource Management. 2014. *Darwin Harbour Water Quality Protection Plan*. Northern Territory Government.
7. Northern Territory Government. 2017. *Northern Territory Planning Scheme*.
8. Rapid Creek Landcare Group. 2015. *Rapid Creek Birdwatching List*.
9. Rapid Creek Landcare Group. 2016. *Report to the Rapid Creek Water Advisory Committee*.
10. Rapid Creek Landcare Group. 2017. *Rapid Creek Landcare Group website* ([www.rapidcreek.org.au](http://www.rapidcreek.org.au)).



**Figure 4: The distinctive roots of *Syzygium angophoroides* contribute to bank stability and assist with preventing erosion; the species is prevalent in the subject area**

Rapid Creek Landcare Group Inc.  
[www.rapidcreek.org.au](http://www.rapidcreek.org.au)  
[info@rapidcreek.org.au](mailto:info@rapidcreek.org.au)