

Darwin Urban Greening Initiatives



Cyclone Marcus – 17th March 2018



Introduction

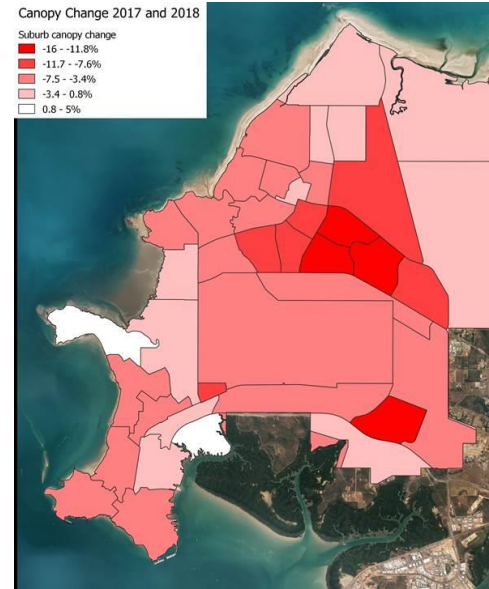
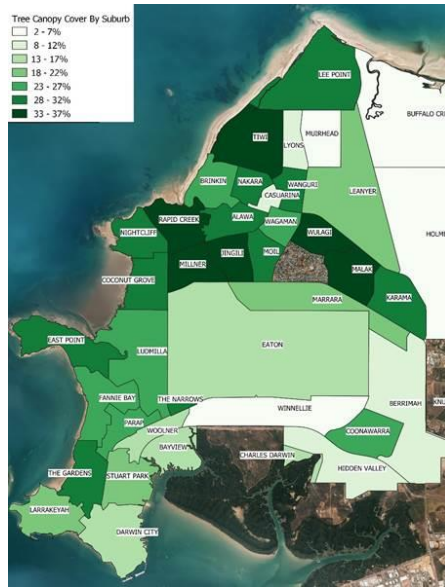
Darwin's unique wet-dry tropics landscape character is highly valued.

Darwin's urban green space forms an integral part of the city's environment as a whole, such as in liveability, climate change adaption, active transport and health and wellbeing.



The impact of Cyclone Marcus on Darwin's Urban Forest

- Loss of tree canopy



The impact of Cyclone Marcus on Darwin's Urban Forest (cont.)

- Loss of tree canopy
 - Through GIS analysis Darwin's urban forest canopy in 2017 was approximately 20,000 hectares
 - In 2018 Post Cyclone Marcus the canopy was approximately 24% less
 - There is the subsequent loss of ecosystem, microclimate moderation (i.e. shading, etc.), climate change adaption (i.e. heat mitigation, stormwater interception, biodiversity, etc.), health & wellbeing, city branding and asset value

The impact of Cyclone Marcus on Darwin's Urban Forest (cont.)

- Loss of asset value
 - Aside from the direct costs attributed to the Cyclone Marcus recovery there is a loss in asset value of the canopy
 - The City of Darwin currently has a NEMUS database capture of over 3,600 trees throughout Darwin
 - An assessment of the vegetation structure, function, and value of this database was conducted during 2019
 - The collected data from those trees indicates a value in the order of \$26M and also avoids 3,500 m³ of stormwater runoff each year
 - So as to indicate a 'ballpark' estimate of total loss of value if extrapolated to the total urban forest the urban forest could be in the order of \$900M. So the loss of tree canopy of in the order of 24% is a significant loss in asset value.



Urban Greening Initiatives

- Tree Re-establishment Advisory Committee (TRAC)
- Urban Forest regeneration
- Lord Mayor's Climate Change Emergency
- Waste Management Initiatives & Strategy
- Urban Greening Strategy



Urban Greening Initiatives

- The TRAC Report
 - Commissioned post Cyclone Marcus to assess tree species against cyclone resilience, recommendations included:
 - Plant selection
 - Tree lists
 - Plant procurement & plant supply
 - Ongoing maintenance & capital funding
 - Monitoring/risk assessment
 - Tree protection, and
 - Education



Urban Greening Initiatives

- Urban Forest regeneration
 - The City of Darwin has committed substantial funding this financial year to through various initiatives to replace, renew, maintain and improve its Urban Green space
 - 6,000 trees to be planted by end December 2019.
 - Over 12,500 trees by end of FY 20/21
 - Several ongoing streetscape beautification projects throughout the suburbs
 - Major streetscape upgrade works in Daly Street



Urban Greening Initiatives

- Lord Mayor's Climate Change Emergency
 - The City of Darwin's Lord Mayor recently declared a Climate Change Emergency
 - The Urban Greening Initiatives will form part of the response.

Urban Greening Initiatives

- Waste Management Initiatives & Strategy
 - The City of Darwin has recently entered into a new Operations Contract at its Shoal Bay Waste Management Facility (SBWMF).
 - A key deliverable under the new operations contract will be an increased level of diversion from the inert waste stream as well as green waste received at the site.
 - The City of Darwin is also undertaking a preliminary works on a Waste Management Strategy with the intent being:
 - Develop and establish a waste diversion target for Council to implement across the Darwin Region,
 - Consider strategies for waste management, and
 - Include an implementation plan for achieving the desired outcomes.

Urban Greening Initiatives

- Urban Greening Strategy
 - The Urban Greening Strategy is currently being developed with a vision that “By 2030, The City of Darwin’s streets and parks will be shady and green”
 - Objectives include:
 - Increase the resilience of Darwin’s urban forest
 - Embed and deliver best practice urban tree asset management
 - Enhance Darwin’s liveability through shading and cooling the public realm
 - Strengthen Darwin’s unique character
 - Support biodiversity in Darwin through increased habitat and green corridor development stream as well as green waste received at the site
 - Increase tree canopy coverage and diversity of species and ages of trees

Thank You

