Summary of the Dampier Creek Zone

THE DINOSAUR COAST NATIONAL HERITAGE MANAGEMENT PLAN 2025

Image: Alarmy Stock

Dampier Creek Zone

The Dampier Creek Zone extends for 12.3 kms, from the start of the mangrove coverage approximately 500m west of the Crab Creek Road T-junction, westward then south-west to the end of the mangrove coverage at Town Beach Jetty.

Assoc. Prof. Steve Salisbury checking Broome Sandstone for dinosaur tracks

TOPOGRAPHY AND ECOLOGY

There are continuous coastal mangrove communities throughout the Dampier Creek Zone, with few beach areas, and an absence of clear coastline. Several mangrove species have been identified here, which provide critical habitat for both terrestrial and marine wildlife species, while mangrove debris is an important food source for animals in the Roebuck Bay Marine Park. Fish, invertebrate and crustacean species also use the mangroves as a nursery area (DPW 2016: 40).

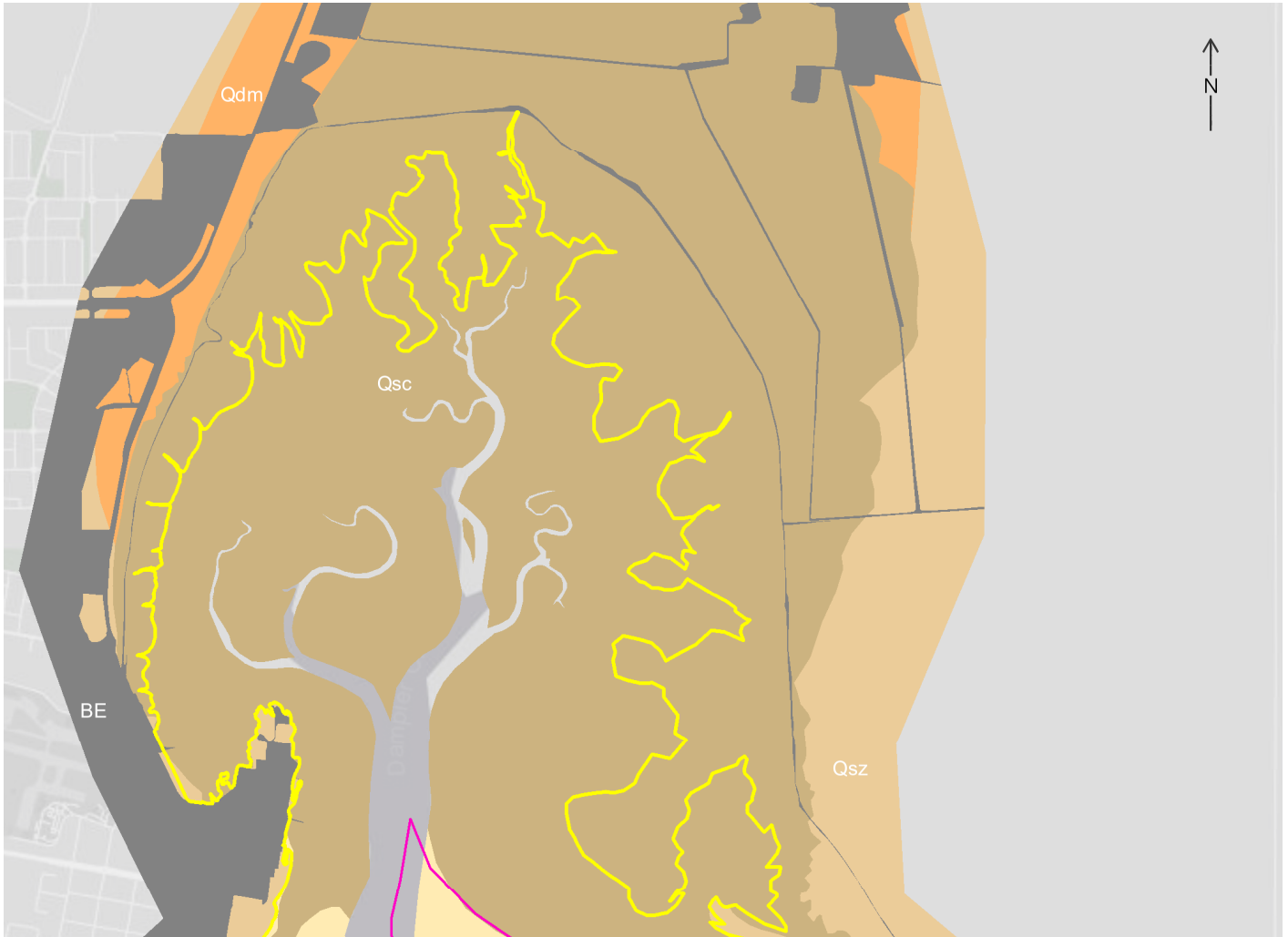
GEOLOGICAL AND PALAEONTOLOGICAL FEATURES

The Dampier Creek inlet is dominated by thick tidal muds of the Sandfire Calcilutite and, in the area above the high-tide mark, the Djugan Member. To the east and south the muds fade to low, sloping cliffs of red Mowanjum Sand. An exposure of sandstone containing iron oxide, eroded from overlying Cretaceous and Cenozoic sandstones, forms a small island known as Buccaneer Rock, south of the estuary mouth.

There are few exposures of Broome Sandstone on the east and west margins of the creek mouth.

Isolated sauropod tracks (one believed to be ex situ) have been recorded in Broome Sandstone exposures immediately north of Town Beach Jetty and 500m further north near Catalina Place.

DCMG field trip into Dampier Creek mangroves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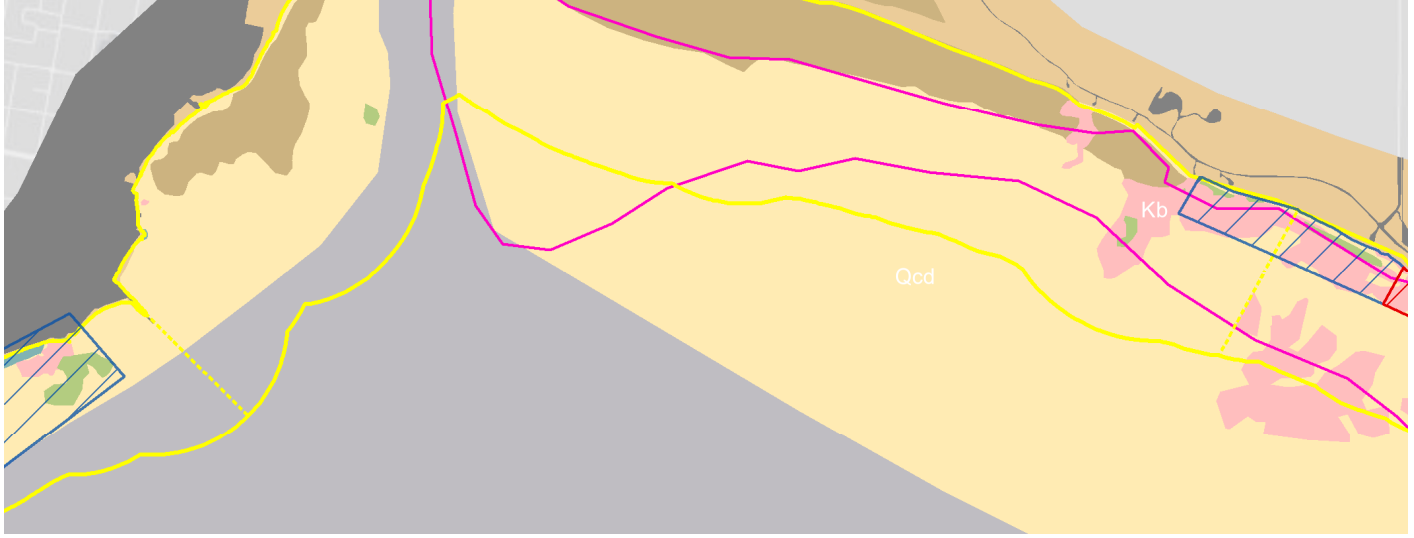

Map Scale 1 : 35,000

0 500 1,000 1,500 2,000 2,500

Metres

Geological & Palaeontological Features

- Area with outstanding features relevant to The West Kimberley National Heritage Listing
- Area with features relevant to The West Kimberley National Heritage Listing

DCNHMP

- Zone Boundary
- Project Area

NHL Gazette

- The West Kimberley

Geological Units

- Kb : Broome Sandstone
- BE : Built Environment
- Qcd : Cable Beach Sand
- Qbr : Cape Boileau Calcarenite + Lombadina Conglomerate
- Qdm : Djugun Member
- Qsz : Holocene Aeolean Dune Sand (Church Hill Sand + Shoonta Hill Sand) overlying Pleistocene Mowanjum Sand
- Qsc : Sandfire Calcilutite
- PQc : Unnamed Pliocene-Quaternary Conglomerate

Dampier Creek Zone: Geological and Palaeontological Features

ACCESS AND LANDSCAPE MODIFICATIONS

There is limited informal pedestrian access and boat access to the intertidal zone within the Dampier Creek estuary system, although there is some access to the zone through the coastal reserve along Old Broome Road, and more regular pedestrian access along the 2km stretch of road between Gray Street and Town Beach Jetty. Built development borders the intertidal zone between Gray Street and Napier Terrace, and further south to the east of Carnarvon Street, and there is direct boat-ramp and pedestrian access to a Broome Sandstone exposure immediately south of the Catalina Place stormwater run-off area, where an ex-situ sauropod track has been recorded. There is also extensive modification and fortification of the coast between Catalina Place and Town Beach Jetty.

Wrapping up the DCMG field trip

ACTIVITIES AND VULNERABILITIES

Recreational fishing occurs throughout the estuary; however, access to the intertidal zone is limited and the only recordings of trackways and sandstone exposures are from within 500m north of Town Beach Jetty. The mudflats around Town Beach Jetty, where sauropod tracks are recorded, is a popular mud-crabbing spot at low tide. Exposures of Broome Sandstone near the town are vulnerable to an increasing residential population with built development, while drainage for stormwater runoff has caused changes in hydrological and sedimentary processes, as can be seen at Catalina Place.

Is it a track?

VISION: TO UNDERSTAND, PROTECT AND PROMOTE THE DINOSAUR COAST AND CREATE OPPORTUNITIES FOR THE BROOME COMMUNITY

OBJECTIVES AND ACTIONS

The following 7 objectives have been identified for the DCNHMP.

Objectives:

1. To increase understanding and awareness of the Dinosaur Coast and its National Heritage Values
2. To conserve and protect the National Heritage Values of the Dinosaur Coast with best-practice adaptive management
3. To monitor and manage the impacts of coastal erosion and other environmental processes
4. To manage the impacts of the expansion of Broome and associated coastal development and infrastructure
5. To manage increasing visitor interest in the tracks and increasing numbers of visitors
6. To create opportunities for the Broome community
7. To improve the experience of visitors to the Dinosaur Coast

The Implementation Plan explains what is being done over the next 5 to 10 years and importantly who will do what.

The Dinosaur Coast Management Plan 2025 received grant funding from the Australian Government.

DINOSAUR COAST MANAGEMENT GROUP

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