



**Basins, Catchments and
Receiving Waters of the
Black Ross Water Quality
Improvement Plan Area**

Appendix A

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descriptions**

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Previously available at http://www.soe-townsville.org/external_inlandwaters/usqmp.html

Alligator Creek - above Bruce Highway [37] (Alligator Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat, Transformed and/or Degraded Habitat
- Conservation value: High
- Important wildlife habitat
- Perennial freshwater habitats
- Closest flowing freshwater creek to Townsville
- Best example of rainforest element riparian vegetation and flood plain paperbark

Uses and Issues

- Freshwater fishery
- A catchment care group is currently being formed in Alligator Creek
- National Park camping grounds
- High-level of use for nature-based recreation (upper catchment)
- Floating aquatic weeds (including Pistia, Salvinia & Hyacinth) require a catchment based integrated management approach
- Exotic grass and fire regime management is required for riparian areas, which are currently disturbed in much of the lowland areas
- Altered hydrology from levees, roads etc



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

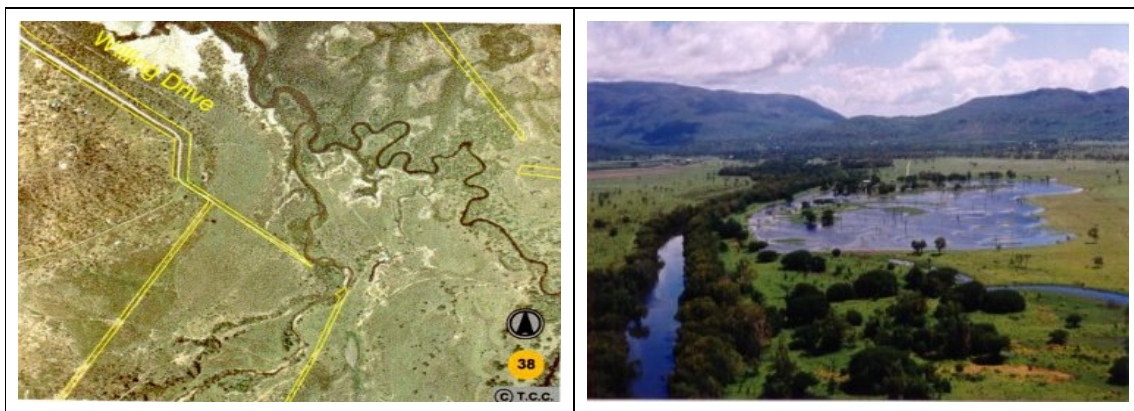
Alligator Creek - below Bruce Highway [38] (Alligator Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - Major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat, Transformed and/or Degraded Habitat
- Important Wildlife habitat
- Perennial freshwater habitats Closest flowing freshwater creek to Townsville
- Best example of rainforest element riparian vegetation and flood plain paperbark forest on Townsville area lowland
- Conservation value: High

Uses and Issues

- Floating aquatic weeds (including Pistia, Salvinia & Hyacinth) require a catchment based integrated management approach
- Exotic grass and fire regime management is required for riparian areas which are currently disturbed in much of the lowland areas
- Sewage disposal



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

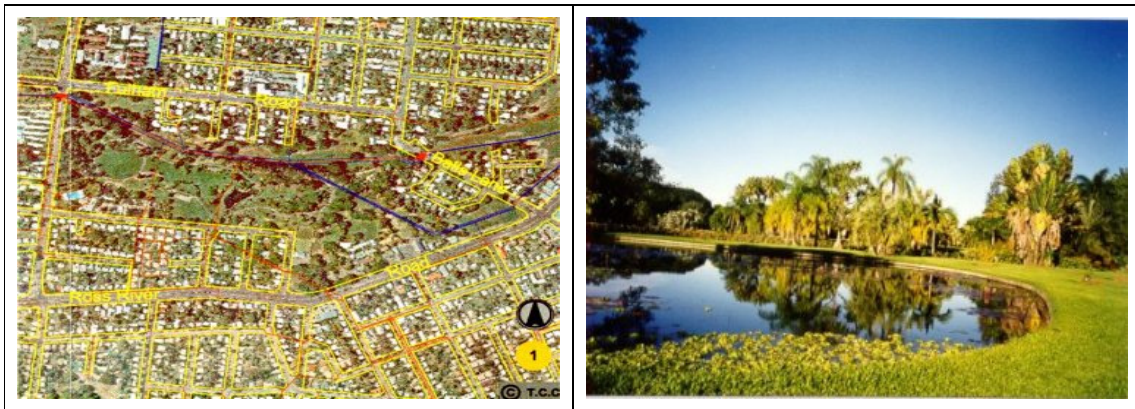
Anderson Park Lakes – Mundingburra [1] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined
- Fish habitat
- Waterbird habitat

Uses and Issues

- Recreational use in urban area - aesthetic value
- Stormwater contamination
- Stormwater drainage and retention area



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Anthill Plains Creek - Lower Catchment [54] (Upper Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat, Transformed and/or Degraded Habitat
- Conservation value: Very High
- Semi-perennial inland freshwater lagoons within creek channel
- Habitat connectivity linking Anthill Plains with Mt Elliott National Park

Uses and Issues

- Maintenance of high water quality to supply Ross Reservoir
- Nature based recreation
- Grazing and exotic vegetation impacts especially on riparian zone



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

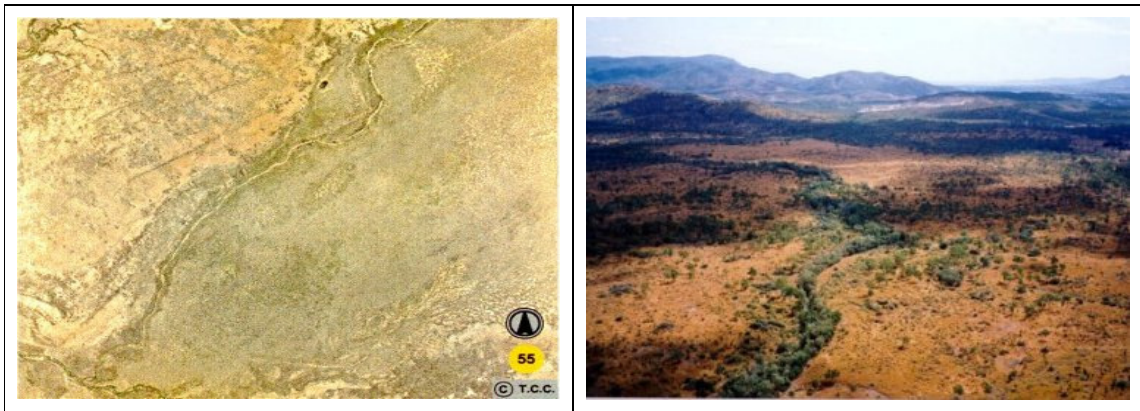
Anthill Plains Creek - Upper Catchment [55] (Upper Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat, Transformed and/or Degraded Habitat
- Conservation value: Medium - High
- Habitat connectivity linking Anthill Plains to Mt Elliott National Park

Uses and Issues

- Catchment and Creek are one of the major sources of potable water to the Ross River Reservoir
- Wilderness Recreation
- Grazing and exotic vegetation impacts on riparian zone
- Fire Management



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

Arcadia [36] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridors - major drainage line
- Heritage Listing and Zoning: Some GBRMP Marine National Park 'B' Natural
- Habitat Quality: Transformed and/or degraded habitat
- Conservation value: Currently unassigned but High in some areas
- Offshore seagrasses and coastal mudflats
- Fringing reefs

Uses and Issues

- Tourism Outdoor recreation
- Popular area for reef walking and snorkelling in Geoffrey Bay
- Impacts on reefs by anchor damage and trampling
- Potential for heavy metal and/or oil spill pollution from vessel operations
- Urbanisation



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Belgian Gardens Drainage [2] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Currently undefined
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined

Uses and Issues

- Urban stormwater drainage
- Litter
- Flood mitigation purposes



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Blakey's Crossing [3] (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Part of National Estate registered as Townsville Town Common and Environs by AHC
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Medium
- Contiguous habitat corridor with Town Common
- Scenic amenity
- Waterfowl habitat and associated flora and fauna
- Fish habitat including juvenile barramundi
- Once a rich wetland site, but now degraded in places

Uses and Issues

- Retention Basin
- Exotic vegetation
- Litter and pollution
- Fire Management
- May require upstream retention basins to improve water quality
- Appropriate control of weeds required
- Potential for grazing



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

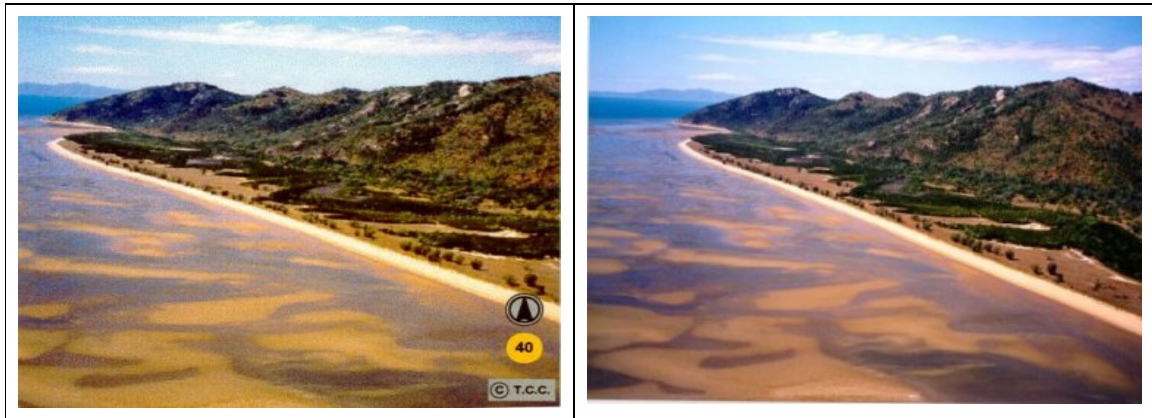
Bohle River to Cape Pallarenda Foreshore [40] (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Contiguous Habitat Corridor
- Heritage Listing and Zoning: GBRMP National Park "A" area near Pallarenda
- Natural Habitat Quality: Natural Habitat and some Disturbed Habitat
- Conservation value: Currently undefined
- Natural Habitat buffer adjoining high value fishery wetlands area
- Contains endangered and vulnerable regional ecosystems
- Last remaining example of Mt Low beach vine thicket
- Connectivity between habitat types including regional connectivity and proximity to Bohle Plains leasehold areas to the south
- Fish, waterbird and estuarine crocodile habitat

Uses and Issues

- Supports commercial and recreational fisheries
- Freehold tenure of beach vine thicket remnant requires agency extension and conservation agreement to ensure retention of representative habitat area
- Fishing pressure



1. RIKES (1990) p10, 35-36. 2. Wetlands of Townsville (1996) Report 96/28 p6-7. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p62 Appendix 2, Figure 1,2 & 5, p11 Section 2. 4. GBRMPA Zoning Information

Bohle River – north of Bruce Highway [4] (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Contiguous Habitat Corridor
- Heritage Listing and Zoning: part of National Estate registered as Townsville Common and Environs by AHC
- Declared Fish Habitat Area - Management 'B' under Queensland Fisheries Act
- Natural Habitat Quality: Disturbed Habitat
- Conservation value: Currently undefined
- Wetland complex composed of mangrove estuaries, salt pans, brackish sedgeland and freshwater swamps
- Fish habitat & waterbird habitat
- Estuarine crocodile habitat
- Representation of old plains land system Habitat connectivity south to Hervey's Range

Uses and Issues

- Drainage development and land reclamation
- Loam extraction from riparian zone
- Previous sand extraction
- Commercial and recreational fishing
- Stream bank erosion
- Exotic vegetation



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

Bohle River – south of Bruce Highway [5] (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Contiguous Habitat Corridors
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat
- Conservation value: Low, some areas High
- Public open space and nature based recreation
- Upper catchment has high value wetland or riparian zone

Uses and Issues

- Licensed discharge of sewage effluent
- Urban stormwater drains lack retention basins
- Erosion from catchment activities
- Sand extraction from riparian zone
- Floating aquatic weeds
- Fire Management
- Littering
- Riparian vegetation removal
- Urban and industrial development in catchment



Campus Creek – James Cook University [41] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Low - Medium

Uses and Issues

- Urban open space
- Nature based recreation
- Site of Townsville City Council habitat rehabilitation by the community



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

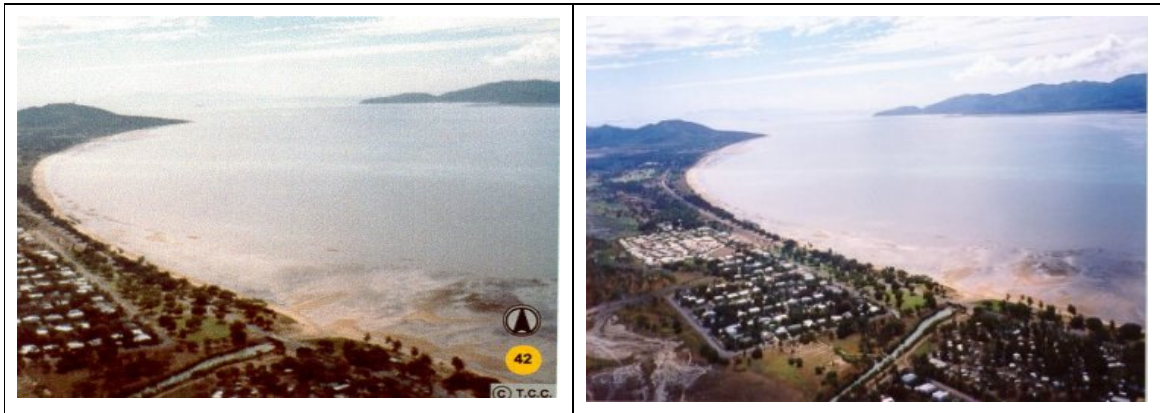
Cape Pallarenda to Kissing Point Foreshore [42] (Lower Ross River Sub Basin)

Site Description

- Heritage Listing and Zoning: Contains GBRMP National Park 'A' area
- Natural Habitat Quality: Currently undefined
- Conservation value: Currently undefined
- Remarkable diversity of marine and terrestrial habitats
- Significant archaeological record
- Extensive intertidal area for wading birds
- Seagrass beds (dugong, fish habitat)
- Remnant native vegetation at Quarantine Station
- Overwintering site for the Danaid butterfly

Uses and Issues

- Extensive recreational use - eg. BBQ's, dog walking
- Recreational fishing
- Environmental buffer against storm surge
- Nursery for marine fish
- Maintain beachfront integrity as buffer for cyclone disturbances
- Up-drift coastal developments impeding sediment supply
- Impacts from recreational use eg. yachts, foot access
- Erosion adjacent to Jezzine Barracks by road activity



1. RIKES (1990) p13, 35-36. Appendic C4. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP. Figures 1,2 and 5 4. GBRMPA Zoning Information

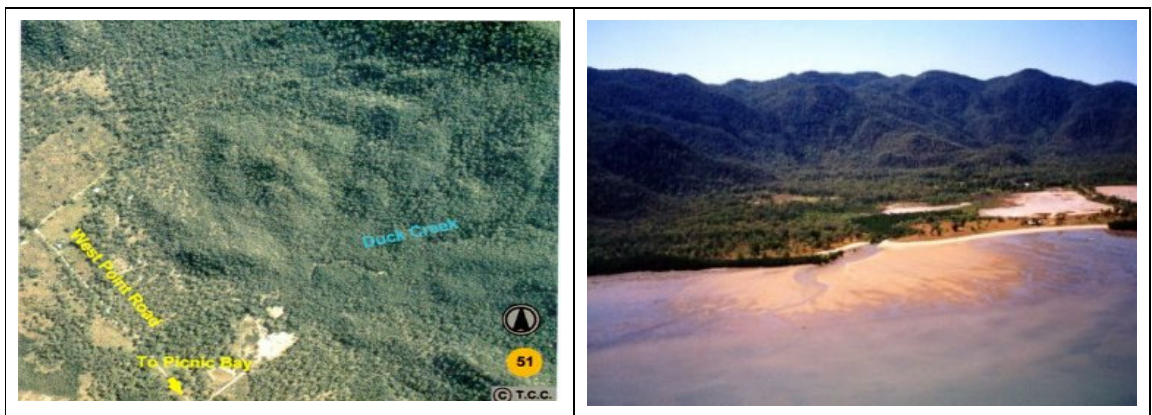
Duck Creek – Magnetic Island [51] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat
- Conservation value: High

Uses and Issues

- Potential future urban development area



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

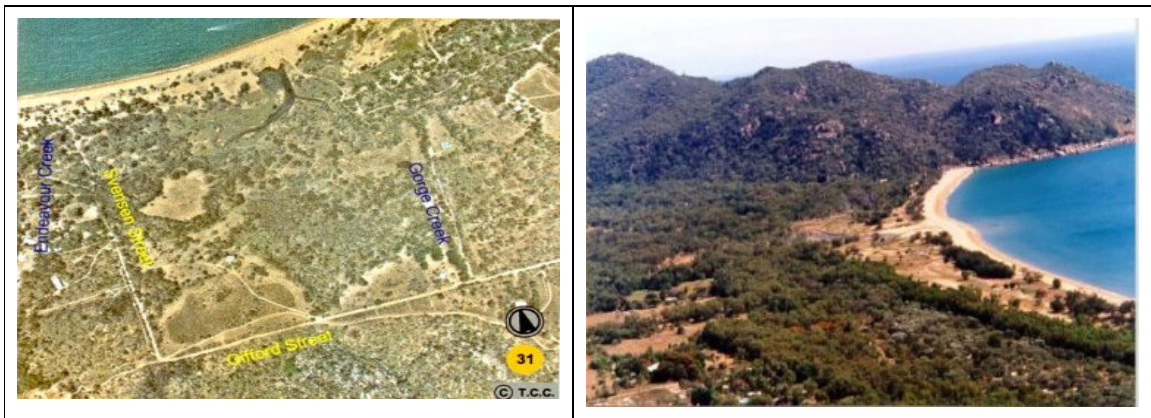
Endeavour Creek and Gorge Creek – Horseshoe Bay [31] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Contiguous Habitat Corridors
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat
- Conservation value: Currently undefined

Uses and Issues

- None listed



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

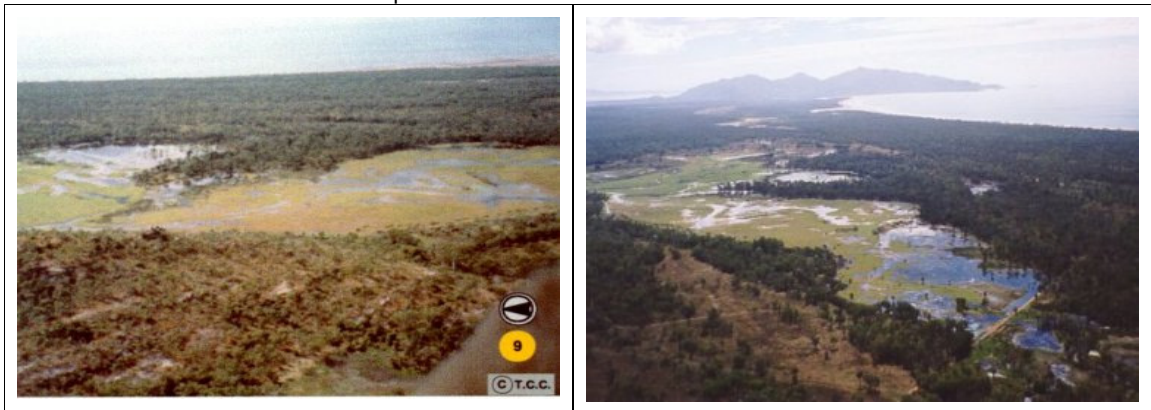
Freshwater Swamps – Cape Cleveland [9] (Alligator Creek Sub Basin and/or Haughton Basin)

Site Description

- Wildlife habitat corridor
- Heritage Listing and Zoning: Ross River to Alligator Creek Coastal area is under assessment for inclusion to the National Estate register
- Natural Habitat Quality: Natural Habitat
- Conservation value: High Large flying fox, ibis and egret colonies
- Habitat for migratory waterbirds subject to international treaties
- Vulnerable plant and bird species
- Semi-permanent water with vegetation relatively intact
- Regionally largest example of woodland developed on old beach ridge soils
- Part of Townsville - Burdekin wetland aggregation listed in directory of important wetlands in Australia
- Barramundi nursery swamps

Uses and Issues

- Undamaged fire regime
- High density grazing and irrigation
- Exotic vines
- Supports recreational and commercial fisheries
- Urban and industrial expansion



1. RIKES (1990) pp.35-6. 2. Wetlands of Townsville (1996) Report 96/28 p8-9, 37. 3. Townsville - Thuringowa Strategy Plan (1996) – NCDP pp.251-52 Appendix 52, Section 2

Goondi Creek – South Townsville [10] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Currently undefined
- Conservation value: Currently undefined
- Mangroves - fish habitat
- Waterbird habitat

Uses and Issues

- Recreational use
- Scenic feature adjacent to urban zone
- 10th Field Supply Battalion development by Australian Defence Force



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Gordon Creek – Idalia/South Townsville [11] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridors - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed habitat
- Conservation value: High

Uses and Issues

- Adjacent to development site
- Refinery industry - copper, zinc



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

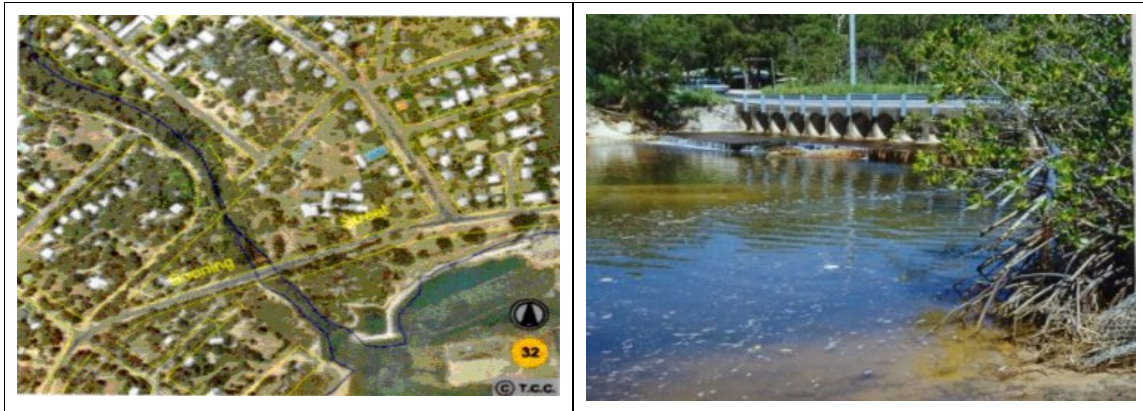
Gustav Creek – Nelly Bay [32] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined
- Typical of a creek that produces habitat diversity

Uses and Issues

- Important conduit during storm flow
- Subject to septic tank releases
- Urbanisation
- Weeds
- Stormwater



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Horseshoe Bay Foreshore [33] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridors - major drainage lines
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Some natural habitat, some transformed and/or degraded habitat
- Conservation value: Currently unassigned
- Buffer to National Park
- Representation of vegetation types not protected within Magnetic Island Park
- Scenic amenity

Uses and Issues

- Tourism
- Outdoor and water-based recreation
- Boat mooring
- Urban development
- Area is part of long standing National Park proposal



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-1

Horseshoe Bay Swamp [34] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Currently undefined
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Natural Habitat, Disturbed Habitat
- Conservation value: High
- Waterfowl and waterbird habitat including rare species
- High densities of swamp hen
- Fish habitat including barramundi nursery
- Largest freshwater habitat on Magnetic Island

Uses and Issues

- Nature based recreation and eco-tourism
- Sewerage effluent (upstream catchment adjoining sewage treatment plant)
- Urban encroachment
- Exotic grass invasion
- Fire regime management
- Paperbark die-back
- Hydrological changes



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

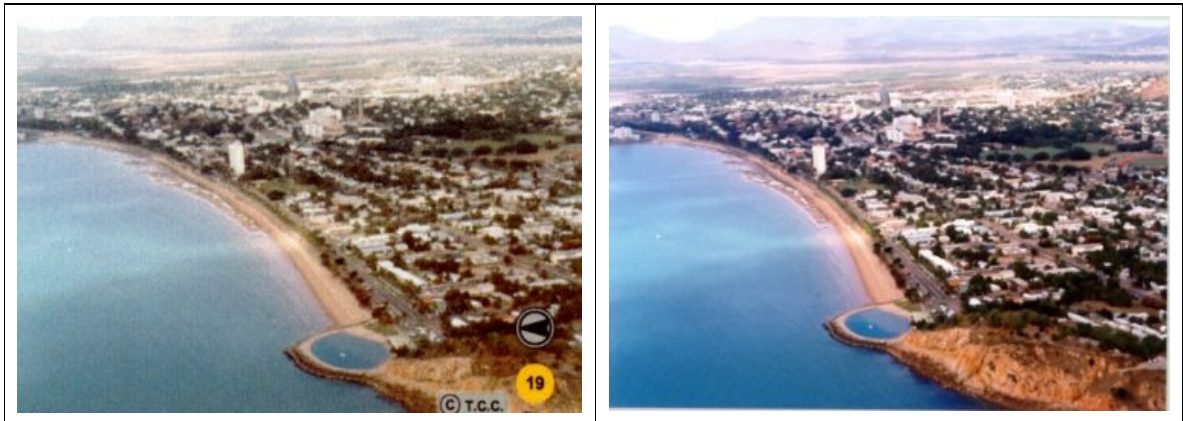
Kissing Point to Ross River – The Strand [19] (Lower Ross River Sub Basin)

Site Description

- Heritage Listing and Zoning: World Heritage below tide
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined
- Dugong protection area
- Seagrass - Small to medium sized beds
- Low diversity, high cover reef offshore (Middle Reef)
- Feeding grounds for dugongs and marine turtles

Uses and Issues

- Very high recreational aesthetic value
- Adjoining tourist and residential development
- Subject to cyclone damage
- Site of future development



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

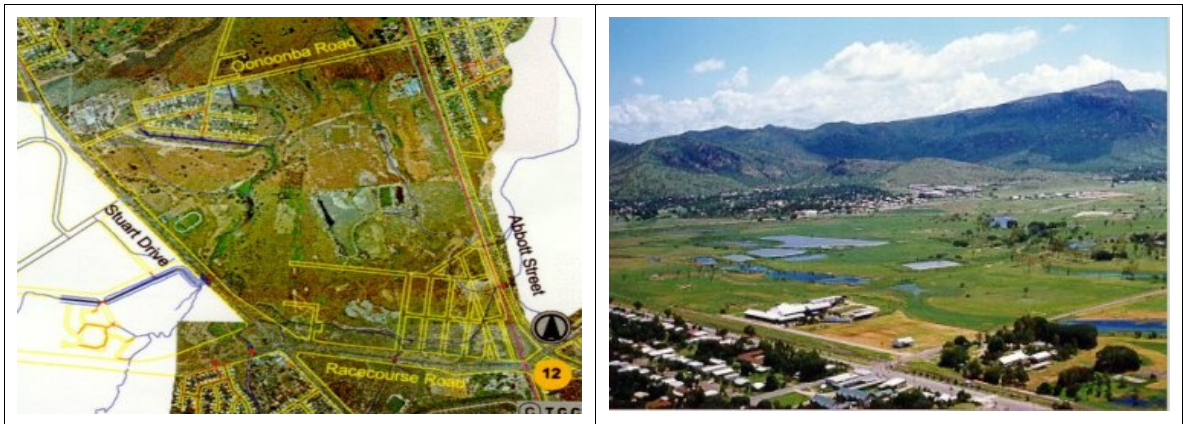
Idalia Lagoons [12] (Stuart Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Medium - High
- Permanent freshwater habitat
- Habitat connectivity with Ross River estuary
- Fish habitat including suitability as barramundi nursery swamp
- Waterfowl and waterbird habitat
- Valuable ephemeral habitat in an urban area

Uses and Issues

- Area proposed for major urban development
- Buffers to be retained between residential "Fairfield" and adjacent wetland and riparian areas
- Hydrological connectivity with lower estuary (via channel adjacent Bowen Rd and Bruce Highway) needs to be maintained to retain fish habitat
- Exotic pasture grasses dominate riparian zone
- Cattle grazing and clearing has degraded riparian vegetation
- Pollution



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

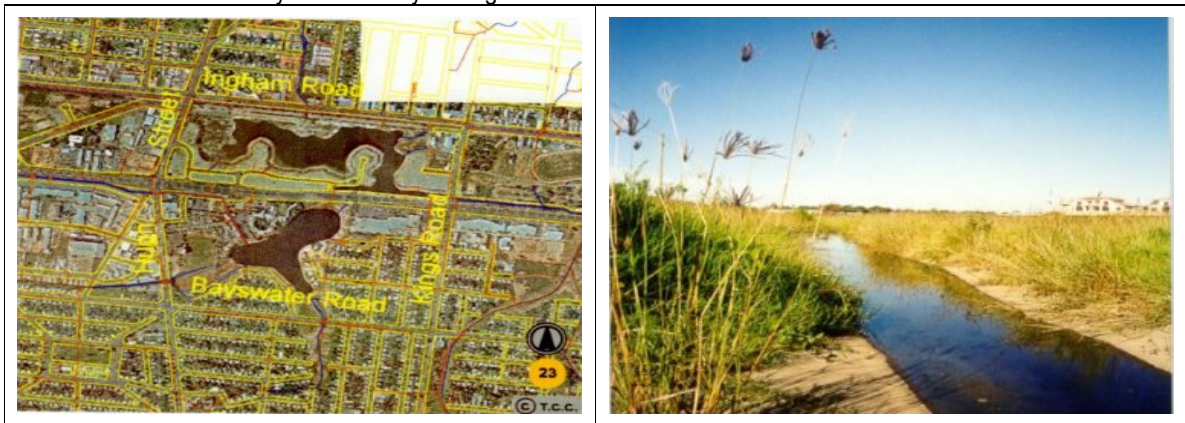
Inlet Drains to Lakes [23] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Currently undefined
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined
- Potential fish habitat
- Potential waterbird habitat

Uses and Issues

- Urban Stormwater drain
- Important in Townsville's flood mitigation scheme
- Litter issues
- Fish nursery / connectivity for migration



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

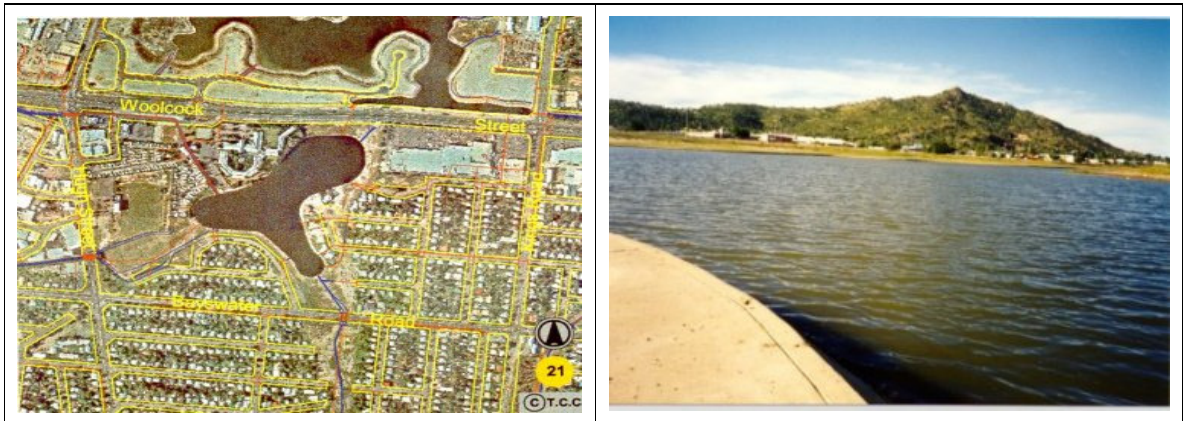
Lakes Development Stage I [21] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Currently undefined
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined

Uses and Issues

- Important in flood mitigation
- Potential to be important for recreation
- Active management requirements
- Potential to be an important wildlife habitat (permanent water)
- Weeds
- Water quality (in general) and blue-green algae issues
- Recreational fishing



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Lakes Development Stage II [22] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Currently undefined
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined

Uses and Issues

- Important in flood mitigation
- Potential to be important for recreation
- Potential to be an important wildlife habitat (permanent water)
- Flat Grade
- Weeds
- Water quality (in general) and bluegreen algae issues



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Lavarack Creek - Annandale [43] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined

Uses and Issues

- Increasing urbanisation



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

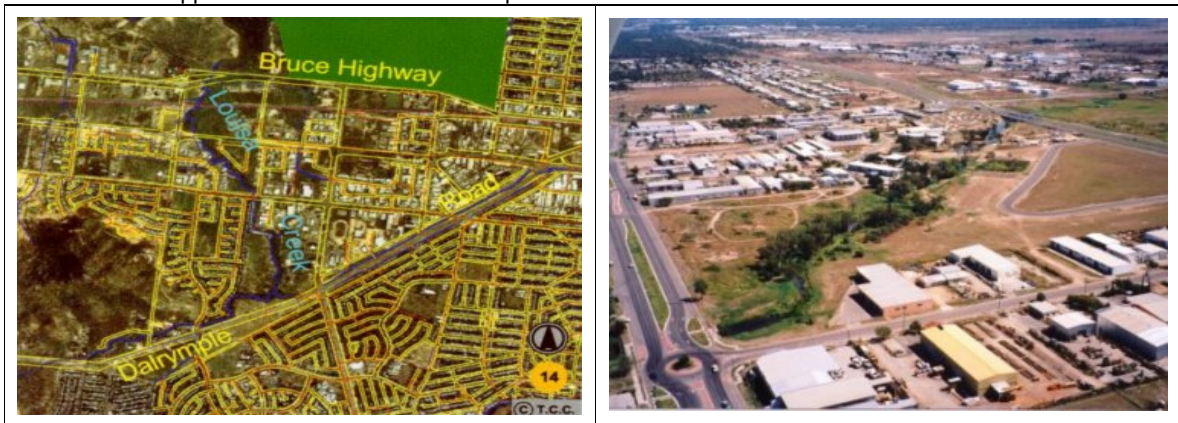
Louisa Creek - Bohle [14] (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation Value: Low - Medium
- Fish and waterfowl habitat and associated flora and fauna
- Diverse indigenous aquatic fauna
- Locally rare vegetation eg. Dog's balls (*Grewia* sp.)
- Good stands of lowland woods including stands of blue gum (*Eucalyptus tereticornis*)

Uses and Issues

- Urban open space
- Site of Townsville City Council supported community riparian rehabilitation projects
- Exotic vegetation invasion
- Urban and industrial development in catchment
- Site is contiguous with Blakey's Crossing and the Town Common
- Upper catchment for conservation park



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

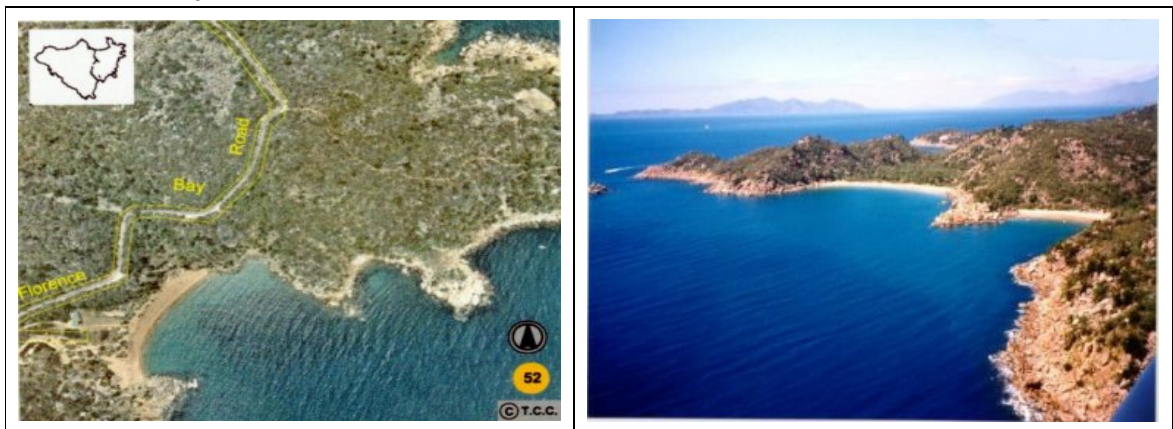
Magnetic Island – Beaches and Rocky Foreshores [52] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Contiguous Habitat Corridors
- Heritage Listing and Zoning: GBRMP Marine National Park 'B' and General use 'B'
- Natural Habitat Quality: Currently undefined
- Conservation value: Very High
- Baitfish nursery - food for marlin
- Extensive coral growth
- Conservation area in Horseshoe Bay conserving a weeping tea-tree (*Melaleuca leucadendra*) wetland
- Seagrass beds. Large beds of low to high density adjoins mangrove and reef habitats
- Feeding ground for dugongs and marine turtles

Uses and Issues

- General recreation
- Tourism
- Aquaculture (Oyster Farm)
- Subject to cyclone damage
- Weed invasion
- Grazing
- Fire



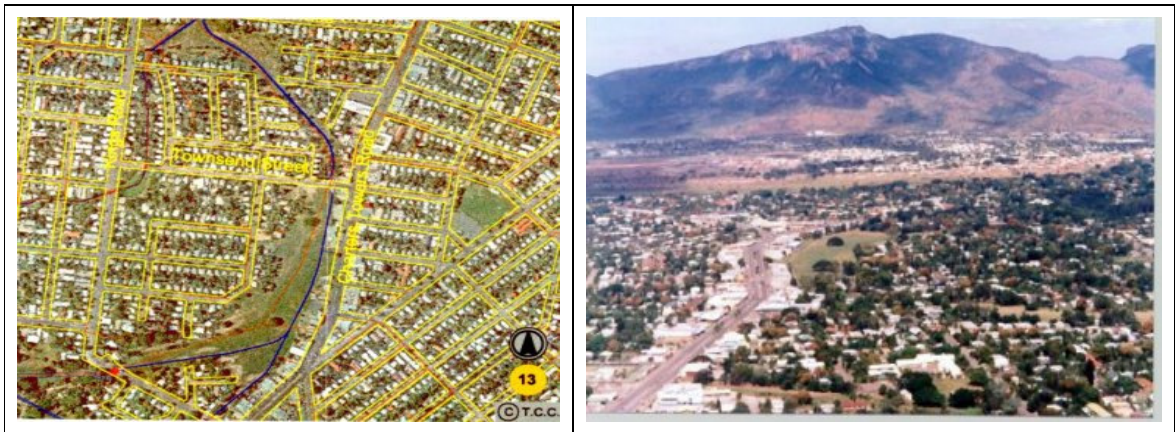
Mindham Creek Drain – Mindham Park [41] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined

Uses and Issues

- Major drainage system
- Flat grade
- Designed to detain stormwater in heavy rain
- Urbanisation
- Weeds



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Mt St John Area – Bohle River [15] (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High
- Key area for maintenance of Town Common Environmental Park waterfowl and waterbird populations

Uses and Issues

- Ecotourism/education
- Nutrient retention basin
- Grazing
- Weeds
- Artificial wetland for sewage treatment
- Sewage treatment plant



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Nelly Bay Foreshore [35] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridors - major drainage line
- Heritage Listing and Zoning: currently unassigned
- Natural Habitat Quality: Transformed and/or degraded habitat
- Conservation value: Currently unassigned
- Offshore seagrasses and coastal mudflats
- Fringing reefs

Uses and Issues

- Tourism
- Outdoor recreation
- Sewage treatment plant location
- Buffer to National Park
- Impacts on reefs by anchor damage, trampling and marina development
- Adjacent to shipping channel
- Urbanisation



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

One Mile Creek [6] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined

Uses and Issues

- Exotic vegetation invasion
- Abutting low lying residential development
- Eutrophication
- Fire
- Litter
- Periodic closure of mouth



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

Pee Wee Creek [16] (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Contiguous Habitat Corridors
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined
- Corridor from Mt Louisa to Town Common Environmental Park

Uses and Issues

- Major drainage input into Town Common Environmental Park
- Buffers noise from growing industrial area
- Important tributary to Bohle River
- Upstream urban catchment (adjoining industrial catchment)
- Weeds



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

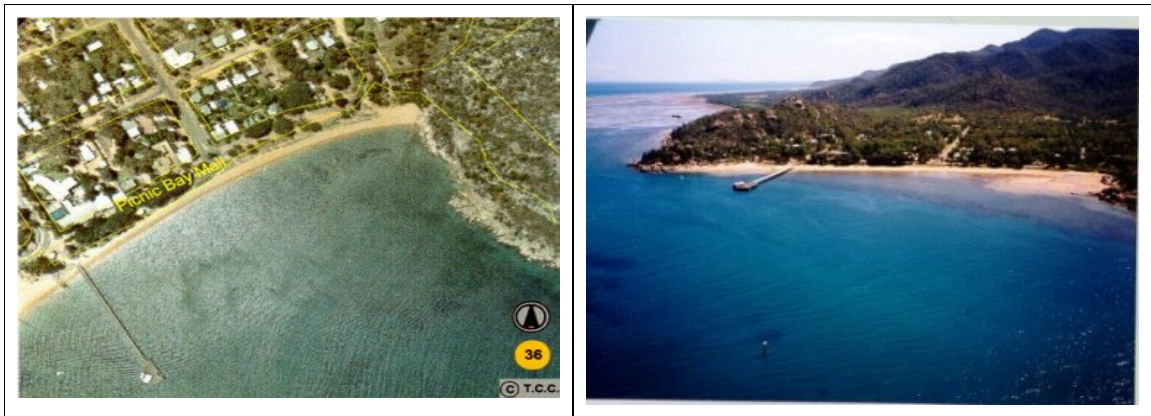
Picnic Bay Foreshore [36] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridors - major drainage line
- Heritage Listing and Zoning: National Park in area
- Natural Habitat Quality: Transformed and/or degraded habitat
- Conservation value: Currently unassigned
- Seagrass beds offshore (dugong and marine turtle feeding, fish habitat)
- Reefs offshore

Uses and Issues

- Tourism
- Outdoor recreation e.g. swimming and snorkelling
- Ferry terminal
- Urban development



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

Rocky Springs [45] (Stuart Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridors - major drainage lines
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Some disturbed habitat, some transformed and/or degraded habitat
- Conservation value: Low

Uses and Issues

- Site of potential future urban development



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

Ross Creek [17] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High
- Wetland complex composed of commercial port, rock breakwaters, mangrove estuaries, salt pans and marine grasslands
- Fish habitat supporting important recreational fishery
- Estuarine crocodile habitat

Uses and Issues

- Public open space with high level of recreational use
- Recreational fishing and boating
- Commercial port
- Boat mooring
- Heavy industry in catchment
- Fuel spills
- Stormwater management - High Priority
- TPA are managing various aspects
- Urban catchment Numerous inflow points
- Flat grade
- Weeds



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

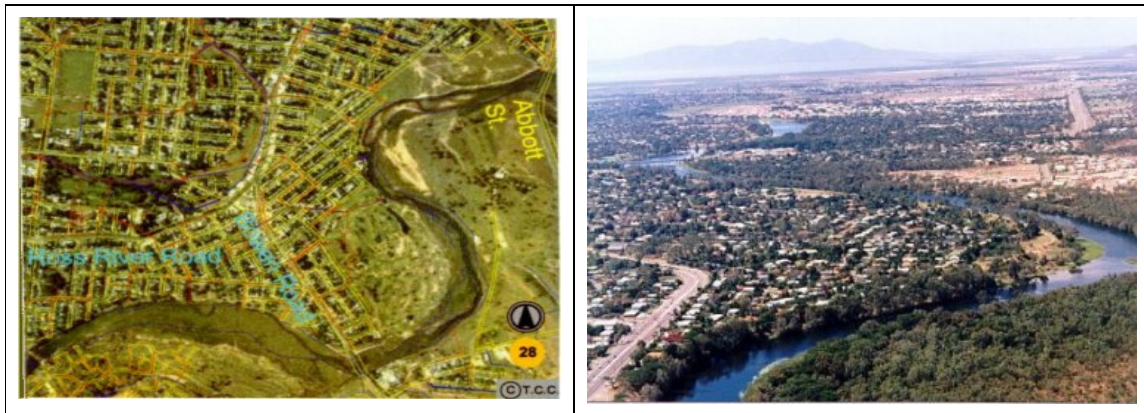
Ross River – Aplin’s Weir to Rooney’s Bridge [28] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High Wildlife habitat
- Waterfowl habitat including rare species

Uses and Issues

- Nature-based recreation
- Recreational fishing
- Horse-swimming (below Aplin's Weir)
- Urban runoff
- Urbanisation
- Riverbank stabilisation
- Noxious weed control



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

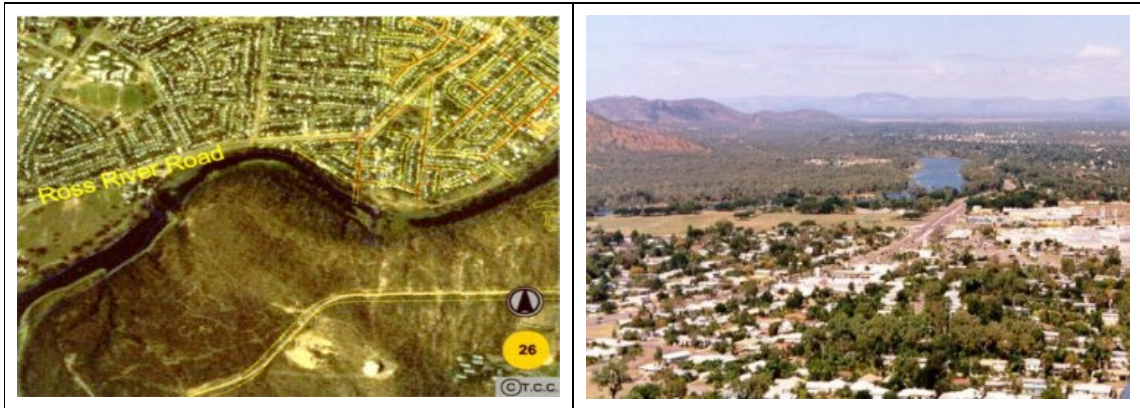
Ross River – Black’s Weir to Gleeson’s Weir [26] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High
- Waterfowl habitat - including rare species

Uses and Issues

- Urban catchment
- Stormwater management required to maintain or improve water quality
- Riparian vegetation heavily infested with exotic grass
- Floating aquatic weeds
- Maintenance of riparian zone buffer required
- Previously cleared riparian areas now landscaped parkland
- Encroaching urban areas require native revegetation to maintain habitat integrity



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

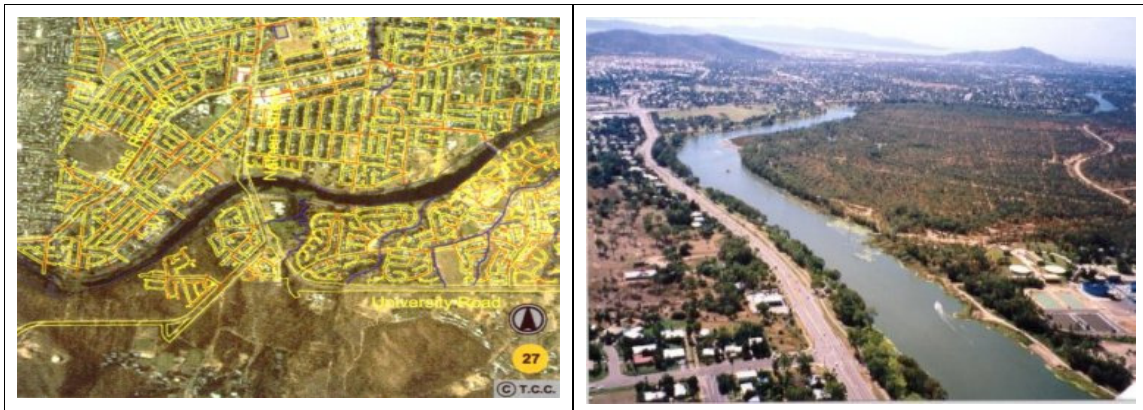
Ross River – Gleeson’s Weir to Aplin’s Weir [27] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridors - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or degraded habitat
- Conservation value: High
- Feral freshwater crocodile population
- Waterbird habitat
- Fish habitat

Uses and Issues

- Local residents have developed managed areas of the riparian zone
- Urbanisation of southern bank
- Riparian vegetation heavily infested with exotic grass
- Urban catchment
- Stormwater
- Floating aquatic weeds



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

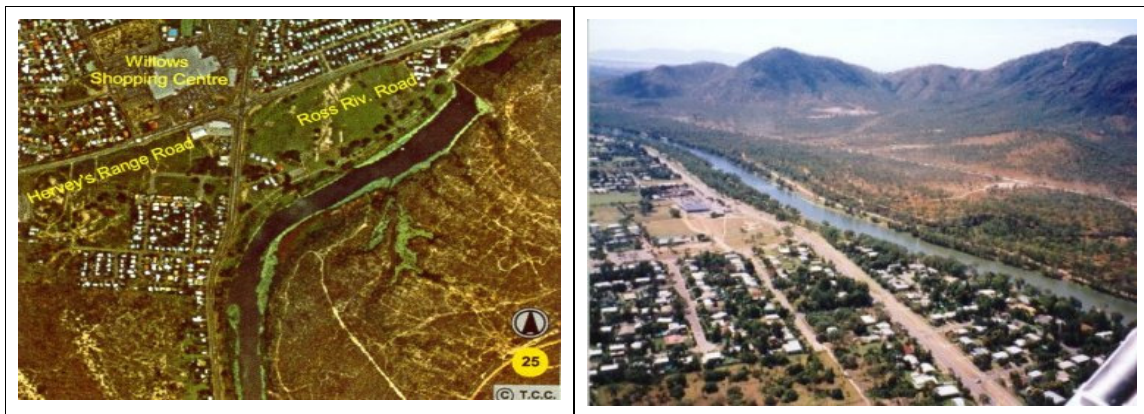
Ross River – Reservoir to Black's Weir [25] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High
- Waterfowl habitat (including rare species)

Uses and Issues

- Nature and water based recreation (e.g. water skiing)
- Commercial eel fishery
- Recreational Barramundi fishery
- Riparian vegetation heavily infested with exotic grass
- Floating aquatic weeds require integrated approach for control
- Potential conflict exists between use for water skiing and sand extraction
- Urban catchment stormwater management required to maintain water quality
- Fishing pressure



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Ross River – Rooney's Bridge to Mouth [29] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - Major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High
- Wildlife Habitat
- Largest Sacred Ibis colony in northern Queensland
- Flying fox habitat

Uses and Issues

- Boat Mooring
- Recreational fishing
- Aquaculture
- Urban and industrial encroachment, stormwater inputs and other contaminants



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

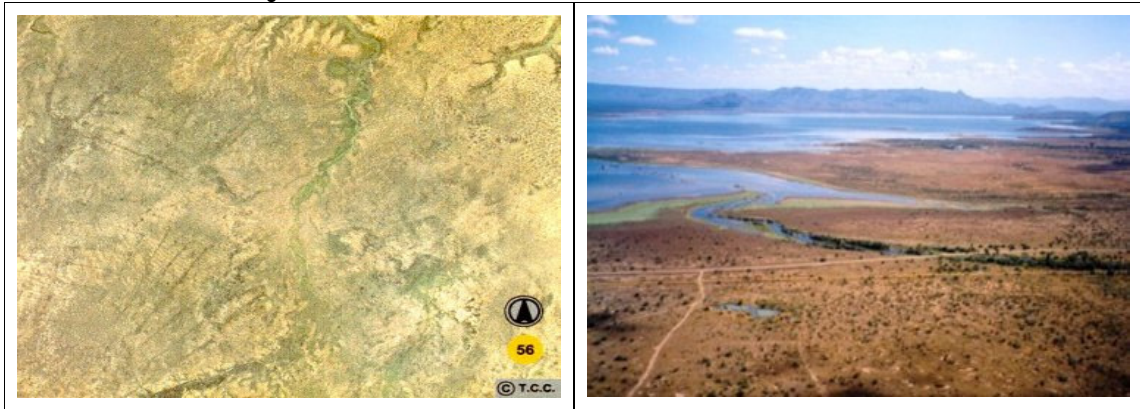
Ross River - catchment above Dam [56] (Upper Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian corridor
- Heritage Listing and zoning: Currently unassigned
- Conservation value: High

Uses and Issues

- Grazing
- Bank erosion
- Clearing within the catchment
- Water quality for portable supply
- Sand and gravel extraction



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

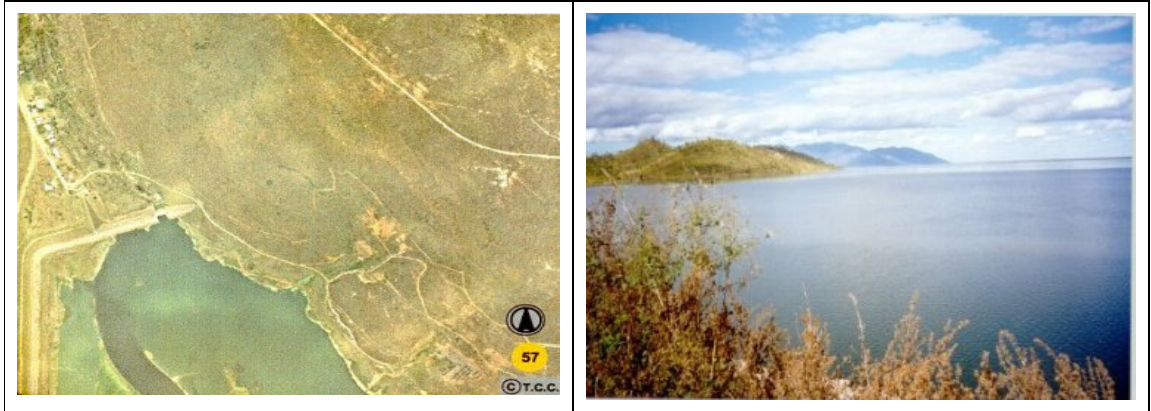
Ross River Reservoir [57] (Upper Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Currently undefined
- Heritage Listing and Zoning: Artificial wetland of national significance listed in ANCA (1996)
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High
- Supports major populations of waterfowl and waterbirds and acts as a drought refuge
- The principal habitat of the rare cotton pygmy goose
- Fish habitat
- Riparian vegetation

Uses and Issues

- Potable water supply
- Potential for public open space and outdoor recreation
- Commercial eel fishery
- Development of recreation potential
- Control of aquatic weeds
- Cattle grazing
- Extraction of gravel



Sach's Creek – Oak Valley [58] (Upper Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High
- Permanent lagoons
- Fish and other wildlife habitat

Uses and Issues

- Upper catchment for Ross River Dam
- Agricultural runoff
- Public open space and nature based recreation within an expanding rural residential area



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

Sandfly Creek [61] (Stuart Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Currently unassigned
- Heritage Listing and Zoning
- Natural Habitat Quality: Some natural habitat
- Conservation value: High

Uses and Issues

- Sewage disposal
- Productive coastal area
- Industrial activities
- Landfill
- Recreational fishing



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

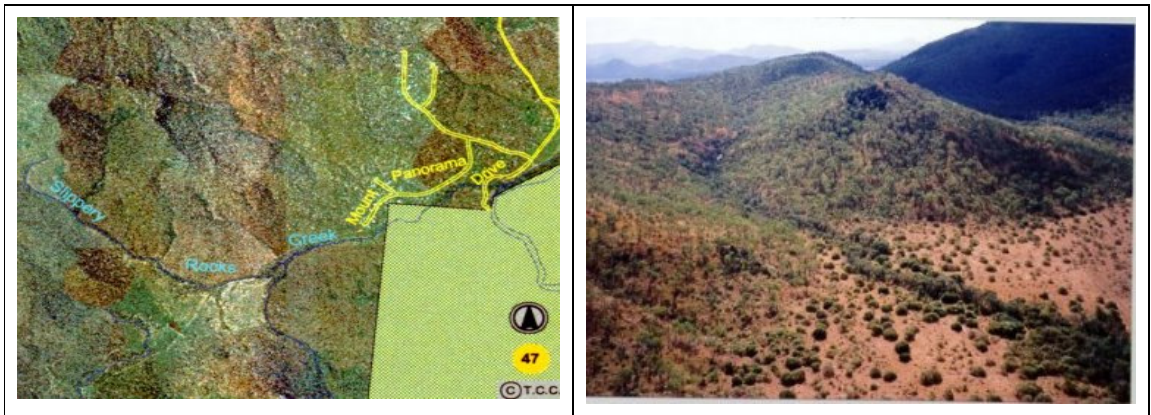
Slippery Rocks Creek – Rocky Springs [47] (Stuart Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - Contiguous Habitat Corridors
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat, Transformed and/or Degraded Habitat
- Conservation value: High
- Diverse riparian vegetation
- Wildlife habitat
- Habitat linkage between Mt Elliott National Park and the Three Sisters Mountains

Uses and Issues

- Nature-based recreation
- Weed invasion
- Excessive fire regime
- Grazing
- Urban Development



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

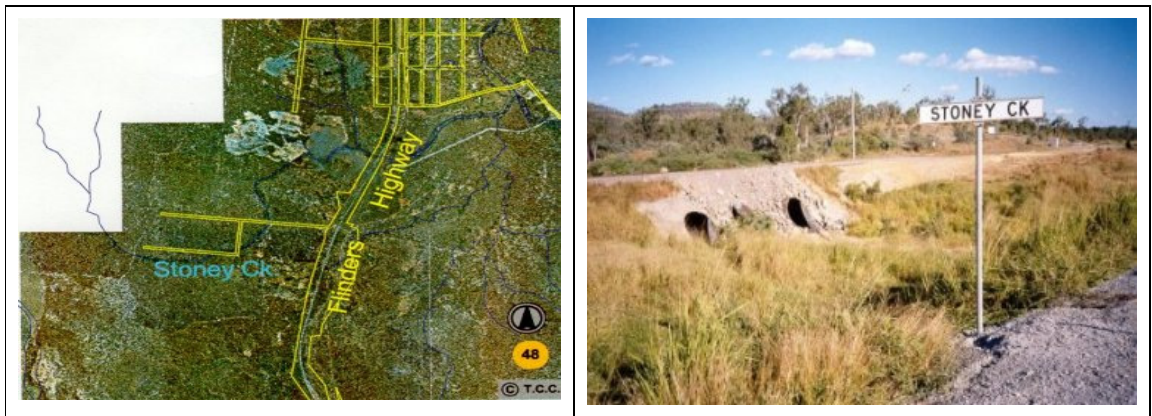
Stoney Creek – Roseneath [48] (Stuart Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat, Transformed and/or Degraded Habitat
- Conservation value: Medium - High

Uses and Issues

- Weed infestation
- Quarry
- Ephemeral stream
- Stability of channel and banks



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

Stuart Creek - Stuart [18] (Stuart Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - major drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat, Transformed and/or Degraded Habitat
- Conservation value: Low but Medium to High for lower catchment
- Diverse riparian vegetation
- Permanent freshwater lagoons
- Fish habitat (including barramundi)
- Best example of riparian gallery forest in Townsville area
- Major drainage area into South Bank
- Aesthetic value high

Uses and Issues

- Public open space/nature based recreation/education
- Exotic vegetation invasion including introduced pasture grasses
- Loss of riparian vegetation
- Riparian vegetation rehabilitation
- Mixture of urban light industrial open space development
- Water quality issues
- Industrial activity in catchment
- Urban and domestic activity



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

Three Mile Creek - Pallarenda [49] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Disturbed Habitat
- Conservation value: Currently undefined
- Fish and waterbird habitat

Uses and Issues

- Popular recreational fishing area
- Fish nursery
- Connectivity with Town Common



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

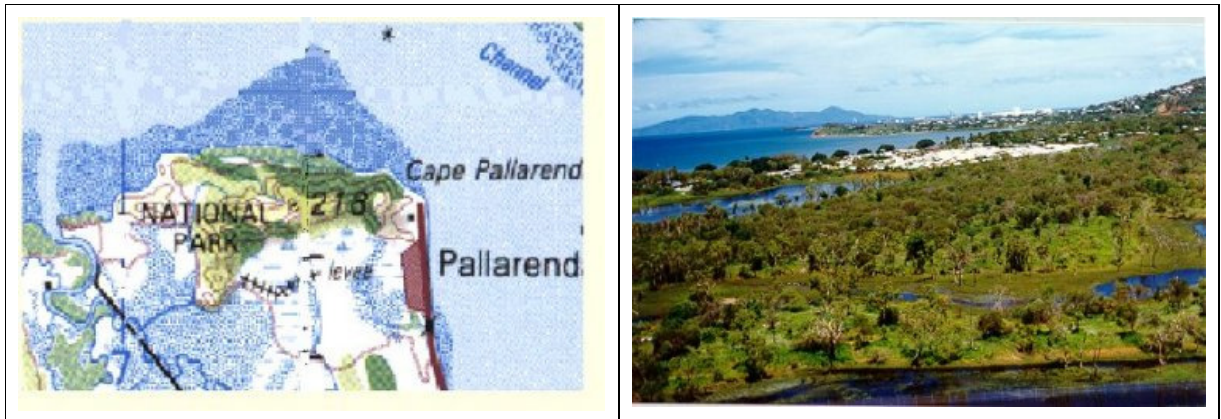
Townsville Town Common (Bohle River Sub Basin)

Site Description

- Wildlife habitat corridor: Contiguous habitat corridors
- Heritage Listing and Zoning: Part of National Estate registered as Townsville Town Common and Environs by AHC
- Natural Habitat Quality: Natural Habitat
- Conservation value: Conservation reserve
- Conservation Park
- Important bird feeding and breeding habitat (subject to Japan Australia and China Australia Migratory Bird Agreements)
- Fish nursery (including Barramundi)
- Diversity of habitat type

Uses and Issues

- Nature-based recreation
- Eco-tourism
- Requires control of exotic weed (rubber vine, noogoora burr, chiney apple, guinea grass, lantana, stinking passionfruit, snake weed, para grass, martinia)
- Introduced fish (Tilapia, Gambusia)
- Industrial catchment, requires water quality control
- Recreational vehicle disturbance
- Feral animals
- Fire



1. RIKES (1990) p35-36, 39 Appendix A11. 2. Wetlands of Townsville (1996) Report 96/28 p21 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p46 Appendix 2, Figure 1,2 & 5.

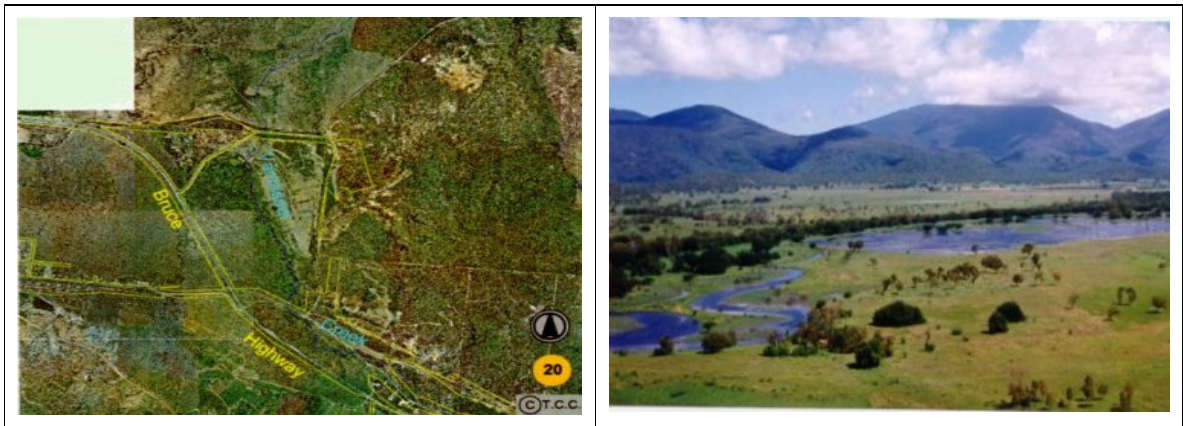
Vantassel Creek - Pallarenda [20] (Stuart Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: High

Uses and Issues

- Downstream industrial development
- Ephemeral wetland



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.

West Point to Cockle Bay Foreshore [53] (Magnetic Island Sub Basin)

Site Description

- Wildlife habitat corridor: Contiguous Habitat Corridors
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Natural Habitat, Transformed and/or Degraded Habitat
- Conservation value: Very High
- Important seagrass beds (dugong, fish habitats)
- Complex mangrove, fringing reefs, sand dunes and salt pans
- Contains aboriginal sites
- Productive fish habitat

Uses and Issues

- Education: Aboriginal sites
- Supports significant bait fishery and fish nursery
- Potential for development of infrastructure associated with ferry reserve within Cockle Bay
- Adequate buffers and waste water controls need to apply to any further rural residential development
- Grazing
- Weeds



1. RIKES (1990) p35-36, 39 Appendix C2. 2. Wetlands of Townsville (1996) Report 96/28 p8 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p63 Appendix 2, Figure 1,2 & 5. 4. ANCA (1996)

Whites Creek Catchment - Nome [50] (Alligator Creek Sub Basin)

Site Description

- Wildlife habitat corridor: Riparian Corridor - minor drainage line
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Low - Medium

Uses and Issues

- Public open space and nature based recreation within an expanding rural/residential and urban area
- Invasion of exotic vegetation, e.g. chinee apple
- Rural residential encroachment into riparian zone



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2

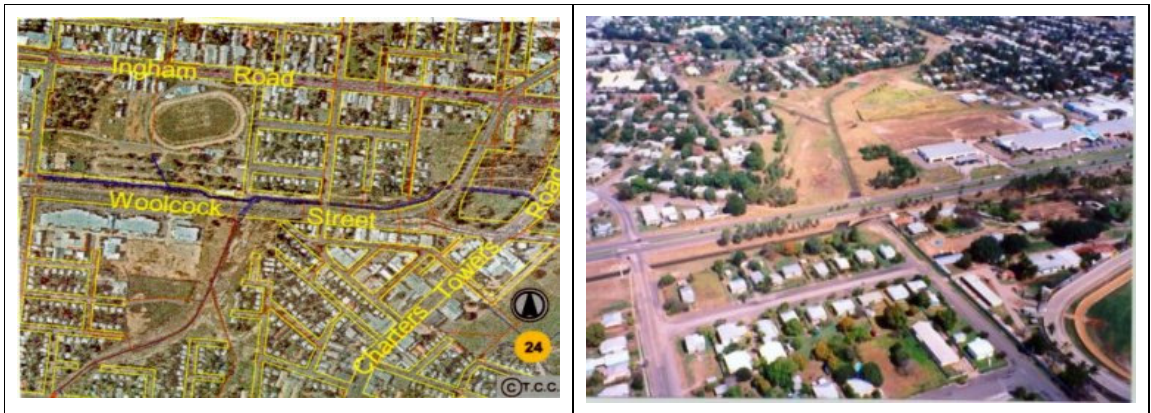
Woolcock Street Channel [24] (Lower Ross River Sub Basin)

Site Description

- Wildlife habitat corridor: Currently undefined
- Heritage Listing and Zoning: Currently unassigned
- Natural Habitat Quality: Transformed and/or Degraded Habitat
- Conservation value: Currently undefined

Uses and Issues

- Urban stormwater drainage
- Secures Lakes base flows & flushing
- Balance flow for Lakes
- Urban catchment
- Weed invasion
- Water quality issues



1. RIKES (1990) p35,36. 2. Wetlands of Townsville (1996) Report 96/28 p9-10, 39. 3. Townsville - Thuringowa Strategy Plan (1996) - NCDP p14 Appendix 2.