

ALLIGATOR CREEK

SUB BASIN FACTSHEET



The Alligator Creek Sub Basin includes the Alligator Creek, Crocodile Creek, Cocoa Creek and Cape Cleveland catchments and associated waterways.

There are a number of tributaries and smaller waterways that have been included in these catchments.



Australian Government



Queensland
Government



Townsville

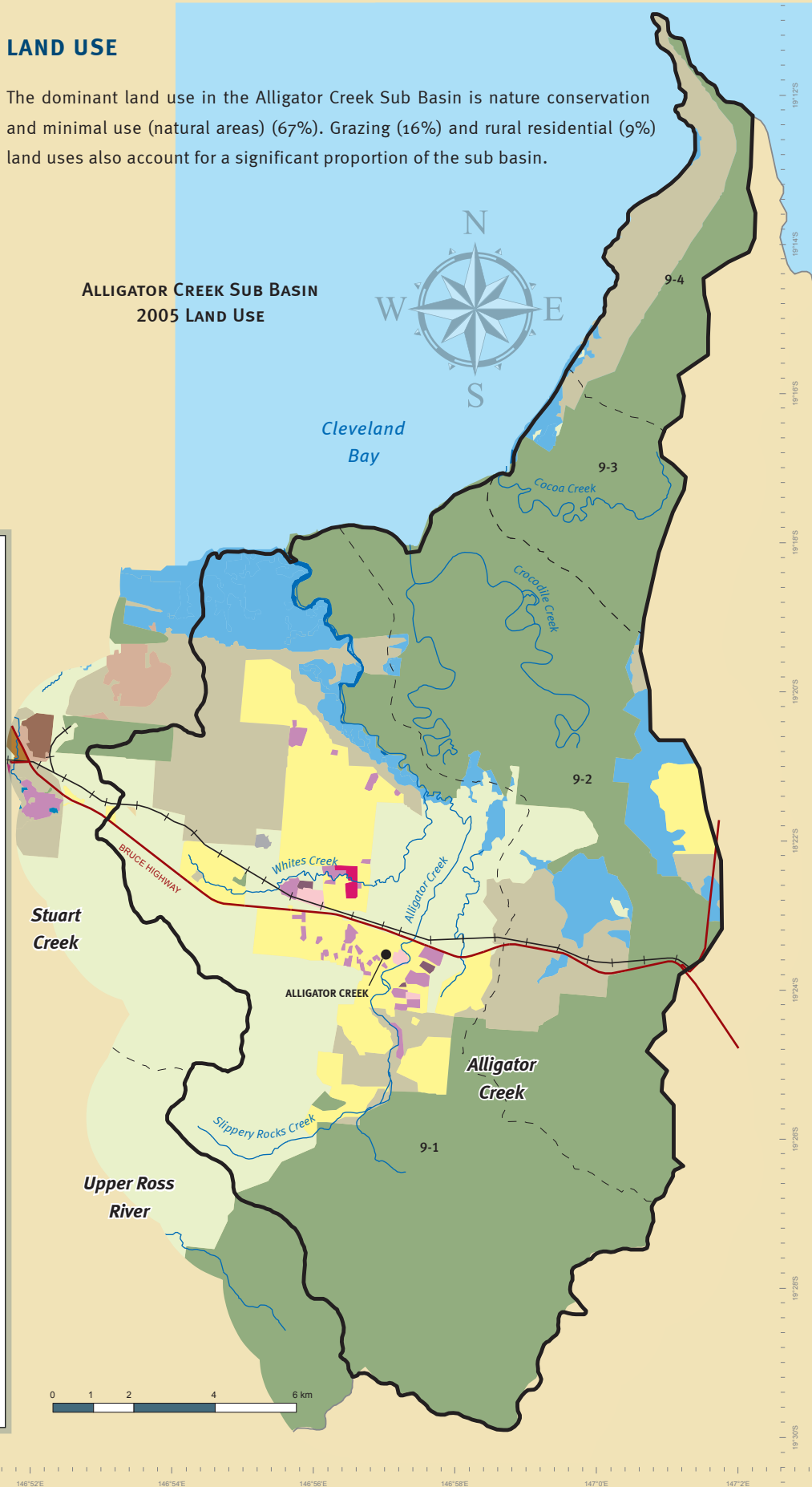
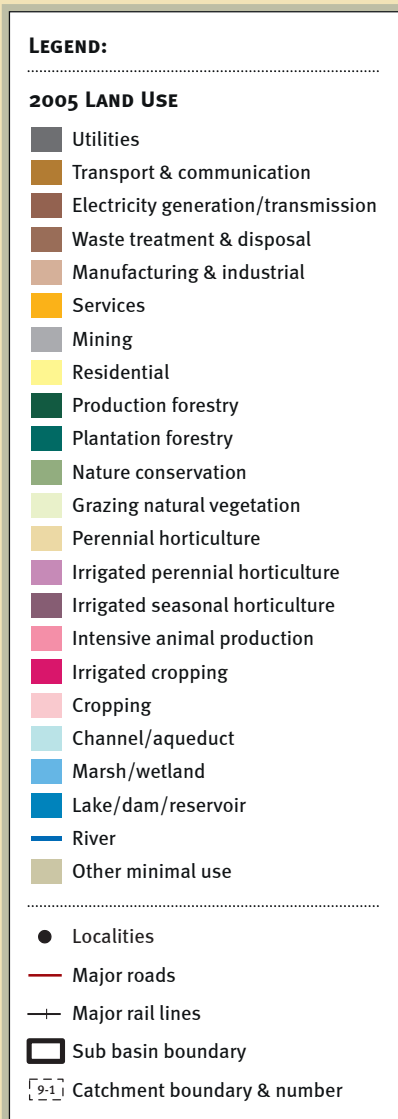


POPULATION

The 2006 Census showed the resident population of the Alligator Creek Sub Basin to be approximately 2,100 people. The Alligator Creek Sub Basin has a high median age of 41 years, with a high percentage of couple families without children (44.6%). The average household size of 2.8 people is on par with the average occupancy for the Townsville local government area.

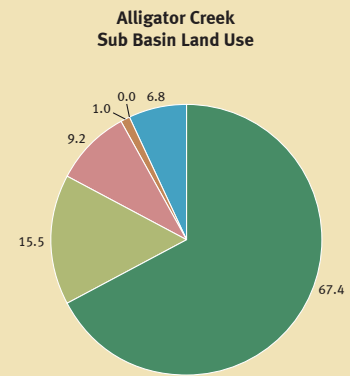
LAND USE

The dominant land use in the Alligator Creek Sub Basin is nature conservation and minimal use (natural areas) (67%). Grazing (16%) and rural residential (9%) land uses also account for a significant proportion of the sub basin.



2005 LAND USE ALLIGATOR CREEK SUB BASIN

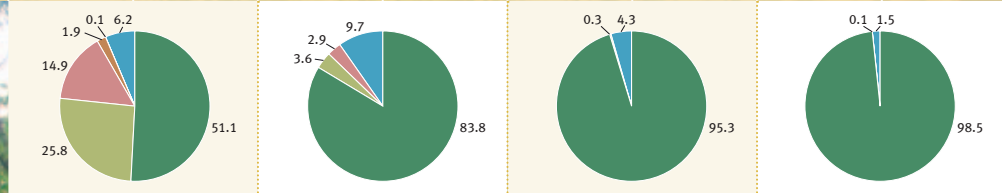
Land Use	Ha	%	Principal Land Use	Ha	%
Nature conservation	14,194	53.6	Conservation and natural areas	17,857	67.4
Other minimal use	3,663	13.8			
Grazing natural vegetation	4,111	15.5	Grazing	4,111	15.5
Residential	2,439	9.2	Rural residential	2,439	9.2
Cropping	43	0.2	Intensive agriculture	272	1.0
Irrigated cropping	26	0.1			
Irrigated perennial horticulture	185	0.7			
Irrigated seasonal horticulture	15	0.1			
Perennial horticulture	3	<0.1			
Mining	11	<0.1	Urban	11	0.0
Marsh/wetland	1,755	6.6	Water and wetlands	1,798	6.8
River	43	0.2			
Totals	26,489	100		26,489	100



Note: Totals may not tally due to rounding of sub totals

LAND USE BY CATCHMENT

Land Use	Ha	%	Ha	%	Ha	%	Ha	%
	Alligator Creek (9-1)	Crocodile Creek (9-2)	Cocoa Creek (9-3)	Cape Cleveland (9-4)				
Conservation and natural areas	7,544	51.1	6,697	83.8	1,636	95.3	1,980	98.5
Grazing	3,816	25.8	289	3.6	5	0.3	2	0.1
Rural residential	2,208	14.9	232	2.9				
Intensive agriculture	272	1.9						
Urban	11	0.1						
Water and wetlands	916	6.2	778	9.7	76	4.3	29	1.5
Totals	14,767		7,996		1,717		2,011	



The Alligator Creek Catchment is the most heavily populated in the sub basin and has a higher proportion of the more intensive land uses. It has a below average representation of "Conservation and natural areas" compared to the other catchments in the sub basin.

[More information about the basins, sub basins and catchments of the Black Ross WQIP can be found in; *Basins, Catchments and Receiving Waters of the Black Ross Water Quality Improvement Plan Area* (Gunn and Manning 2009)]

WATER RESOURCE CONDITION

The Black Ross WQIP area water quality condition assessment (Connell Wagner 2008), using a range of data collected between 1972 and 2007, indicated that the water quality of this sub basin was ecologically healthy. This result is confined to the Alligator Creek Catchment, as the remainder of the catchments had no water quality data to analyse.

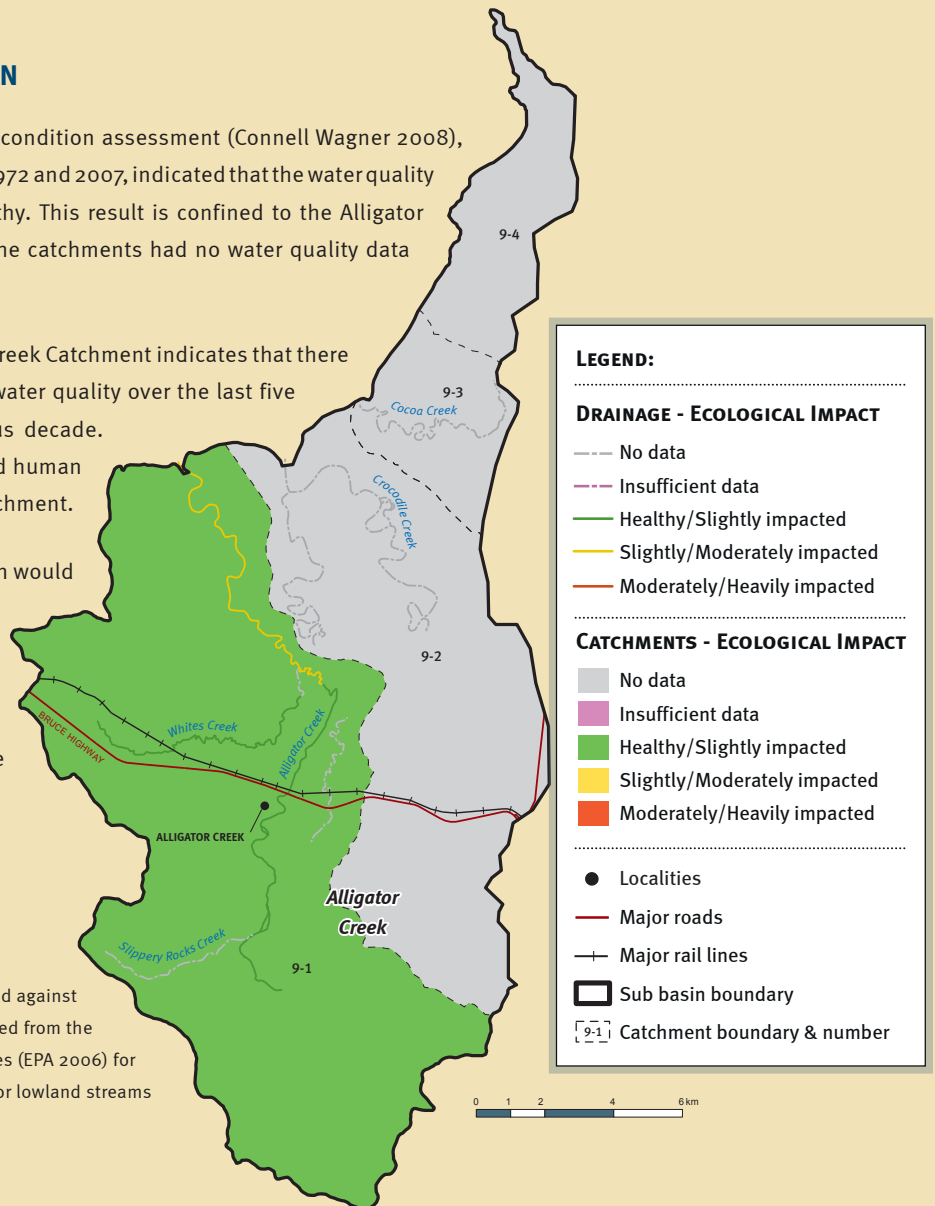
The most recent data from the Alligator Creek Catchment indicates that there has been a significant deterioration in water quality over the last five years when compared with the previous decade.

This is most likely the result of increased human activity in the peri-urban areas of the catchment.

It is assumed that water quality condition would be good, in the three unmonitored catchments in the Alligator Creek Sub Basin, and the streams ecologically healthy due to the limited amount of disturbance and human activity in those catchments.

ALLIGATOR CREEK SUB BASIN ECOLOGICAL IMPACT

Note: Water quality data was assessed against water quality objectives (WQOs) derived from the Queensland Water Quality Guidelines (EPA 2006) for the Central Coast Region for lowland streams



WATER QUALITY AND WATER QUALITY OBJECTIVES (WQOS)

The Alligator Creek Catchment water quality (lowland streams) meets all the WQOs according to the available water quality monitoring data. Mid estuary water quality data only meets one of the four parameters measured based on 'old' data.

COMPARING WQOS WITH WATER QUALITY

Alligator Creek Sub Basin	DIN	Org N	TN	FRP	TP	TSS
Alligator Creek 9-1 (Lowland)	✓ 63%	✓ 46%	✓ 34%	✓ 25%	✓ 40%	✓ 20%
Alligator Creek 9-1 (Mid estuary)	✗ 50%	✗ 15%	✗ 10%	ND	✗ 17%	✓ 50%

Notes: Tick/cross denotes if the WQO is met (✓) or not (✗) for the waterway based on the median value for the water quality indicator. The percentage indicates the amount by which the WQO is met or not met (the difference between the WQO and water quality condition median as a percentage of the WQO). No % is listed if the water quality condition is the same as the WQO. ND is no data.

DIN is dissolved inorganic nitrogen, Org N is organic nitrogen, TN is total nitrogen, FRP is filterable reactive phosphorus, TP is total phosphorus and TSS is total suspended solids (sediment).

* indicates inconsistency or a wide variation in the data, or insufficient data to calculate percentiles.

1 indicates data is dated and may not reflect current condition.

[More information about water quality conditions and WQOs can be found in; *Environmental Values, Water Quality Objectives and Targets for the Black Ross Water Quality Improvement Plan* (Gunn, Manning, and McHarg 2009), and *Water Quality Condition of the Black and Ross River Basins* (Connell Wagner 2008)]

DISCLAIMER: Townsville City Council advises that the information in this document is derived from a number of different sources. The information may not be accurate or up to date and should not be solely relied upon for decision-making purposes.