

BLACK RIVER

SUB BASIN FACTSHEET

4



The Black River Sub Basin includes the Black River and Alice River catchments. There are also a number of smaller waterways that have been included in the catchments of these larger waterways.



Australian Government



Queensland
Government



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POPULATION



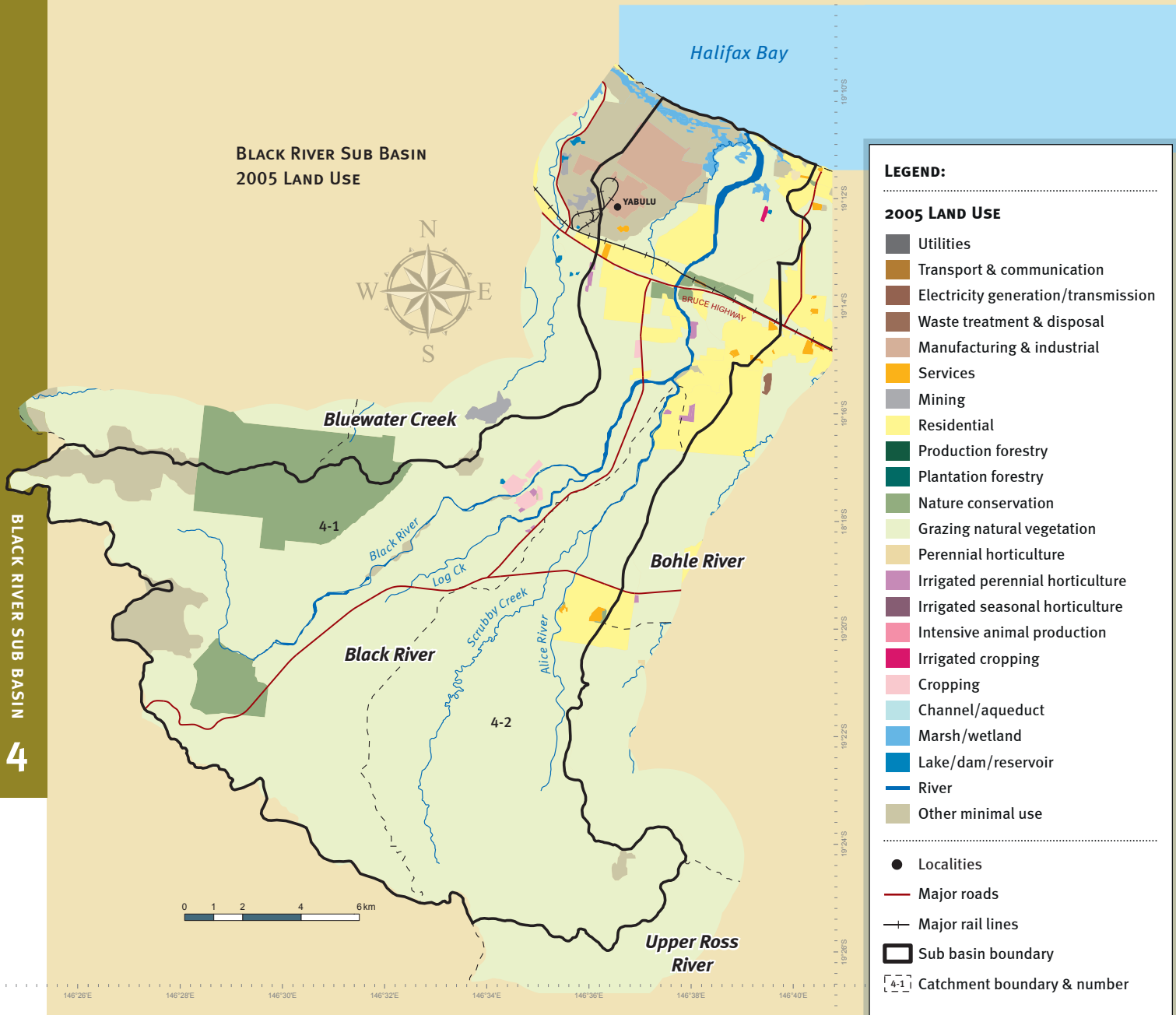
The 2006 Census counted 4,917 people resident within the Black River Sub Basin area. The sub basin stretches from Herveys Range to the coast and includes the northern parts of the Bushland Beach residential area, the majority of the Queensland Nickel Industry (QNI) Yabulu manufacturing and refining plant, and rural residential estates including most of Rupertswood (Alice River).

At the 2006 Census the median age of the Black River Sub Basin population is reported at 36 years. There is a relatively high percentage of couple families without children (38%) and an equally high percentage (38%) with children under 15 years old.

Average household size at 3.2 people per household is well above the average occupancy of 2.8 people for the Townsville local government area.

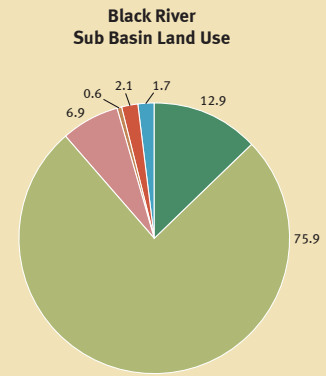
LAND USE

The Black River Sub Basin is approximately 304 square kilometres in size (~30,400 hectares). Land use in the Black River Sub Basin is dominated by grazing (76%). Nature conservation and minimal use (natural areas), at approximately 13% of the sub basin area, is the next most prolific land use followed by rural residential (7%).



2005 LAND USE BLACK RIVER SUB BASIN

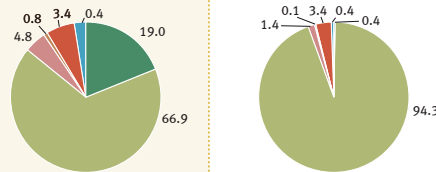
Land Use	Ha	%	Principal Land Use	Ha	%
Nature conservation	1,962	6.5	Conservation and natural areas	3,923	12.9
Other minimal use	1,962	6.5			
Grazing natural vegetation	23,063	75.9	Grazing	23,063	75.9
Residential	2,081	6.9	Rural residential	2,081	6.9
Cropping	103	0.3	Intensive agriculture	168	0.6
Irrigated cropping	7	<0.1			
Irrigated perennial agriculture	58	0.2			
Manufacturing and industrial	564	1.9	Urban	629	2.1
Services	58	0.2			
Transport and communication	7	<0.1	Water and wetlands	513	1.7
Reservoir/dam	5	<0.1			
River	343	1.1			
Marsh/wetland	165	0.5			
Totals	30,377	100		30,377	100



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

LAND USE BY CATCHMENT

Land Use	Black River (4-1)		Alice River (4-2)	
	Ha	%	Ha	%
Conservation and natural areas	3,871	19.0	52	0.5
Grazing	13,646	66.9	9,417	94.3
Rural residential	979	4.8	140	1.4
Intensive agriculture	163	0.8	5	0.1
Urban	1,256	6.2	335	3.4
Water and wetlands	474	2.3	39	0.4
Totals	20,389		9,988	

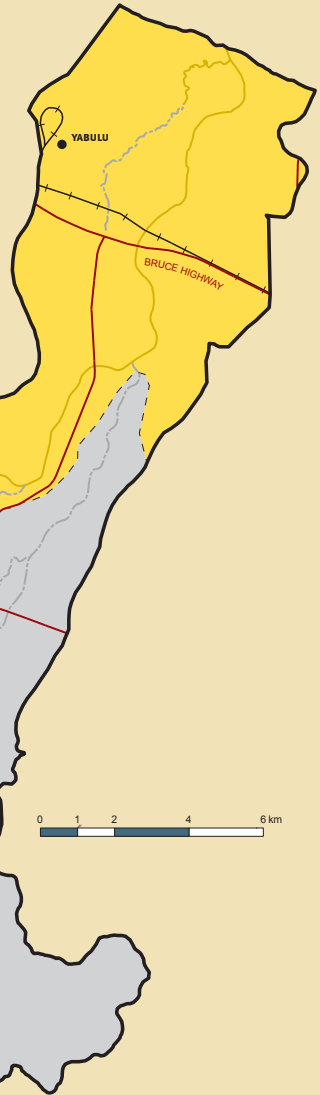


The upper reaches of the waterways in the sub basin are dominated by grazing with a mixture of rural residential and industrial land uses in the lowland sections of the sub basin e.g. Yabulu.

[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) indicated that the water quality of this sub basin was slightly impacted. The limited data available for this sub basin showed that total suspended solids (sediment) (TSS) for the Black River was above the guideline. Recent data for the Black River indicates that TSS is trending higher.



BLACK RIVER SUB BASIN ECOLOGICAL IMPACT

LEGEND:

DRAINAGE - ECOLOGICAL IMPACT

- No data
- Insufficient data
- Healthy/Slightly impacted
- Slightly/Moderately impacted
- Moderately/Heavily impacted

CATCHMENTS - ECOLOGICAL IMPACT

- No data
- Insufficient data
- Healthy/Slightly impacted
- Slightly/Moderately impacted
- Moderately/Heavily impacted

● Localities

— Major roads

— Major rail lines

□ Sub basin boundary

□ Catchment boundary & number

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)

When comparing water quality condition data with the WQOs for the Black River we can see that the WQOs are met for some of the water quality indicators including total nitrogen and total phosphorus. The water quality condition data was above the WQOs for filterable reactive phosphorus (FRP) and total suspended solids (TSS).

COMPARING WQOS WITH WATER QUALITY

Black River Sub Basin	DIN	Org N	TN	FRP	TP	TSS
Black River 4-1	✓*50%	✓28%	✓*33%	✗75%	✓*36%	✗60%

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.



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.

[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)]