

# Black River Catchment

## Catchment Information

### Description

<b>Area (km<sup>2</sup>)</b>	1057
<b>% Gauged</b>	33
<b>Mean Discharge Yr (km<sup>3</sup>)</b>	0.4
<b>Rainfall (mm)</b>	1538
<b>Runoff (mm/m<sup>2</sup>)</b>	360
<b>Runoff/Rainfall Ratio</b>	23

### Land Use

<b>Population</b>	1579
<b>Clearing (km<sup>2</sup>)</b>	501
<b>% Cleared</b>	47
<b>Area under Grazing (km<sup>2</sup>)</b>	802
<b>Area under Sugar (km<sup>2</sup>)</b>	9.7
<b>Area under Horticulture (km<sup>2</sup>)</b>	4.2

### Pesticide Application

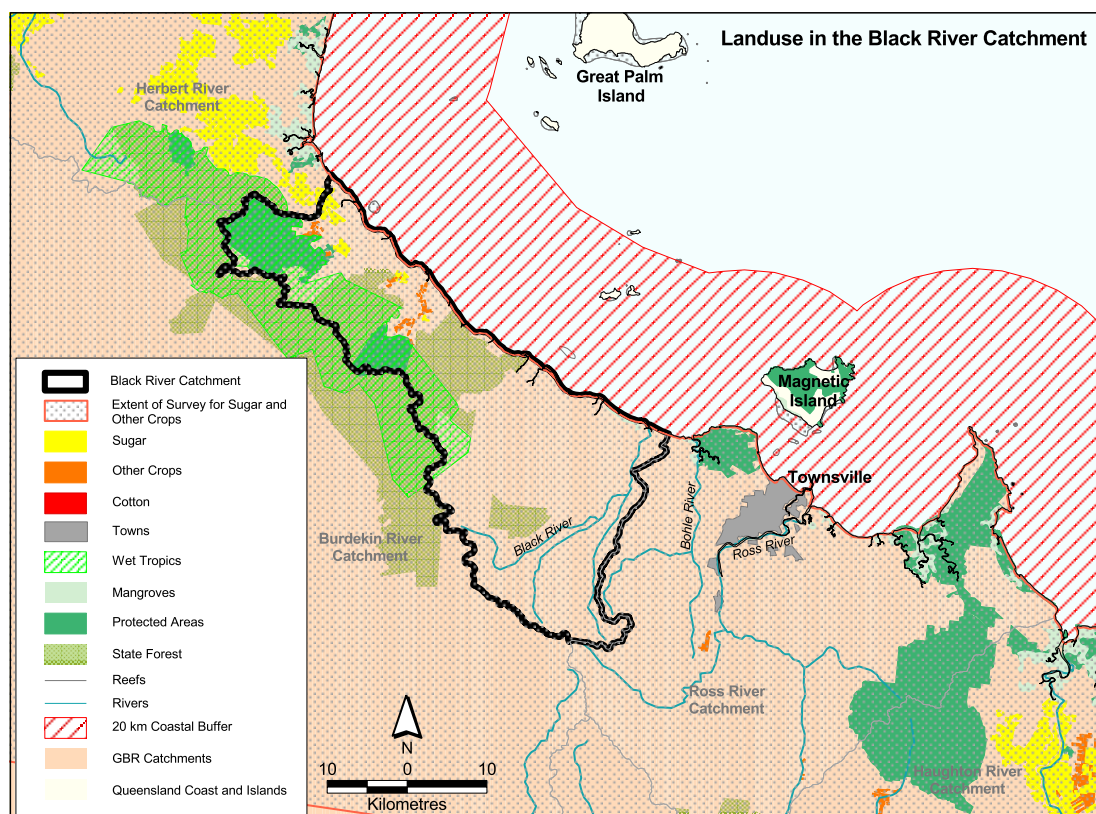
(Kg Active Ingredient/Yr)

<b>Atrazine</b>	203
<b>Diuron</b>	100
<b>2-4D</b>	169
<b>Chlorpyrifos</b>	20
<b>MEMC</b>	3

## Catchment Targets

	<b>1850 T/yr</b>	<b>Current T/yr</b>	<b>Current T/ km<sup>3</sup></b>	<b>ratio</b>	<b>2011 % Red'n</b>	<b>2011 T/yr Target</b>	<b>2011 T/ km<sup>3</sup> Target</b>
<b>Sediment Export</b>	28000	82887	218421	2	0	82887	218421
<b>Total N Export</b>	93	411	1082	4.4	33	275	725
<b>Total P Export</b>	5	90	237	18	33	60	159

Data Confidence Index = 1



## Black River Catchment

The Black River catchment covers an area of 1057 km<sup>2</sup>. Grazing is the dominant land use occupying 802 km<sup>2</sup>. Other land uses are sugarcane farming covers approximately 10 km<sup>2</sup> and horticulture 4 km<sup>2</sup>. Total forests occupy 220 km<sup>2</sup> and protected areas, including the Wet Tropics World Heritage Area, cover 231 km<sup>2</sup>. Sediment export is classified as low risk, and total nitrogen and total phosphorus exports are classified as medium risk in the Black River catchment.

### *Issues in the catchment:*

- There are problems of ground water supplies in the Black River.
- Significant quantities of sand and gravel are extracted from the Black River for the Townsville market, creating an in-stream environmental impact.
- The riverbanks are severely eroded.
- Significant area of the Catchment has been cleared for grazing.
- Some fauna species have been subjected to pressure in the catchment.
- Approximately 22% of the catchment is within protected areas.
- Expansion of cultivated agriculture.
- Increasing contribution of nutrient and pesticides.
- Commercial and recreational fishery.
- Recreational marine use.

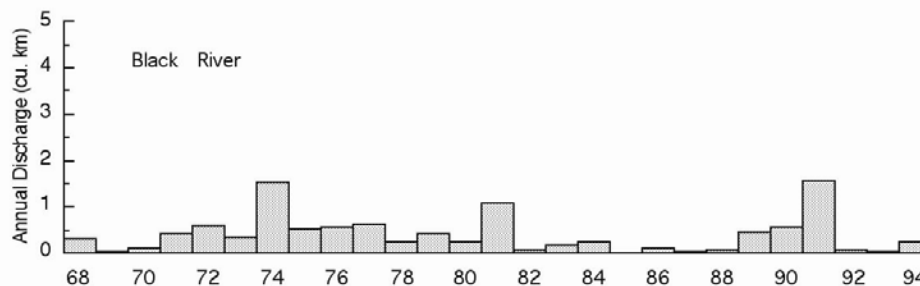


Figure 16. Water discharge patterns in the Black River.