

Black River Catchment

Catchment Information

Description

| | |
|---|------|
| Area (km²) | 1057 |
| % Gauged | 33 |
| Mean Discharge Yr (km³) | 0.4 |
| Rainfall (mm) | 1538 |
| Runoff (mm/m²) | 360 |
| Runoff/Rainfall Ratio | 23 |

Land Use

| | |
|---|------|
| Population | 1579 |
| Clearing (km²) | 501 |
| % Cleared | 47 |
| Area under Grazing (km²) | 802 |
| Area under Sugar (km²) | 9.7 |
| Area under Horticulture (km²) | 4.2 |

Pesticide Application

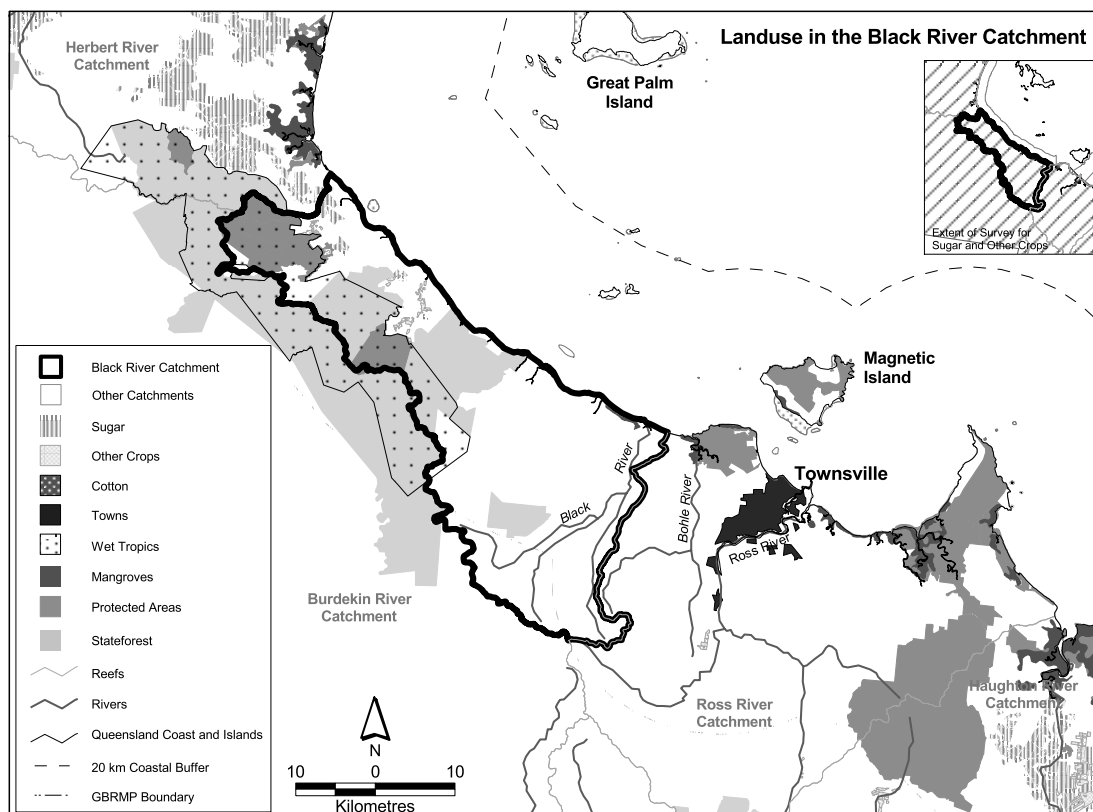
(Kg Active Ingredient/Yr)

| | |
|---------------------|-----|
| Atrazine | 203 |
| Diuron | 100 |
| 2-4D | 169 |
| Chlorpyrifos | 20 |
| MEMC | 3 |

Catchment Targets

| | 1850 T/yr | Current T/yr | Current T/ km³ | ratio | 2011 % Red'n | 2011 T/yr Target | 2011 T/ km³ Target |
|------------------------|------------------|---------------------|----------------------------------|--------------|---------------------|-------------------------|--------------------------------------|
| Sediment Export | 28000 | 82887 | 218421 | 2 | 0 | 82887 | 218421 |
| Total N Export | 93 | 411 | 1082 | 4.4 | 33 | 275 | 725 |
| Total P Export | 5 | 90 | 237 | 18 | 33 | 60 | 159 |

Data Confidence Index = 1



Black River Catchment

The Black River catchment covers an area of 1057 km². Grazing is the dominant land use occupying 802 km². Other land uses are sugarcane farming covers approximately 10 km² and horticulture 4 km². Total forests occupy 220 km² and protected areas, including the Wet Tropics World Heritage Area, cover 231 km². 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.

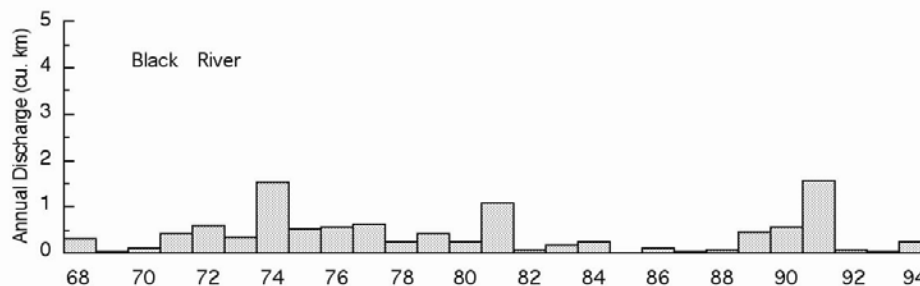


Figure 16. Water discharge patterns in the Black River.