

Pioneer River Catchment

Catchment Information

Description

Area (km ²)	1570
% Gauged	92
Mean Discharge Yr (km ³)	1.2
Rainfall (mm)	1385
Runoff (mm/m ²)	758
Runoff/Rainfall Ratio	55

Land Use

Population	44159
Clearing (km ²)	466
% Cleared	30
Area under Grazing (km ²)	1166
Area under Sugar (km ²)	296
Area under Horticulture (km ²)	<1

Pesticide Application

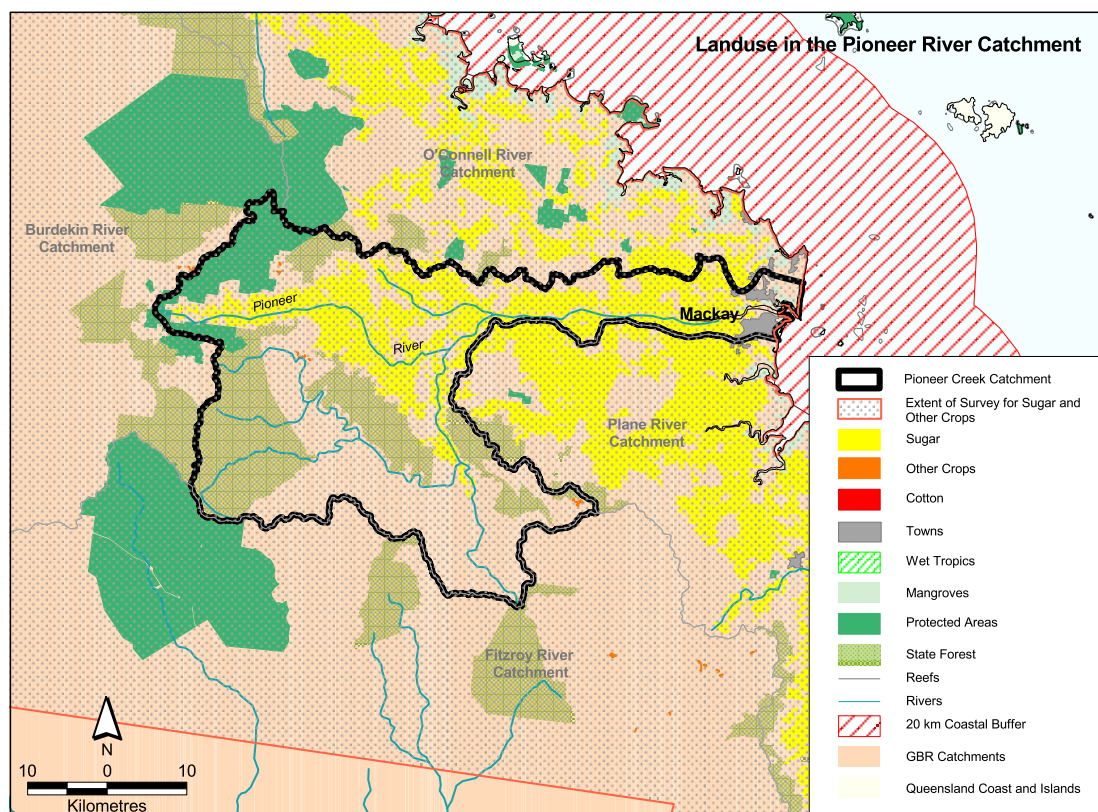
(Kg Active Ingredient/Yr)

Atrazine	25151
Diuron	23435
2-4D	7547
Chlorpyrifos	5519
MEMC	103

Catchment Targets

	1850 T/yr	Current T/yr	Current T/ km ³	ratio	2011 % Red'n	2011 T/yr Target	2011 T/ km ³ Target
Sediment Export	10000	288343	242017	28.8	50	144172	121008
Total N Export	160	471	396	2.9	50	236	198
Total P Export	8	50	42	6.3	50	25	21

Data Confidence Index = 1



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The Pioneer River catchment covers an area of 1570 km². Grazing is the dominant land use occupying approximately 1100 km². Other land uses include 296 km² of sugarcane, predominantly on the river flats. State forest and timber reserves occupy 354 km² and protected areas cover 109 km². Sediment, total nitrogen and total phosphorus exports are classified as high risk in the Pioneer River Catchment.

Issues in the catchment:

- Pioneer River catchment is used extensively for sugarcane production. Some sugar cane land has suffered serious erosion, especially in the upland areas on granitic soils.
- High contribution of nutrient (particularly nitrates) and pesticides.
- Several weirs and dams have been constructed on the river for irrigation and industrial purposes.
- Estuarine fauna are threatened by urban and tourism development.
- Approximately 30% of the catchment has been cleared mostly for sugar production.
- Approximately 7% of the catchment is within protected areas.
- Commercial and recreational fishery.
- Recreational marine use.

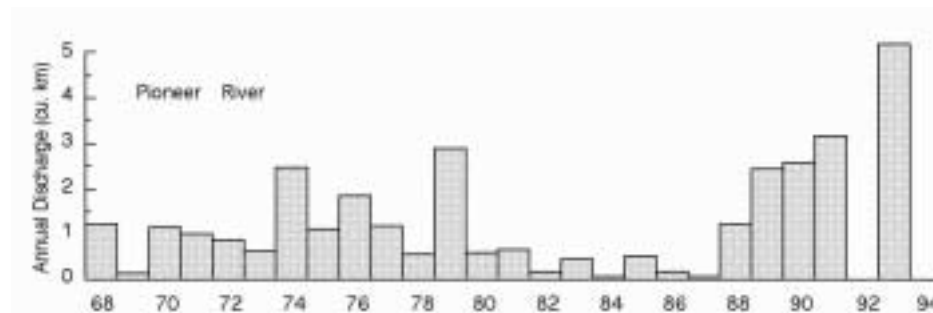


Figure 23. Water discharge patterns in the Pioneer River