

Kolan River Catchment

Catchment Information

Description

Area (km²)	2901
% Gauged	80
Mean Discharge Yr (km³)	0.4
Rainfall (mm)	1065
Runoff (mm/m²)	141
Runoff/Rainfall Ratio	13

Land Use

Population	1471
Clearing (km²)	2487
% Cleared	86
Area under Grazing (km²)	2349
Area under Sugar (km²)	161
Area under Horticulture (km²)	5.1

Pesticide Application

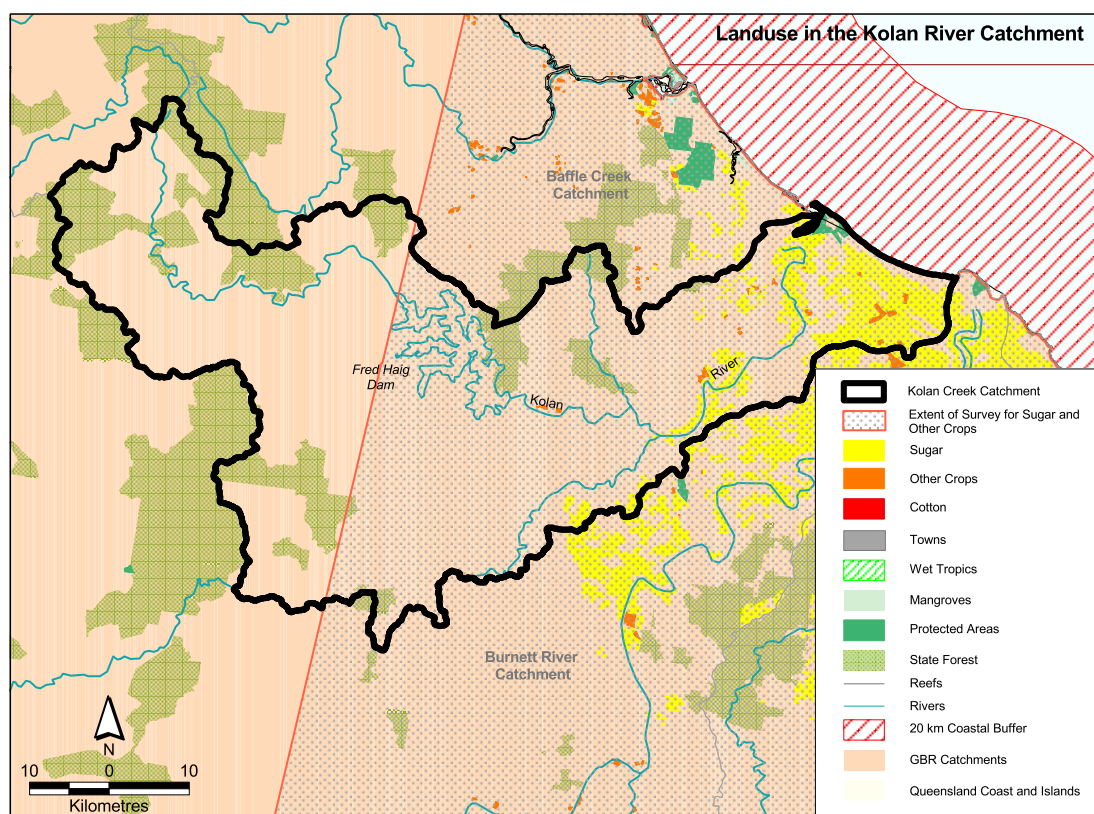
(Kg Active Ingredient/Yr)

Atrazine	4070
Diuron	1761
2-4D	499
Chlorpyrifos	2696
MEMC	39

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	2000	61589	151220	30.8	50	30794	75610
Total N Export	100	444	1082	4.4	33	297	725
Total P Export	5	97	237	19.4	50	49	119

Data Confidence Index = 1



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The Kolan River catchment covers an area of 2901 km². Grazing is the dominant land use occupying approximately 2349 km². Other land uses include 161 km² of sugarcane and approximately 5 km² of horticulture. State forest and timber reserves occupy 381 km² and protected areas cover <5 km². Sediment and total phosphorus exports are classified as high risk, whilst total nitrogen export is classified as medium risk in the Kolan River Catchment.

Issues in the catchment:

- Grazing lands have been extensively cleared and sown with improved pasture.
- Approximately 86% of the catchment has been cleared mostly for grazing.
- Less than 0.2% of the catchment is within protected areas.
- Soil areas are susceptible to erosion and flooding which has caused severe sheet and rill erosion in some areas.
- Cultivation mainly occurs on better drained, sloping and fertile soils.
- Native pasture decline has occurred.
- Woody weed invasion in coastal areas is a problem.
- Salinity is a problem which is associated with high watertables on cultivated lands. Salt water intrusion to coastal aquifers has occurred from overuse of ground water.
- Urbanisation and use of agricultural chemicals has caused contamination in some local ground waters.
- Proximity to extensive seagrass beds.
- Changes to habitat and land usage in the catchment have brought about changes to fauna species.

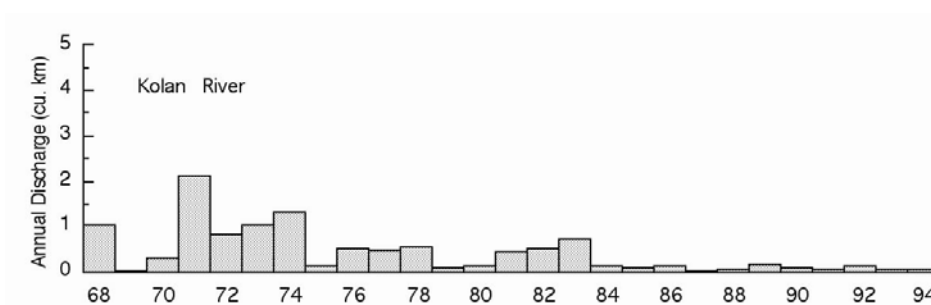


Figure 29. Water discharge patterns in the Kolan River