

Proserpine River Catchment

Catchment Information

Description

Area (km ²)	2535
% Gauged	13
Mean Discharge Yr (km ³)	1.1
Rainfall (mm)	1360
Runoff (mm/m ²)	426
Runoff/Rainfall Ratio	31

Land Use

Population	16286
Clearing (km ²)	1514
% Cleared	60
Area under Grazing (km ²)	2070
Area under Sugar (km ²)	196
Area under Horticulture (km ²)	2.5

Pesticide Application

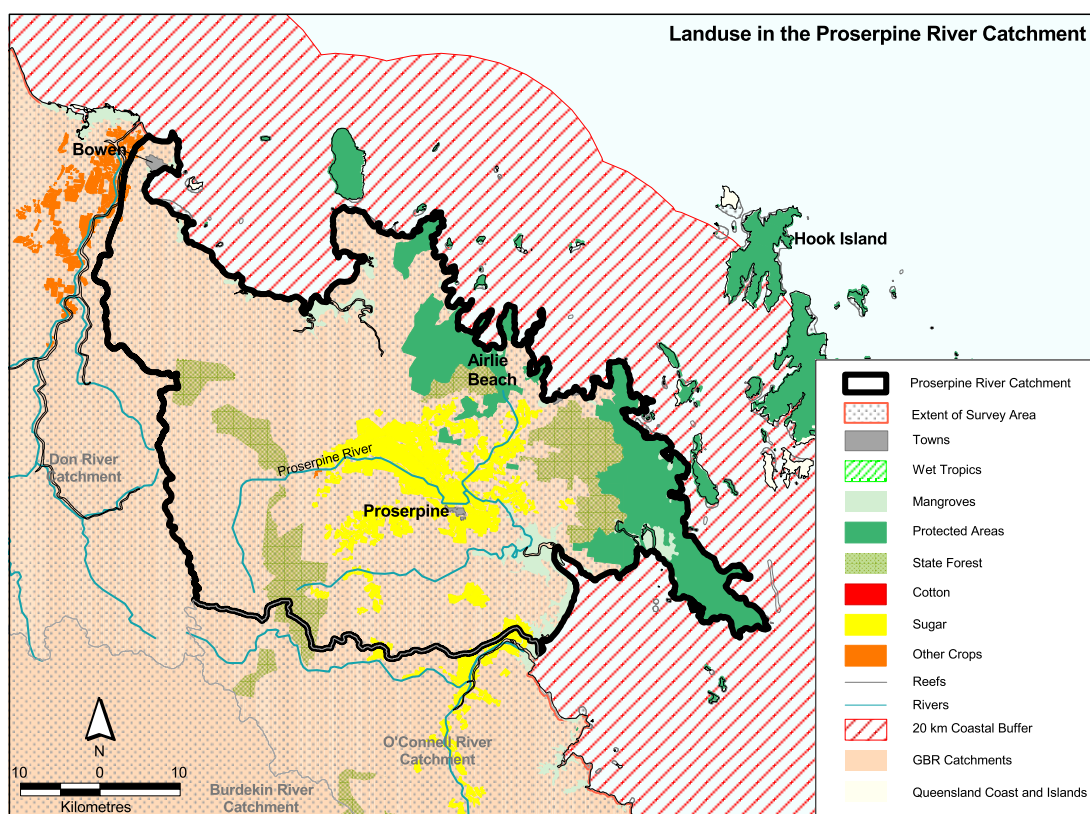
(Kg Active Ingredient/Yr)

Atrazine	9404
Diuron	9281
2-4D	5705
Chlorpyrifos	2608
MEMC	3

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	7000	227314	210185	32.5	50	113657	105092
Total N Export	263	1169	1082	4.4	50	585	541
Total P Export	13	256	237	19.7	50	128	119

Data Confidence Index = 1



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The Proserpine River catchment covers an area of 2535 km². Grazing is the dominant land use occupying approximately 2070km². Other land uses include 196 km² of sugarcane farming with a small area, 2.5 km², of horticultural landuses. State forests and timber reserves occupy 232 km² and protected areas cover 317 km². Sediment, total nitrogen and total phosphorus exports are classified as high risk in the Proserpine River catchment.

Issues in the catchment:

- Two types of development occur in the catchment agricultural/grazing land use and intense tourism development.
- Approximately 61% of the Catchment has been cleared mostly for grazing.
- Extensive cultivated agriculture (mostly sugar).
- High contribution of nutrient (particularly nitrates) and pesticides.
- Grazing prone to erosion.
- Approximately 13% of the catchment is within protected areas.
- Commercial and recreational fishery.
- Significant marine tourism.
- Proximity to inshore reefal areas.
- Proximity to seagrass and dugong protection areas.

Water quality studies in the late 1980's/early 1990's by James Cook University showed very high nutrient concentrations in the Proserpine River during high flow conditions.

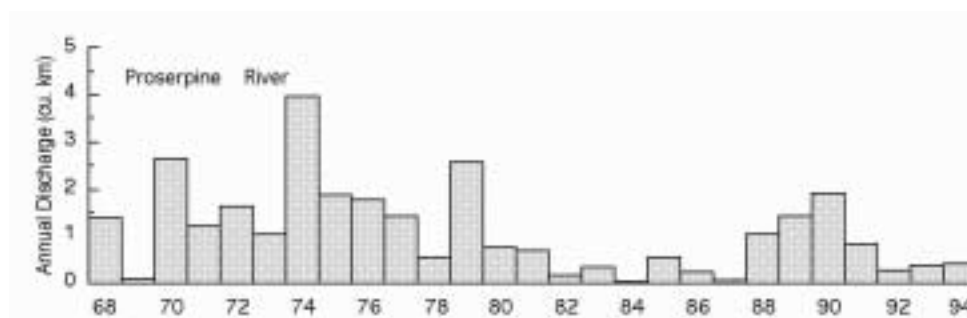


Figure 21. Water discharge patterns in the Proserpine River.