

# Murray River Catchment

## Catchment Information

### Description

Area (km <sup>2</sup> )	1107
% Gauged	14
Mean Discharge Yr (km <sup>3</sup> )	1.1
Rainfall (mm)	2098
Runoff (mm/m <sup>2</sup> )	958
Runoff/Rainfall Ratio	46

### Land Use

Population	1296
Clearing (km <sup>2</sup> )	166
% Cleared	15
Area under Grazing (km <sup>2</sup> )	520
Area under Sugar (km <sup>2</sup> )	58
Area under Horticulture (km <sup>2</sup> )	<10

### Pesticide Application

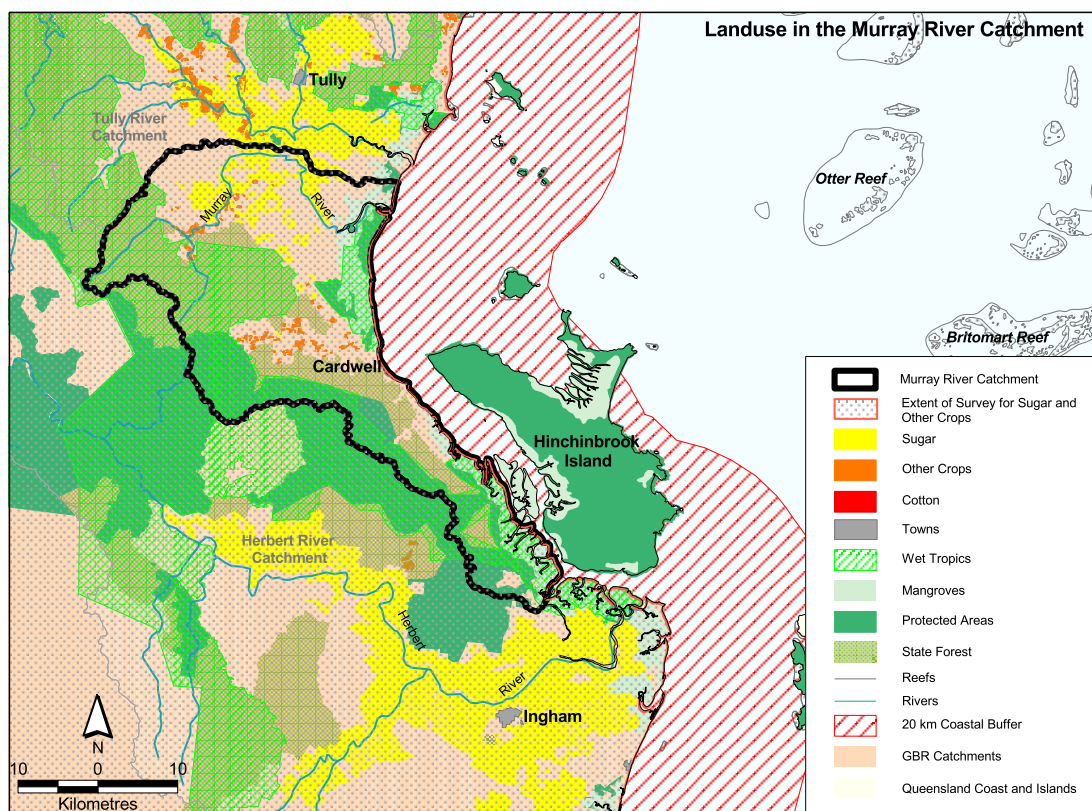
(Kg Active Ingredient/Yr)

Atrazine	8672
Diuron	1252
2-4D	3168
Chlorpyrifos	1166
MEMC	50

## Catchment Targets

	1850 T/yr	Current T/yr	Current T/ km <sup>3</sup>	ratio	2011 % Red'n	2011 T/yr Target	2011 T/ km <sup>3</sup> Target
Sediment Export	3000	17098	16038	5.7	33	11455	10745
Total N Export	142	440	396	2.9	50	210	198
Total P Export	7	45	42	6.4	33	30	28

Data Confidence Index = 1



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The Murray River catchment covers an area of 1107 km<sup>2</sup>. Grazing occupies a large proportion of the catchment with 520 km<sup>2</sup>. Approximately 518 km<sup>2</sup> is within the Wet Tropics World Heritage Area. Other land uses include 58 km<sup>2</sup> of sugarcane and <10 km<sup>2</sup> of horticulture. State forests and timber reserves occupy 361 km<sup>2</sup> and protected areas cover 518 km<sup>2</sup>, including the Wet Tropics World Heritage Area. Sediment and total phosphorus exports are classified as medium risk, and total nitrogen export is classified as high risk in the Murray River catchment.

### *Issues in the catchment:*

- The Murray River is subjected to frequent flooding. This has resulted in over-bank flows creating severe erosion problems on the lower and middle reaches of the rivers.
- Recent significant expansions in cultivated cropping.
- Increasing contribution of nutrient and pesticides.
- Close proximity to inshore reefal areas including Hinchinbrook Island.
- Recent significant losses of coastal wetlands.
- Approximately 47% of the catchment is within protected areas.
- Commercial and recreational fisheries.
- Increasing marine tourism.

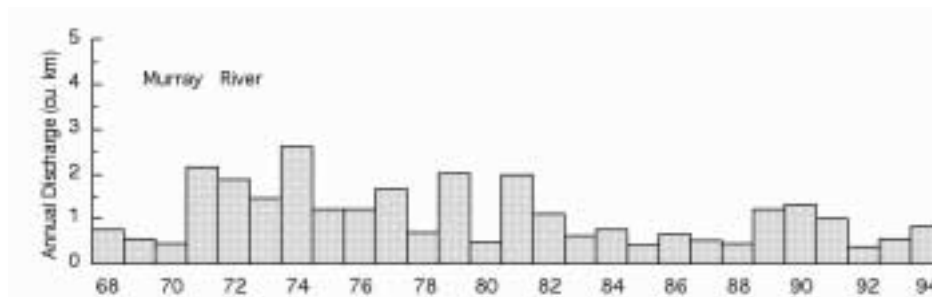


Figure 14. Water discharge patterns in the Murray River.