

# Maylands

The Maylands catchment consists of more than ten drains which discharge into the Middle Swan Estuary. The drains are almost entirely closed pipes with only a very small section of open drain present.

The catchment consists of three suburbs, Mt Lawley, Inglewood and Maylands, with small portions of other suburbs also within its boundaries. Prior to the establishment of the Swan River Colony, the area was occupied by the Yabbaru Bibbulman Nyungar people. In the early 1800s, Mt Lawley was the first of these suburbs to be settled with Inglewood and Maylands settled around 1830.

Historical landuse in the catchment included agriculture, residential, clay pits for brick and tile making as well as being the location of Perth's main airport until the 1960s when it moved to its current site. To facilitate development, significant drainage works have occurred throughout the catchment to lower groundwater levels and drain lakes.

The catchment is predominantly urban though there are two golf courses present as well as regionally significant bushland at Baigup Reserve which contains some of the last remaining bushland on the Swan River Estuary.

Leached sands (both Bassendean and Spearwood sands) are the most common soil type with an area of neutral red and yellow earths along the Middle Swan Estuary. Leached sands have poor nutrient-retention capabilities so any nutrients applied as fertilisers will rapidly leach into groundwater after water is applied.

Water quality is monitored fortnightly at the outlet of the Maylands Main Drain to the Middle Swan Estuary near the Maylands Yacht Club. Because the sites is so close to the estuary it is only possible to sample when the flow from the drain is sufficient to remove any estuarine backflow. This means that while the drain appears to flow-year round it can only be sampled during winter, when drain flows are high. The site is positioned to indicate nutrient concentrations leaving the catchment and flowing into the Middle Swan Estuary, so the data may not represent nutrient concentrations in upstream areas, or in other drains in the catchment.



## Maylands – facts and figures

Average rainfall (2013–17)	~ 730 mm per year (Perth metro)
Catchment area	18.7 km <sup>2</sup> (total catchment)
Per cent cleared area (2005)	96% (total catchment)
River flow	Flows year-round however can not be sampled during low flow due to estuarine backflow
Main land uses (2005)	Residential and associated transport infrastructure (roads), recreation (total catchment)

## Nutrient Summary: concentrations, rainfall and targets

Year	Site	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual rainfall (mm)	009225	703.0	807.8	607.2	503.8	860.8	608.2	782.4	674.4	617.8	715.8	854.0
TN median (mg/L)	MIMDOUT					1.20	1.00	1.20	0.98 <sup>#</sup>	0.93 <sup>#</sup>	1.00 <sup>#</sup>	1.10
TP median (mg/L)	MIMDOUT					0.023	0.015	0.017	0.014	0.015	0.015	0.022

TN short term target = 2.0 mg/L

TN long term target = 1.0 mg/L

TP short term target = 0.2 mg/L

TP long term target = 0.1 mg/L

insufficient data to test target  
  failing both short and long-term target  
  passing short but failing long-term target  
  passing both short and long-term target

\* Best estimate using available data.    # Statistical tests that account for the number of samples and large data variability are used for testing against targets on three years of winter data. Thus the annual median value can be above the target even when the site passes the target (or below the target when the site fails).