



# Meredith Drain

The Meredith Drain catchment is bordered by the Harvey catchment to the east and the Myalup State Forest to the west. It discharges to the Harvey River downstream of Samson South Drain.

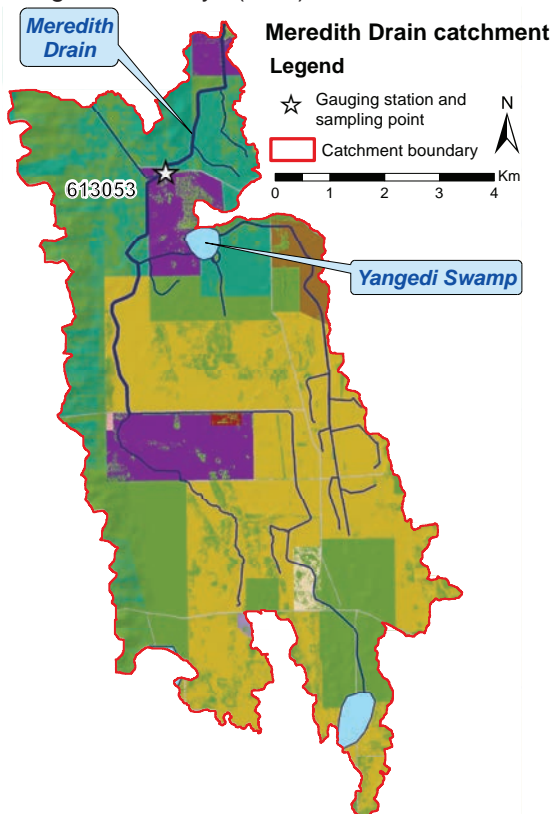
The catchment's monitoring site is located at the Johnston Road flow gauging station (613053). The drain has been monitored since 1982 and has a history of very high total nitrogen and phosphorus concentrations. Before 1987 Meredith Drain flowed year-round. Since then it has ceased to flow from around January to June, with the exception of 1993 and 1999 when it flowed year-round. No continuous flow has been recorded since July 2010.

The Meredith Drain catchment lies on subdued dune-swale terrain, comprising of leached sands. Half of the catchment is subject to seasonal inundation and most of the catchment has a high or very high risk of phosphorus leaching to waterways (90%).

Two thirds of the catchment has been cleared, mostly for agriculture such as stock grazing and plantations. There is also a piggery present.



Meredith Drain, Johnston Road – December 2006



Land use classification (2006)	Area	
	(km <sup>2</sup> )	(%)
Cattle for beef (predominantly)	20	36
Cattle for dairy	1.1	2.1
Conservation and natural	20	36
Horticulture	0.07	0.13
Industry, manufacturing and transport	0.49	0.88
Intensive animal use	0.11	0.19
Lifestyle block	0.37	0.66
Mixed grazing	5.2	9.2
Plantation	8.5	15
Viticulture	0.04	0.07
<b>Total</b>	<b>56</b>	<b>100</b>

***In 2011 Meredith Drain had the highest median TN and TP concentrations of the six sites sampled in the catchments that drain to the Harvey Estuary.***

## Nutrient summary: median concentrations, loads and status classification at 613053

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Annual flow (GL)	2.8	5.1	4.0	0.64	2.1	0.90	3.5	6.2	0.75	2.2	3.5	1.4		
TN median (mg/L)	2.4	2.5	2.5	2.7	2.3	2.3	2.0	2.6	1.9	2.7	2.7	2.4	1.7	2.7
TP median (mg/L)	0.56	0.50	0.32	0.58	0.32	0.34	0.42	0.70	0.25	0.50	0.44	0.51	0.13	0.42
TN load (t/year)	8.2	15	11	1.6	5.8	2.3	10	18	2.1	6.2	10	3.9		
TP load (t/year)	2.0	3.6	2.8	0.31	1.2	0.58	2.4	4.4	0.37	1.4	2.3	0.81		

Status classification: Low (Green), Moderate (Yellow), High (Orange), Very high (Red)

Status reported for three-year period end (i.e. 1996 – 1998 reported in 1998)

TN = total nitrogen TP = total phosphorus