



Drakes Brook - Waroona Drain

Drakes Brook starts on the Darling Plateau in the Dwellingup State Forest to the east of Waroona. The natural flow of the Brook has been modified by engineering works. There are two dams; Drakes Brook Dam (Lake Moyanup) and Waroona Dam (Lake Navarino) in the catchment. Discharge from Drakes Brook Dam is slowed before either continuing into Waroona Drain or being diverted via Drakes Brook Drain to service the north of the catchment.

The monitoring site at Dorsett Road (6131335) on Waroona Drain, downstream of the confluence of Drakes Brook Drain and Waroona Drain, and west of Waroona has been sampled for water quality since 2006. There is no flow gauging station located in the catchment. Waroona Drain discharges into the Harvey River, just upstream of the gauging station (613052).

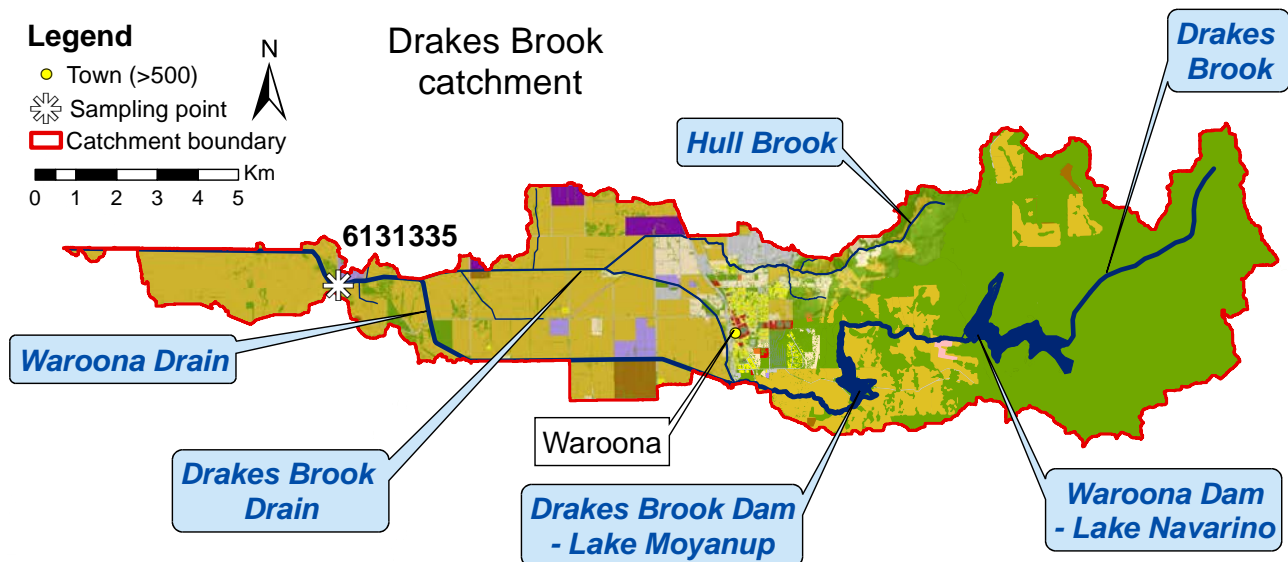
Less than 3% of the Drakes Brook catchment is subject to seasonal inundation, while 11% of the catchment has a high or very high risk of phosphorus leaching to waterways.

The catchment consists of a variety of soil types, including massive rock outcrops with acid red earths, sandy

acidic yellow mottled soils and dark porous loamy soils containing ironstone gravel.

To the east of the Darling Scarp the catchment remains relatively undisturbed. West of the scarp, the land has been cleared, mostly for agriculture such as stock grazing, as well as industry and lifestyle blocks.

Land use classification (2006)	Area	
	(km ²)	(%)
Animal keeping – non-farming (horses)	0.06	0.06
Cattle for beef (predominantly)	39	37
Cattle for dairy	1.2	1.1
Conservation and natural	57	53
Horticulture	1.2	1.1
Industry, manufacturing and transport	3.1	2.9
Lifestyle block	2.6	2.4
Mixed grazing	1.1	1.0
Offices, commercial and education	0.23	0.22
Recreation	0.28	0.26
Residential	0.99	0.93
Viticulture	0.14	0.13
Total	107	100



Nutrient summary: median concentrations, loads and status classification at 6131335

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Annual flow (GL)														
TN median (mg/L)									0.56	1.0	0.92*	0.77	0.65	1.1
TP median (mg/L)									0.030	0.044	0.065*	0.040	0.038	0.061
TN load (t/year)														
TP load (t/year)														

Status classification: Low (green), Moderate (yellow), High (orange), Very high (purple)

Status reported for three-year period end (i.e. 2006–08 reported in 2008)

TN = total nitrogen TP = total phosphorus

* best estimate using available data