

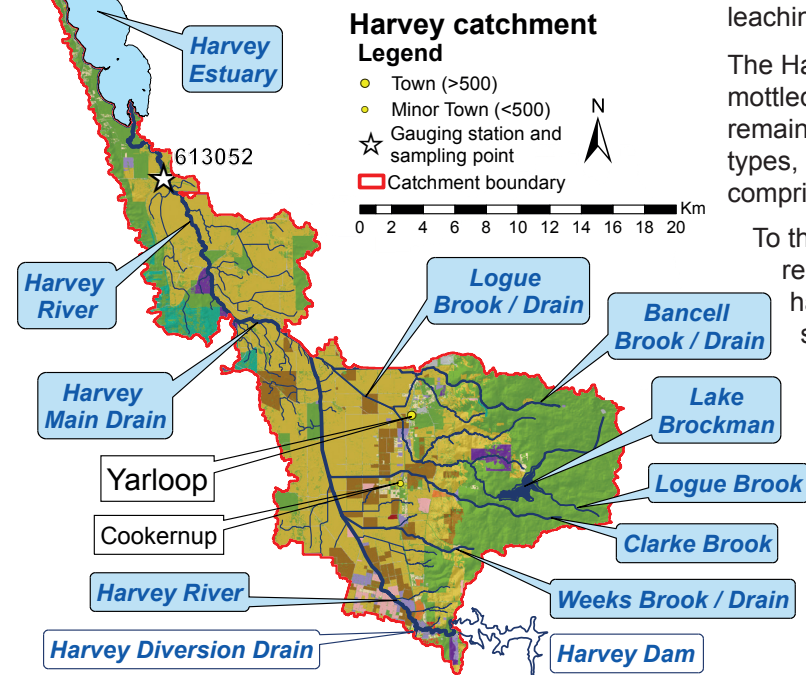


Harvey River

The Harvey River flows north-easterly from the Harvey Reservoir to its discharge point at the southern end of the Harvey Estuary. Many of the waterways within the catchment have been modified and these portions of the rivers and brooks have been re-named as drains. Just downstream of the Harvey Reservoir the Harvey Diversion Drain carries water directly to the ocean.

The headwaters of Logue Brook are located on the Darling Plateau in the Dwellingup State Forest. The brook flows into Lake Brockman, the reservoir formed by the Logue Brook Dam, before continuing across the coastal plain to its confluence with Harvey Main Drain. Bancell Brook flows into Logue Brook while both Clarke Brook and Weeks Brook discharge into Harvey Main Drain, upstream of Logue Brook.

The Harvey River monitoring site at Clifton Park (613052) is one of three long-term monitoring sites within the Peel-Harvey catchment. Nutrients have been monitored since 1982 and flow measured from 1983. The Harvey River flows year-round.



Land use classification (2006)	Area	
	(km ²)	(%)
Animal keeping – non-farming (horses)	1.1	0.26
Cattle for beef (predominantly)	169	41
Cattle for dairy	27	6.5
Conservation and natural	172	42
Cropping	<0.01	<0.01
Horticulture	5.3	1.3
Industry, manufacturing and transport	8.1	2.0
Intensive animal use	0.15	0.04
Lifestyle block	5.6	1.4
Mixed grazing	4.9	1.2
Offices, commercial and education	0.54	0.13
Plantation	9.5	2.3
Recreation	0.10	0.02
Residential	1.3	0.31
Viticulture	4.3	1.1
Total	408	100

Nearly 10% of the Harvey catchment is subject to seasonal inundation and more than a quarter of the catchment has a high or very high risk of phosphorus leaching to waterways (27%).

The Harvey River flows through sandy acidic yellow mottled soils, some containing ironstone gravel. The remainder of the catchment consists of a variety of soil types, including leached sands and poorly drained flats comprising of black and grey cracking clays.

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 more intensive land uses such as piggeries and turf farms.



Nutrient summary: median concentrations, loads and status classification at 613052

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Annual flow (GL)	107	106	144	39	85	108	98	20	73	59	136	98	20	62
TN median (mg/L)	1.0	1.0	0.88	1.0	1.30	1.30	0.85	0.80	1.1	1.0	1.4	1.4	0.82	1.6
TP median (mg/L)	0.15	0.12	0.14	0.13	0.15	0.20	0.11	0.07	0.10	0.13	0.18	0.15	0.09	0.16
TN load (t/year)	213	207	286	57	168	217	196	24	135	100	280	197	24	112
TP load (t/year)	31	29	40	7.9	23	31	27	3.14	18	13	39	27	3.0	15

Status classification: Low Moderate High Very high

Status reported for three-year period end (i.e. 2012–14 reported in 2014)

TN = total nitrogen TP = total phosphorus

* Best estimate using available data (- not applicable)