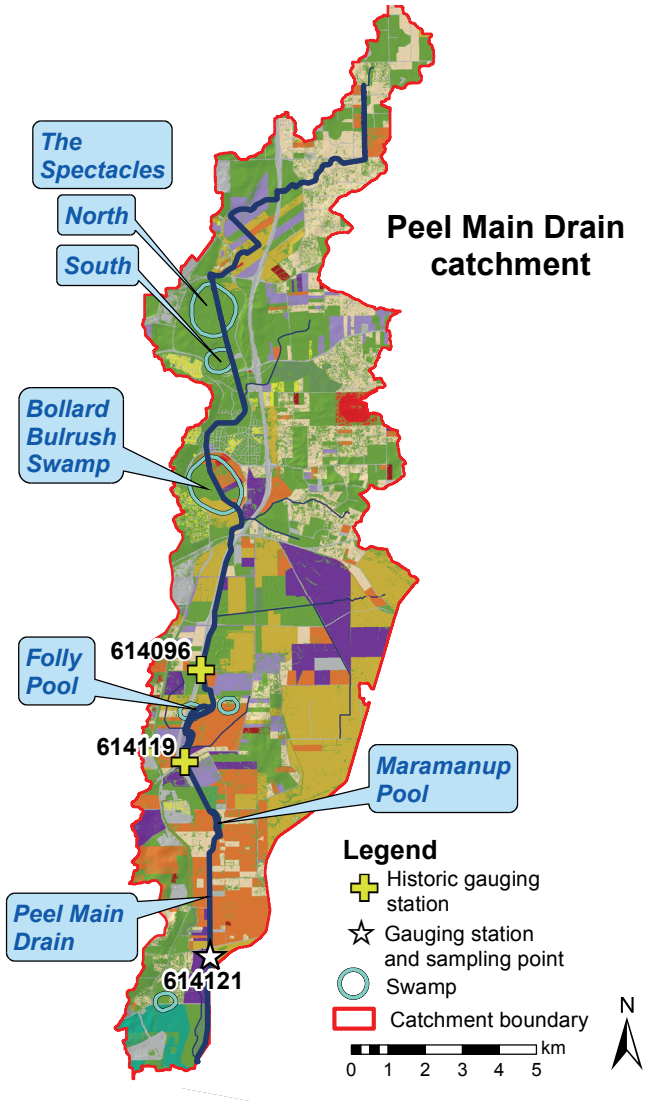
Peel Main Drain

Peel Main Drain flows in a southerly direction and passes through several pools or wetlands (swamps) before discharging to the Serpentine River at Kerulup Pool.

Since July 2006, water quality has been monitored near the bottom of the catchment at the gauging station on Karnup Road (614121). Flow has been recorded at Karnup Road since March 2005.



Peel Main Drain typically flows continuously between July and October each year and stops flowing during summer and autumn. The number of days the drain was dry ranged between 35 (Feb–Apr 2014) and 175 (Jan–May and Nov–Dec 2007).

Nearly half of the Peel Main Drain catchment (mostly north of Bollard Bulrush Swamp) has leached sands and a high or very high risk of phosphorus loss to waterways. Land use in this area is dominated by bushland and residential and lifestyle blocks. To the south the land has been cleared, mostly for agriculture such as stock grazing.

In addition to a piggery and several poultry farms, the catchment also has two sheep feedlots and an aquaculture facility that have Department of Environment Regulation licence conditions governing their discharges and report to the National Pollutant Inventory (Department of Environment Regulation).

Land use classification (2006)	Area (km²)	Area (%)
Animal keeping – non-farming (horses)	12	10
Cattle for beef (predominantly)	16	13
Conservation and natural	47	39
Horticulture	5.6	4.6
Industry, manufacturing and transport	11	9.1
Intensive animal use	0.35	0.29
Lifestyle block	15	13
Mixed grazing	7.5	6.2
Offices, commercial and education	0.83	0.69
Plantation	1.9	1.6
Recreation	1.4	1.2
Residential	1.2	0.98
Total	**120**	**100**

Peel Main Drain - Upstream view 2002

Nutrient summary: median concentrations, loads and status classification at 614121

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Annual flow (GL)	-	-	-	10*	2.7	6.0	12	7.3	1.8	6.7	3.9	7.5	5.0	2.2
TN median (mg/L)	-	-	-	-	1.6	1.9	2.0	2.3	1.1	1.5	1.4	1.5	1.7	1.2
TP median (mg/L)	-	-	-	-	0.08	0.28	0.37	0.32	0.09	0.18	0.31	0.36	0.19	0.18
TN load (t/year)	-	-	-	-	3.8	12	24	14	2.7	13	6.3	14	8.7	3.5
TP load (t/year)	-	-	-	-	0.56	1.8	3.8	2.2	0.41	2.0	0.96	2.1	1.3	0.51

Status classification — Low — Moderate — High — Very high

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

* best estimate using available data

(- not applicable)

TN = total nitrogen TP = total phosphorus

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