



Mayfield Drain

Mayfield Drain catchment drains west from the Darling Plateau, discharging into the southern end of the Harvey Estuary. The catchment has 237 km of natural and modified waterways of which approximately half are gazetted under the Waroona Drainage District and managed by the Water Corporation.

The catchment's soils are mostly poorly drained flats and sandy soils containing either ironstone gravel or calcareous mounds. It has the smallest area of leached sands (5.3 km², 4.5%) of all the Peel-Harvey catchments. Nearly a third of the catchment has a high to very high risk of phosphorus loss to waterways (30%).

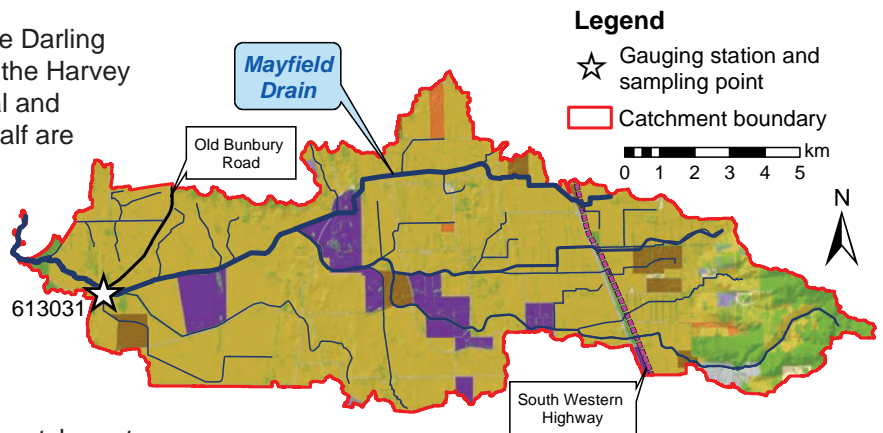


Mayfield Drain - July 2010

Water quality is monitored at the gauging station close to the Old Bunbury Road (613031), near the outlet of the catchment.

Flow data were collected at Mayfield Drain between 7 March 1991 and 5 March 2002, then from 11 May 2005 to 31 October 2007 and from 1 June 2010.

During the years the gauging station was operational Mayfield Drain flowed continuously. 2001, 2006 and 2010 were extremely dry resulting in much lower flows (and loads) than other years.



Most of the catchment is used for agriculture (e.g. cattle and mixed grazing) with the largest percentage area dedicated to a single land use ('cattle for beef') of all the Peel-Harvey catchments. Mayfield Drain also had the smallest area and percentage of remnant vegetation of the Peel-Harvey catchments.

Land use classification (2006)	Area	
	(km ²)	(%)
Animal keeping - non-farming (horses)	1.0	0.80
Cattle for beef (predominantly)	87	73
Cattle for dairy	3.7	3.1
Conservation and natural	16	13
Cropping	0.03	0.02
Horticulture	0.44	0.37
Industry, manufacturing and transport	2.8	2.3
Lifestyle block	0.58	0.48
Mixed grazing	8.3	7.0
Residential	<0.01	<0.01
Total	119	100

In 2011 Mayfield Drain had the second-lowest median TP concentration of the 13 sites sampled in the Peel-Harvey catchment.

Nutrient summary: median concentrations, loads and status classification at 613031

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Annual flow (GL)	13	24	36	3.7					3.4				3.9*	13
TN median (mg/L)	0.53	0.66	0.47	0.40	0.42	0.47	0.37	0.62	0.52	1.3	0.80	0.49	0.41	1.2
TP median (mg/L)	0.033	0.029	0.020	0.025	0.029	0.025	0.025	0.051	0.056	0.17	0.053	0.030	0.024	0.053
TN load (t/year)	25	48	74	5.6					8.5				6.1*	25
TP load (t/year)	4.3	8.3	14	0.70					0.92				0.76*	3.7

Status classification: Low Moderate High Very high

Status reported for three-year period end (i.e. 1996-98 reported in 1998)
TN = total nitrogen TP = total phosphorus

* best estimate using available data