Department of **Water and Environmental Regulation**
Department of **Biodiversity, Conservation and Attractions**
GOVERNMENT OF WESTERN AUSTRALIA

Henley Brook

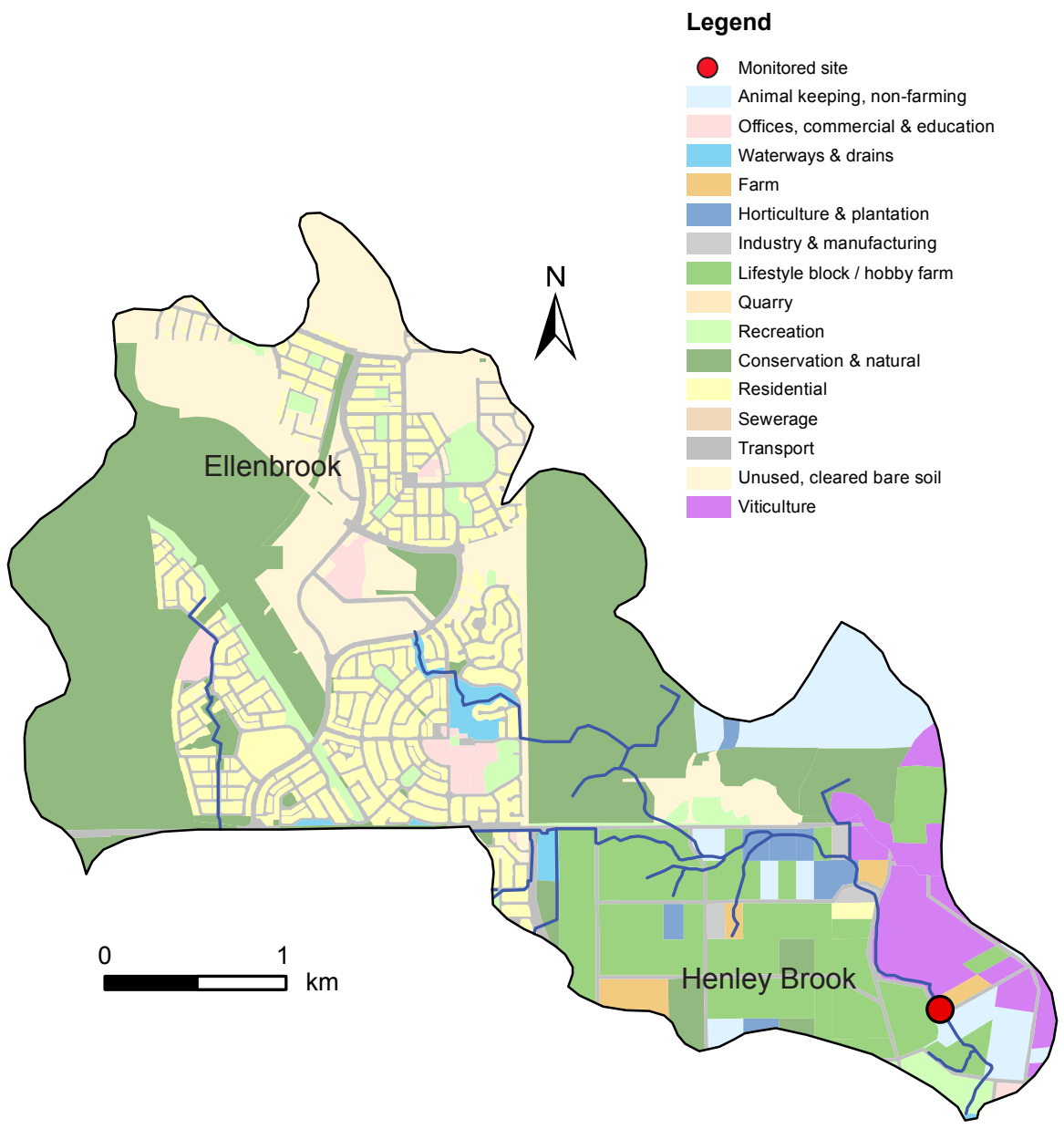
Henley Brook is an ephemeral system which ceases to flow for a few months over summer. In the upper portion of the catchment it has been modified into a piped drain where it flows through urban areas. The bottom section of the brook is more natural though it does have a series of dams where it flows along West Swan Road and Brockman Street. It discharges into the Upper Swan Estuary near the Swan Valley Oasis Resort.

Nyungar people of the Wadjuk tribe have inhabited the region for at least 40 000 years and are the traditional owners of the Swan Valley. Following Captain James Stirling's exploratory voyage up the Swan River in 1827, European settlement occurred from 1829 with arable and livestock farming. Migrants who came to the valley after WWI, in the 1920s, and WWII included Croatian farmers who were largely responsible for changing the valley from agricultural lands to vineyards.

In the last ten years the central portion of the catchment has been almost entirely converted from pine plantation to urban. The lower section of the catchment consists mainly of lifestyle blocks and hobby farms as well as viticulture along the Swan River.

Soils in most of the catchment are leached Bassendean sands with a smaller area of gravelly and sandy acidic soils (Forrestfield and Guildford Soils) in the eastern portion, close to the Upper Swan Estuary. The Bassendean sands have very poor nutrient-retention capabilities; any nutrients applied to the surface will rapidly leach into the groundwater after water is applied.

Water quality is monitored fortnightly at a site near the end of Brockman Street, just after the series of dams. The site is positioned to indicate nutrient concentrations leaving the catchment and flowing into the Upper Swan Estuary, so the data may not represent nutrient concentrations in upstream areas.



Henley Brook – facts and figures

Average rainfall (2013–17)	~ 730 mm per year (Perth metro)
Catchment area	13.5 km^2
Per cent cleared area (2005)	64%
River flow	Ceases to flow in most years for a few months over summer
Main land uses (2005)	Conservation and natural, residential and unused, cleared bare soil


Photo: Emma van Looij

Nutrient Summary: concentrations, rainfall and targets

Year	Site	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual rainfall (mm)	009225	703.0	807.8	607.2	503.8	860.8	608.2	782.4	674.4	617.8	715.8	854.0
TN median (mg/L)	HBBROCK	1.35			1.00	1.00	0.96	0.97	1.00	0.91	0.96	0.81
TP median (mg/L)	HBBROCK	0.093			0.050	0.058	0.052	0.072	0.077	0.056	0.057	0.060

TN short term target = 2.0 mg/L TN long term target = 1.0 mg/L TP short term target = 0.2 mg/L TP long term target = 0.1 mg/L

insufficient data to test target | failing both short and long-term target | passing short but failing long-term target | passing both short and long-term target

* Best estimate using available data. # Statistical tests that account for the number of samples and large data variability are used for testing against targets on three years of winter data. Thus the annual median value can be above the target even when the site passes the target (or below the target when the site fails).

For further information please contact the
Water Science Branch, Department of Water and Environmental Regulation
catchmentnutrients@dwer.wa.gov.au

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