

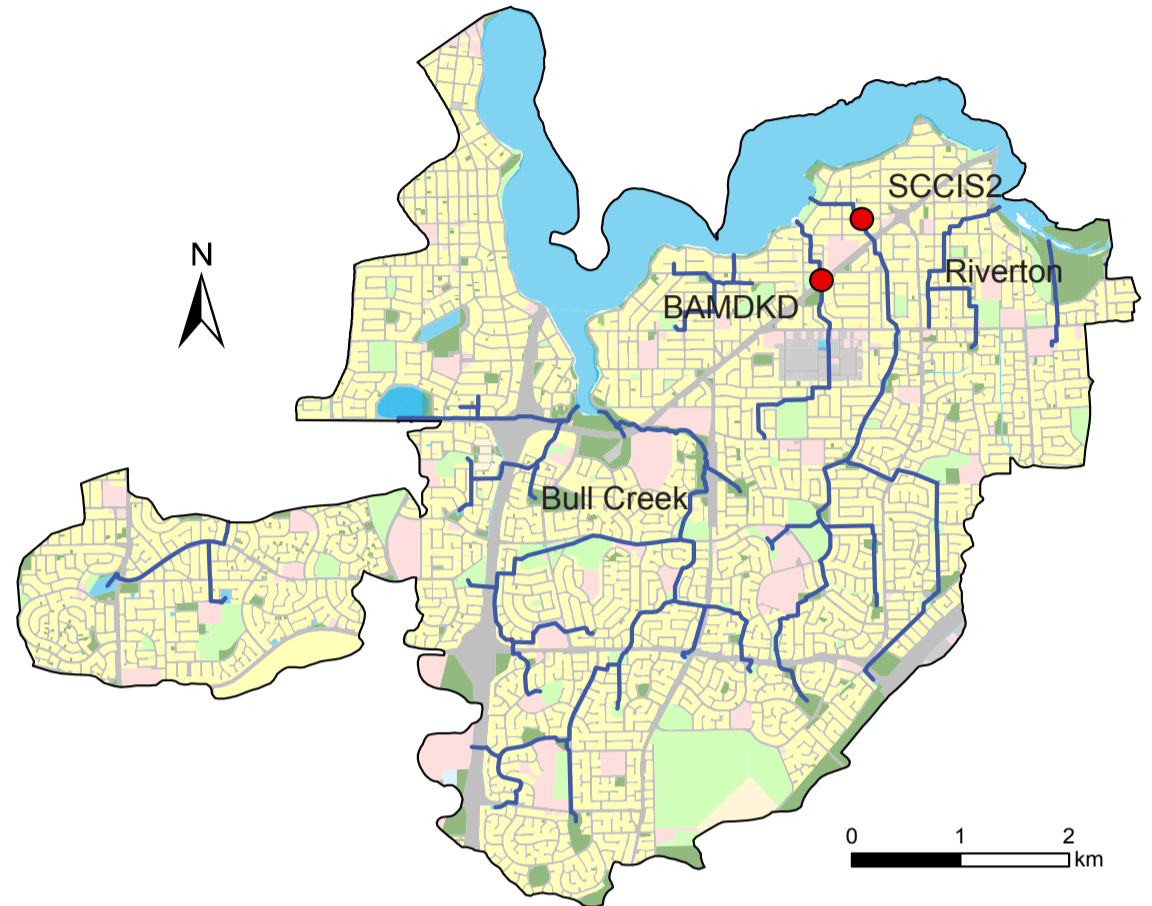
Bull Creek

The Bull Creek catchment is highly modified and consists of a series of drains that discharge into the Canning River. There are small areas of remnant vegetation present in Bull Creek Reserve and around some of the wetlands such as Booragoon Lake.

The Creek was named after an early settler, Lieutenant Henry Bull of the Royal Navy, who explored the Canning River and to whom a grant of land was made in 1830. Before European settlement, the Wadjuk Beelias people used the Bull Creek Wetlands as a source of food and fresh water in summer.

The soils in the catchment are predominantly Bassendean Sands in the east and Spearwood Sands with areas of Forrestfield and Guildford soils in the west. They tend to have poor nutrient retention capacity so any nutrients applied to the surface have the potential to quickly mobilise into the waterways.

Water quality samples are collected fortnightly from two sites in different subcatchments within the Bull Creek catchment. Each site is near the discharge point of the drain into the Canning River. These sites give an indication of the nutrient concentrations leaving these two subcatchments and entering the Canning River. They do not represent nutrient concentrations in upstream areas, nor do they give an indication of the water quality in the other subcatchments.



Legend

- Monitored site
- Animal keeping, non-farming
- Offices, commercial & education
- Waterways & drains
- Farm
- Horticulture & plantation
- Industry & manufacturing
- Lifestyle block / hobby farm
- Quarry
- Recreation
- Conservation & natural
- Residential
- Sewerage
- Transport
- Unused, cleared bare soil
- Viticulture



Photo: Katherine Bennett

The SCCIS2 sampling site, August 2017.

Bull Creek – facts and figures

Average rainfall (2014–18)	~ 720 mm per year (Perth metro)
Catchment area	42 km ²
Per cent cleared area (2005)	92% (total catchment)
River flow	Dries over summer though not every year No major water supply dams in catchment
Main land uses (2005)	Residential and transport (roads) (total catchment)

Nutrient summary: concentrations, rainfall and targets

Year	Site	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Annual rainfall (mm)	009225	807.8	607.2	503.8	860.8	608.2	782.4	674.4	617.8	715.8	854.0	741.6
TN median (mg/L)	SCCIS2			0.81	0.83	0.78	0.79	0.87	0.76	0.81	0.88	0.86
TP median (mg/L)	SCCIS2			0.072	0.062	0.067	0.066	0.070	0.062	0.066	0.069	0.062
TN median (mg/L)	BAMDKD					0.89	0.82	0.93 [#]	0.85 [#]	0.99 [#]	0.92 [#]	0.90 [#]
TP median (mg/L)	BAMDKD					0.091	0.087	0.115 [#]	0.076	0.062	0.105 [#]	0.077

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).