

# PATHWAYS TO WATER QUALITY IMPROVEMENTS IN THE MYRTLE CREEK SUB-CATCHMENT

## MYRTLE CREEK CATCHMENT SAMPLES

- All samples were collected on 17 January 2019.
- Samples were labelled as follows (in order from top of Myrtle Creek to bottom of Myrtle Creek):
  - Myrtle Creek Blair Road.
  - Myrtle Creek # 2.
  - Up River Gully – this gully drains directly into Myrtle Creek and drains all of Up River starting at Riley Road.
  - Myrtle Creek Quarry Road – taken before the Foxdale Quarry.
  - Foxdale Drain.

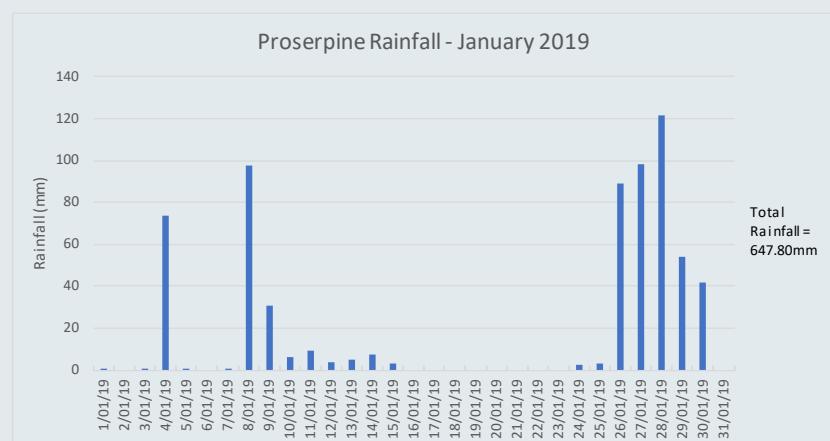


Figure 1 Proserpine rainfall data for January 2019 – read from Glen Isla weather station



Figure 1 Google Earth image of catchment samples

SAMPLE	DIURON (UG/L)	ATRAZINE (UG/L)	ISOXAFLUTOLE (UG/L)	IMAZAPIC (UG/L)	IMIDACLOPRID (UG/L)	HEXAZINONE (UG/L)	METOLACHLOR (UG/L)
Myrtle Crk Blair Rd	1	<1	<0.2	<0.2	0.3	1.3	<0.2
Myrtle Crk # 2	2.3	<1	<0.2	<0.2	0.3	2.2	<0.2
Up River Gully	3.5	<1	<0.2	<0.2	0.6	3.3	0.2
Myrtle Ck Quarry Rd	1.3	<1	<0.2	<0.2	0.5	1.3	<0.2
Foxdale Drain	2.3	<1	<0.2	0.5	0.7	0.9	<0.2
Pesticide Ecotoxicity Threshold Values for PC95 - Freshwater (ug/L) ^	0.23	1.1	0.46	0.41	0.11	1.1	0.71

SAMPLE	AMETRYN (UG/L)	METRIBUZIN (UG/L)	PENDIMETHALIN (UG/L)	TEBUTHIURON (UG/L)	2,4-D (UG/L)	MCPA (UG/L)	FLUROXYPYR (UG/L)
Myrtle Crk Blair Rd	<0.2	<2	<0.5	<1	<1	<1	<0.5
Myrtle Crk # 2	<0.2	<2	<0.5	1	<1	<1	<0.5
Up River Gully	<0.2	<2	<0.5	<1	<1	<1	1.1
Myrtle Ck Quarry Rd	<0.2	<2	<0.5	<1	<1	<1	<0.5
Foxdale Drain	<0.2	<2	<0.5	<1	<1	<1	1.2
Pesticide Ecotoxicity Threshold Values for PC95 - Freshwater (ug/L) ^	0.33	2.6	2.1	13	N/A*	N/A*	160

All results reported represent the concentration levels of the active ingredients in micrograms per litre, which is equivalent to parts per billion.

The pesticide ecotoxicity threshold value for PC95 (Freshwater) was used for reference as these values relate to gazetted waterways. PC95 means that at these pesticide concentrations, 95% of freshwater aquatic species are protected.

■ Fields highlighted this colour represent loads over the PC95 threshold values.

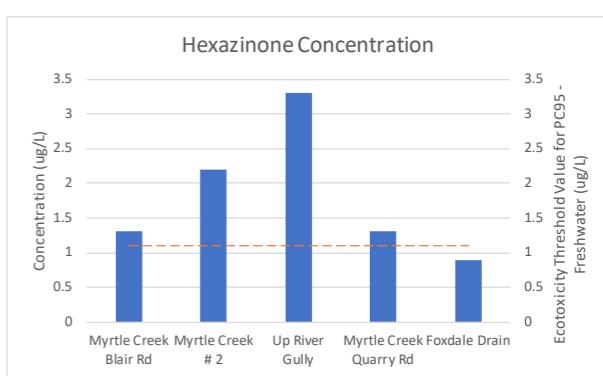
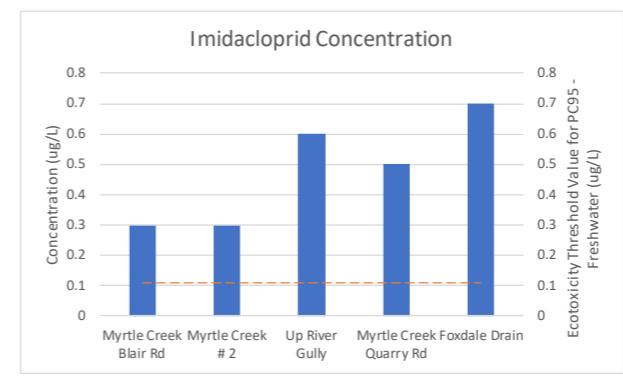
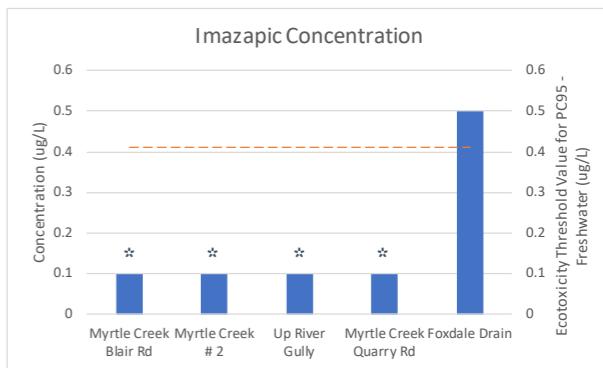
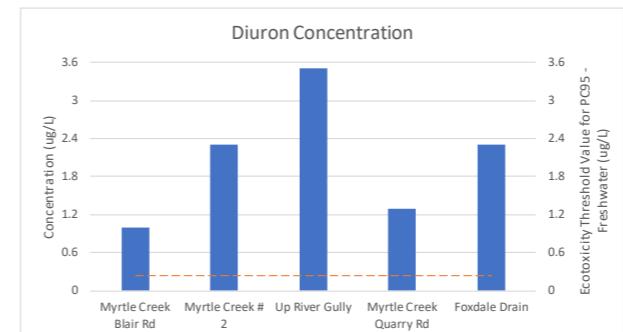
<sup>^</sup>References: *Proposed aquatic ecosystem protection guideline values for pesticides commonly used in the Great Barrier Reef catchment area: Part 1 (amended). Water Quality and Investigations, Department of Environment and Science, 2017 (amended March 2018).*

*Proposed aquatic ecosystem protection guideline values for pesticides commonly used in the Great Barrier Reef catchment area: Part 2 (amended). Water Quality and Investigations, Department of Environment and Science, 2017 (amended March 2018).*

\*No current guideline

#### Note:

\* Where concentrations are <x, the concentration is below the limit of reporting of the analysis instrument



#### Note:

\* chemical concentrations were below the analysis instruments level of reporting (LOR). In these cases, concentrations are presented as half the LOR to provide an estimate.

## FOR FURTHER INFORMATION PLEASE CONTACT

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