

# ANNUAL NUTRIENT SURVEY for Local Government Authorities

## Town of Cottesloe

### Nutrient Management Score Card 2020

The Swan and Canning River systems, and many wetlands, are suffering from regular, sometimes toxic, algal blooms. These blooms occur due to excessive inputs of nutrients, particularly phosphorus and nitrogen, combined with low water flows. Local authorities are responsible for nutrient use on turfed areas, reserves and in local planning decisions and thus have the opportunity to lead the community by setting examples in best practice.

Each year Local Government Authorities (LGA's) in Perth are surveyed on their nutrient practices by the Phosphorus Awareness Project of the South East Regional Centre for Urban Landcare (SERCUL). The results from the questions asked in the survey have been used to provide these Score Cards for each LGA that responded and clearly show where and how improvements can be made. LGA's should also refer to the *Annual Nutrient Survey for Local Government Authorities Results 2020* report ([www.sercul.org.au/fertilisewise](http://www.sercul.org.au/fertilisewise)) for further recommendations on how to improve nutrient Best Management Practices (BMP's).

The survey is broken up into different sections including nutrient monitoring, fertiliser applications, nutrient management, nutrient education, water quality monitoring and development control. The results from these sections are shown below, for the last five years, so that the LGA knows exactly how they responded and where improvements can be made. Recommendations on how to improve practices have been made where needed.

Please note that not all of the questions asked in the survey were used to determine the overall best management practice score. We have provided an overall score based on results provided since 2000, those for the last 5 years and those for this year. This will allow LGA's to see how they are doing over the long-term, short-term and at the current time. Any additional information about nutrient practices provided by an LGA is summarised at the end of this scorecard.



### Best Management Practice Scores

**Overall (2002 - 2020): 48% - Average**

**Last 5 years: 46% - Average**

**2020: 46% - Average**

The Town of Cottesloe has only adopted average Best Management Practices since it completed its first survey in 2002. Despite only just touching upon the Swan Canning Catchment, the city should be mindful of the nutrients making their way from their LGA to the ocean. Improvements are required in all areas of nutrient practices.

Key for following tables:

Best management practice has been achieved
  Best management practice has not been achieved
  No response
  Not Applicable

### Nutrient Monitoring

Question Number	Question	Year				
		2016	2017	2018	2019	2020
1	Conducted soil tests					
3	ASPAC analysis					
4	Colwell test used					
5	PRI measured					

Overall, the Town of Cottesloe has achieved above average results for nutrient monitoring, however for the last five years they have achieved an average score and this year have slipped to an unsatisfactory level. It is recommended that the Town conduct regular soil, leaf and moisture tests of their fertilised turfed areas, use the Colwell method and measure the PRI of the soil at least biannually to determine accurate phosphorus levels. Parks and Gardens Officers should attend Fertilise Wise Fertiliser Training in 2021.

### Fertiliser Applications

Question Number	Question	Year				
		2016	2017	2018	2019	2020
7(b)	Fertiliser used in foreshore areas					

The Town is using fertiliser on foreshore reserves and parks. It is recommended that before applying fertiliser to these areas soil, leaf tissue and moisture tests are conducted. The Town does not currently undertake any testing in foreshore reserves. If nutrients are required then controlled release and low water soluble fertilisers should be used. As is currently the case, fertiliser should not be applied in winter months. A 50 metre buffer zone should be established between fertilised areas and waterways. Despite indicating that they fertilise foreshore areas, the amounts used were not provided in Question 8. These amounts should be provided in next years survey.

Analysis of Question 8 from the 2020 survey indicated that the Town is using an inorganic slow release fertiliser for their active turf areas and is applying it in the seasons of spring and autumn. It is recommended that the Town base their fertiliser applications on nutrient monitoring results so that only the nutrients required are being applied. The amount of fertiliser being applied has average application rates of phosphorus and nitrogen above the maximum recommended rates of 40 kg/ha of nitrogen and 5 kg/ha of phosphorus in one application. This practice should be discontinued and fertiliser applied in multiple applications in spring and autumn at a lower rate according to monitoring results.

# Town of Cottesloe

## Nutrient Management Score Card 2020 *continued*

### Nutrient Management

Question Number	Question	Year				
		2016	2017	2018	2019	2020
10(a)	Grass clipping measures					
11	NIMP for streetscapes					
12	Local plants policy					
13(b)	Deciduous tree leaf removal					
14	Dog poo bins					

Overall and for the past five years, the Town has scored above average in nutrient management. It is recommended that the Town implements a Nutrient and Irrigation Management Plan (NIMP) for their streetscapes.

Despite the irregular response in 2018, it would appear that deciduous trees are found in the Town's area. It is recommended that no further deciduous trees be planted.

### Nutrient Education

Question Number	Question	Year				
		2016	2017	2018	2019	2020
15(a)	Discourages public waterbird feeding					
16(a)	Provides fertiliser advice to rate payers					

Overall, the Town has achieved an unsatisfactory score in nutrient education. This score has gradually increased over the past 5 years and they are now rated average. It is encouraging that in 2019 they began providing nutrient advice to rate payers and this should continue. Despite not having any river foreshore it is recommended that the Town discourage the feeding of waterbirds by the public, particularly at beaches, as they are highly mobile animals and can deposit their nutrients in waterways elsewhere. The Phosphorus Awareness Project has a leaflet which outlines this issue and could be used as the basis for signage.

### Water Quality Monitoring

Question Number	Question	Year				
		2016	2017	2018	2019	2020
17(a)	Monitors wetlands for nutrients					
17(b)	Monitors stormwater drains for nutrients					
17(c)	Monitors comp basins for nutrients					

Overall, the Town is scoring unsatisfactory in the area of water quality monitoring. The Town of Cottesloe does not have any wetlands within it and has capped all of its ocean outfall pipes. However, nutrients entering stormwater sumps and compensation basins can still enter the groundwater and make their way into waterbodies. It is recommended that the Town monitors its stormwater drains/sumps and any compensation basins it has for nutrients.

### Development Control

Question Number	Question	Year				
		2016	2017	2018	2019	2020
18(a)	NIMP developers conditions imposed					
19	Town Planning env enforcement policies					

Overall, the Town has scored below average in the development control area, but have been average over the last five years. It is recommended that the Town imposes NIMP conditions on developers, monitors these for compliance and prosecutes developers that are not complying with NIMP conditions imposed on them as new developments are potentially major sources of nutrients to groundwater and waterways.

