

ANNUAL NUTRIENT SURVEY for Local Government Authorities

2021 Town of Cottesloe Nutrient Management Score Card

The Swan and Canning River systems, and many wetlands, are suffering from regular, and sometimes toxic, algal blooms. These blooms occur due to excessive inputs of nutrients, particularly phosphorus and nitrogen, combined with low water flows and warm temperatures. Local authorities are responsible for nutrient use and management on turfed areas and in reserves, in drainage systems 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 (LGAs) in Perth are surveyed on their nutrient practices by the Phosphorus Awareness Project of the South East Regional Centre for Urban Landcare (SERCUL). 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 the questions asked in the survey have been used to provide a Score Card for each LGA that responded and clearly show how the LGA is performing and where and how improvements can be made. LGAs should also refer to the Annual Nutrient Survey for Local Government Authorities Results 2021 report (www.sercul.org.au/fertilisewise) for further recommendations on how to implement nutrient Best Management Practices (BMPs).

Please note that not all of the questions asked in the survey were used to determine the overall best management practice score. Any additional information about nutrient practices provided by an LGA is summarised at the end of this scorecard.



BEST MANAGEMENT PRACTICE SCORE 2021

Overall BMP: **52% AVERAGE**

The Town of Cottesloe has been average in implementing Best Management Practices in 2020/21. The Town has no freshwater waterbodies within its borders and only has a small area within the Swan Canning Catchment. Therefore, it is unlikely to contribute greatly to the nutrient load of the Swan Canning River System. The Town should, however, be mindful of the nutrients entering the ocean via the groundwater. Improvements are required in all areas of nutrient practices.

RESPONSE KEY:

■ BMP has been achieved ■ BMP has NOT been achieved ■ Not Applicable Response not assessed

BEST MANAGEMENT PRACTICE (BMP) KEY:

■ Excelling ■ Above Average ■ Average ■ Below Average ■ Unsatisfactory

NUTRIENT MONITORING

QUESTION	RESPONSE	SECTION BMP
Are regular soil tests &/or leaf tissue analyses conducted in grassed and turf areas?	NO	UNSATISFACTORY
Is analysis conducted by a lab affiliated with ASPAC?	N/A	
Is plant available phosphorus in the soil measured using an appropriate test?	N/A	
Are rates of phosphorus determined by soil testing and Phosphorus Retention Index (PRI) results?	N/A	

It is recommended that the Town conduct regular soil tests and leaf tissue analysis in all fertilised areas at least biannually to determine accurate nutrient levels. In irrigated areas they should also conduct soil moisture tests. It is recommended employees involved in turf management attend SERCULs Fertilise Wise Fertiliser Training in 2022.

FERTILISER APPLICATIONS

QUESTION	RESPONSE	SECTION BMP
Are there foreshore reserves and parks in the LGA?	YES	BELOW AVERAGE
Is fertiliser added to foreshore reserves and parks?	YES	
Does the fertiliser contain phosphorus?	YES	
Is it a controlled release, low water soluble fertiliser?	YES	

The Town reported having no foreshore reserves in the survey, however provided details on the amounts of fertiliser added to these areas. Consequently their answers were changed to reflect the information provided. The foreshore area is adjacent to the ocean rather than the river. A buffer zone immediately adjacent to waterbodies should be established in which no fertilising takes place. The width of the buffer zone should be determined by factors such as the site condition and function, however, if possible, it should be at least 50m. Outside the buffer zone, if fertiliser is to be applied it should be a controlled release, phosphorus free, low water soluble fertiliser that is applied according to soil testing and leaf tissue analysis. If the area is irrigated moisture testing should also be undertaken. The same fertiliser was used on active, passive and foreshore areas at the same rates of application. Nitrogen is being applied at rates above the recommended single application rate of 40kg/ha. It is recommended that the fertiliser type and rates be determined by the requirements and conditions of the specific site, based on nutrient testing and the single application rate of nitrogen be no more than 40kg/ha.

NUTRIENT MANAGEMENT

QUESTION	RESPONSE	SECTION BMP
Are structural BMPs in place to reduce nutrients entering waterbodies?	YES	EXCELLING
Are non-structural measures in place to prevent nutrients from grass clippings entering waterbodies via stormwater drains?	YES	
Are there deciduous trees in parks and streetscapes?	YES	
Are non-structural measures in place to prevent nutrients from deciduous leaves entering waterbodies via stormwater drains?	YES	
Are there non-structural measures in place to prevent nutrients from sediment entering waterbodies via stormwater drains?	YES	
Is a Nutrient and Irrigation Management Plan (NIMP) implemented for streetscapes?	NO	
Is there a policy to use local native plants as the first choice in public (LGA) and private (developers) landscaping?	YES	

The Town reported having no structural measures in place in the survey, but later confirmed that they have "dry" sumps or soakwells, which is an infiltration system so their answer was changed to reflect this information. It is recommended that no further deciduous trees be planted on road verges or near water bodies. A NIMP should be implemented for streetscapes.

WATER QUALITY MONITORING

QUESTION	RESPONSE	SECTION BMP
Are wetlands regularly monitored for nutrient levels?	N/A	
Are stormwater drains regularly monitored for nutrient levels?	N/A	
Are compensating basins regularly monitored for nutrient levels?	N/A	

The Town has no wetlands or compensation basins within its borders or under its control and its stormwater is directed to "dry" sumps or soakwells (those that do not intersect the maximum groundwater table). It reported that it does monthly sea water testing that is sent to the laboratory for analysis.

DEVELOPMENT CONTROL

QUESTION	RESPONSE	SECTION BMP
Are there provisions in the Town Planning Scheme or Planning Policies to enforce environmental conditions on development?	YES	BELOW AVERAGE
Do you impose conditions on development which include Nutrient and Irrigation Management Plans (NIMPs)?	NO	
Do you have mechanisms in place to regulate sediment management?	NO	

It is recommended that the Town imposes conditions requiring NIMPs on developments, monitors these for compliance and prosecutes developers that are not complying. They should also have mechanisms in place to regulate sediment management (refer to main report for measures that can be implemented).

NUTRIENT EDUCATION

QUESTION	RESPONSE	SECTION BMP
Are dog poo bins and bags provided in parks and foreshore reserves?	YES	BELOW AVERAGE
Are measures taken to educate the public about not feeding bread to waterbirds in foreshore reserves and parks?	NO	
Are ratepayers provided with advice on best practice in fertiliser management according to soil type?	NO	

It is recommended that the Town implement BMP measures to educate the public about not feeding bread to waterbirds and that they provide ratepayers with advice on best practice in fertiliser management according to soil type (refer to main report for measures that can be implemented). Although the Town does not have freshwater waterbodies within their borders, birds are highly mobile animals and can deposit nutrients in waterbodies elsewhere. SERCUL has a flyer that can form the basis of a sign educating the public about not feeding waterbirds. SERCUL also has a Fertilise Wise brochure that can be sourced for free from SERCUL and distributed to ratepayers at LGA locations. The Town can also link its website to the Fertilise Wise page of SERCUL's website (www.sercul.org.au/fertilisewise).