

ANNUAL NUTRIENT SURVEY for Local Government Authorities

2021 Shire of Peppermint Grove 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: **38% BELOW AVERAGE**

The Shire of Peppermint Grove has been below average in implementing Best Management Practices in 2020/21. Further improvements can be made in the areas of nutrient monitoring, fertiliser applications, nutrient management, water quality monitoring and development control. It is recommended that future respondents to this survey seek assistance from other departments in the Shire if they are unsure of the answers to a question as not providing a response can negatively affect the overall result.

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 Shire 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?	NO	
Is it a controlled release, low water soluble fertiliser?	NO	

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 performed. It was reported that fertiliser is only applied to passive parks and foreshore areas and the same fertiliser is used in both areas. It is recommended that the fertiliser used be determined by soil tests, leaf tissue analysis and, if irrigated, moisture tests. No fertiliser should be applied in summer.

NUTRIENT MANAGEMENT

QUESTION	RESPONSE	SECTION BMP
Are structural BMPs in place to reduce nutrients entering waterbodies?	NO	UNSATISFACTORY
Are non-structural measures in place to prevent nutrients from grass clippings entering waterbodies via stormwater drains?	NO	
Are there deciduous trees in parks and streetscapes?	NO	
Are non-structural measures in place to prevent nutrients from deciduous leaves entering waterbodies via stormwater drains?	N/A	
Are there non-structural measures in place to prevent nutrients from sediment entering waterbodies via stormwater drains?	NO	
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	

It is recommended that the Shire put in place structural measures and non-structural measures to reduce nutrients from grass clippings and sediment entering the Swan River via stormwater drains (refer to main report for measures that can be implemented) and implement a NIMP for streetscapes.

WATER QUALITY MONITORING

QUESTION	RESPONSE	SECTION BMP
Are wetlands regularly monitored for nutrient levels?	N/A	UNSATISFACTORY
Are stormwater drains regularly monitored for nutrient levels?	NO	
Are compensating basins regularly monitored for nutrient levels?	N/A	

The Shire has no wetlands or compensation basins within its borders or under its control. It is recommended that the Shire implement a water quality monitoring program for its stormwater drains and report the results to the local community. SERCUL Water Quality Monitoring Team can assist LGAs with undertaking this work and can be contacted on 9458 5664.

DEVELOPMENT CONTROL

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

The respondent to the survey indicated that they were unsure if the Shire had mechanisms in place to regulate sediment management. A quick search of the internet showed that the Shire have 'Sand Drift Prevention and Sediment Control Guidelines' for building sites which is a regulatory mechanism so the response was changed accordingly. It is recommended that if they are not already, the Shire imposes conditions on developments including NIMPs, monitors these for compliance and prosecutes developers that are not complying. It is also recommended that future respondents to this survey seek assistance from other departments in the Shire if they are unsure of the answers to a question as not providing a response can negatively affect the overall result.

NUTRIENT EDUCATION

QUESTION	RESPONSE	SECTION BMP
Are dog poo bins and bags provided in parks and foreshore reserves?	YES	EXCELLING
Are measures taken to educate the public about not feeding bread to waterbirds in foreshore reserves and parks?	YES	
Are ratepayers provided with advice on best practice in fertiliser management according to soil type?	YES	

It is recommended that the City continue to implement their current practices.