

# ANNUAL NUTRIENT SURVEY for Local Government Authorities



## City of Nedlands 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 turf 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, 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 2022 report ([www.sercul.org.au/fertilisewise](http://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 2022

Overall BMP: **97% EXCELLING**

The City of Nedlands has excelled in implementing nutrient Best Management Practices in 2021/22. Further improvements can be made in the areas of nutrient monitoring, fertiliser applications and nutrient education.

#### 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?	YES	EXCELLING
Is analysis conducted by a lab affiliated with ASPAC?	YES	
Is plant available phosphorus in the soil measured using an appropriate test?	YES	
Are rates of phosphorus determined by soil testing and Phosphorus Retention Index (PRI) results?	YES	

The City conducts soil tests, leaf tissue analysis and moisture testing on sports grounds, golf courses and foreshore areas and soil and moisture tests on irrigated parks. It is recommended that leaf tissue analysis is undertaken at irrigated parks to determine if fertiliser is required and that if dry grass areas are fertilised they be subject to soil tests and leaf tissue analysis.

### FERTILISER APPLICATIONS

QUESTION	RESPONSE	SECTION BMP
Are there foreshore reserves and parks in the LGA?	YES	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?	YES*	

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 50 m. Outside the buffer zone, if fertiliser is needed it should be applied as it currently is - phosphorus free, controlled release or applied to foliage and according to soil and moisture testing and leaf tissue analysis. Analysis of the fertiliser applied to active turf and foreshore areas indicates that single application rates of nitrogen are above the 40 kg/ha that is generally recommended, although as it is a controlled release fertiliser, nutrient monitoring and moisture testing is being conducted and the fertiliser regime is based on advice from a number of sources, including that of a turf consultant, this may be acceptable. \*One of the two types of fertiliser being applied to foreshore areas is quick release and water soluble, however as it is applied to foliage and only in small amounts, the answer to this question was kept as yes. This fertiliser is, however, applied to foliage in winter when the grass is likely to be semi-dormant and nutrients not being used and fertiliser has a greater chance of being leached into groundwater due to heavy rain. It is recommended that fertiliser not be applied during winter.

## 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?	YES	
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 City continue to implement its current practices. It is recommended that no further deciduous trees be planted on road verges or near waterbodies.

## 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 City has reported that it has no wetlands or compensation basins under its control and its stormwater is directed to “dry” sumps or soakwells (those that do not intersect the maximum groundwater table).

## DEVELOPMENT CONTROL

QUESTION	RESPONSE	SECTION BMP
Are there provisions in the Town Planning Scheme or Planning Policies to enforce environmental conditions on development?	YES	EXCELLING
Do you impose conditions on development which include Nutrient and Irrigation Management Plans (NIMPs)?	YES	
Do you have mechanisms in place to regulate sediment management?	YES	

It is recommended that the City continue to implement their current practices, including monitoring developments for compliance. If developers are found not to be in compliance they should be prosecuted.

## 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 provide more specific advice on best practice in fertiliser management according to soil type. SERCUL has a Fertilise Wise brochure that can be sourced for free from SERCUL and distributed to ratepayers at LGA locations. The City can also link its website to the Fertilise Wise page of SERCUL's website ([www.sercul.org.au/fertilisewise](http://www.sercul.org.au/fertilisewise)).