

# ANNUAL NUTRIENT SURVEY for Local Government Authorities

## 2023 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 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 to foreshore areas, nutrient management, water quality monitoring, development control and nutrient education. 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 2023 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.

### 2023 Overall Best Management Practice Score – 94% EXCELLING

The City of Nedlands has excelled in implementing nutrient Best Management Practices in 2022/23. Further improvements can be made in the areas of nutrient monitoring, fertiliser applications, nutrient management 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
Were regular soil nutrient tests, soil moisture tests &/or leaf tissue analyses conducted in any grass/turf areas?	YES	EXCELLING
Was analysis conducted by a lab affiliated with ASPAC?	YES	
Was plant available phosphorus in the soil measured using an appropriate test?	YES	
Were rates of phosphorus determined by soil testing and Phosphorus Retention Index (PRI) results?	YES	

The City conducted soil tests, leaf tissue analysis and moisture testing on sports grounds, golf courses and foreshore areas and soil and moisture tests on irrigated parks. Regular leaf tissue analysis should also have been performed on irrigated parks to determine if the application of fertiliser was required by the turf.

## FORESHORE FERTILISER APPLICATIONS

QUESTION	RESPONSE	SECTION BMP
Are there grassed/turfed foreshore areas within the LGA?	YES	EXCELLING
Was fertiliser added to grassed/turfed foreshore reserves?	YES	
Did the fertiliser contain phosphorus?	NO	
Was it a controlled release solid fertiliser or a liquid fertiliser applied to foliage?	YES	
Was there a buffer zone around waterbodies in which no fertiliser was applied?	YES	
Was any nutrient testing completed of foreshore areas?	YES	

The City fertilised their foreshore reserves and parks, however as they used phosphorus free, controlled release solid fertiliser and liquid fertiliser applied to foliage, have a buffer zone in place in which they didn't apply fertiliser and completed nutrient testing prior to fertilising they have excelled in meeting the assessed BMP for foreshore areas.

#### General Fertiliser Recommendations:

Analysis of the ICL Pro Turf fertiliser applied to active turf and foreshore areas outside the buffer zone indicates that nitrogen was being applied at rates above the maximum recommended rate of 40 kg/ha for a single application, although as it is a controlled release fertiliser this may be acceptable. Living Turf fertiliser, however, was being added to passive turf at rates above the recommended annual application rate of nitrogen of 50 - 100 kg/ha/yr for premium passive turf. The City should adhere to the recommended annual application rates for the types of turf it is managing. Employees involved in turf management would benefit from attending SERCULs Fertilise Wise Fertiliser Training in 2024.

## NUTRIENT MANAGEMENT

QUESTION	RESPONSE	SECTION BMP
Were structural BMPs in place to reduce nutrients entering waterbodies?	YES	EXCELLING
Were non-structural measures in place to prevent nutrients from grass clippings entering waterbodies directly or via stormwater drains?	YES	
Are there deciduous trees in parks and streetscapes?	YES	
Were non-structural measures in place to prevent nutrients from deciduous leaves entering waterbodies directly or via stormwater drains?	YES	
Were non-structural measures in place to prevent nutrients from sediment entering waterbodies directly or via stormwater drains?	YES	
Was a Nutrient and Irrigation Management Plan (NIMP) implemented for streetscapes?	YES	
Was 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, with the exception that no further deciduous trees be planted on road verges or near waterbodies.

## WATER QUALITY MONITORING

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

The City has reported that it has no wetlands or compensating 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
Were there provisions in the Town Planning Scheme or Planning Policies to enforce environmental conditions on development?	YES	EXCELLING
Did the LGA impose conditions on development which included Nutrient and Irrigation Management Plans (NIMPs)?	YES	
Did the LGA 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
Were dog poo bins and bags provided in parks and foreshore reserves?	YES	ABOVE AVERAGE
Were measures taken to educate the public about not feeding bread to waterbirds in foreshore reserves and parks?	YES	
Were ratepayers provided with advice on best practice in fertiliser management according to soil type?	YES	
Was education provided about nutrient sources to waterways?	NO	

It is recommended that the City provide more specific advice on best practice in fertiliser management according to soil type and that it implement education about nutrient sources to waterways. SERCUL has Fertilise Wise, Grow Local Plant and other general nutrient awareness brochures 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 ([www.sercul.org.au/fertilisewise](http://www.sercul.org.au/fertilisewise)) and Phosphorus Awareness Project ([www.sercul.org.au/our-projects/pap/](http://www.sercul.org.au/our-projects/pap/)) pages of the SERCUL website. SERCUL can also be engaged to deliver presentations to schools, business and community groups through its Phosphorus Awareness Project. For more information on this education program and how it can assist the City with nutrient education contact Natasha Bowden on 9458 5664.