# ANNUAL NUTRIENT SURVEY for Local Government Authorities

# 2022 City of Melville 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 2022 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 2022

Overall BMP: **71% ABOVE AVERAGE**

The City of Melville has been above average in implementing nutrient Best Management Practices in 2021/22. Further improvements can be made in the areas of nutrient monitoring, fertiliser applications, nutrient management, water quality monitoring and development control.

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, moisture testing and leaf tissue analysis at sports fields, golf courses and irrigated parks and it is recommended that this practice continue. It does not conduct any testing or analysis of foreshore and dry grass areas, despite fertilising foreshore areas. It is recommended that before applying fertiliser to any area, but particularly foreshore areas, the City conduct soil tests and leaf tissue analysis and if they irrigate the area, moisture testing as well.

## 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 | |

Despite stating that the fertiliser applied to foreshore areas was a controlled release, low water soluble form in the survey, the information provided about the brand of fertiliser applied showed it was slow release, so the answer to this question was changed to 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 50 m. Outside the buffer zone, if fertiliser is required according to soil testing and leaf tissue analysis, it should be phosphorus free and a controlled release, low water soluble fertiliser if in solid form or applied to foliage. If the area is irrigated moisture testing should also be undertaken. Analysis of the fertiliser applied to active and passive turf and foreshore areas indicates that single application rates of nitrogen are above the 40 kg/ha that is recommended, although it is in a controlled release form and testing is undertaken so these rates may be acceptable.

## NUTRIENT MANAGEMENT

| QUESTION | RESPONSE | SECTION BMP |
|---|---|---|
| Are structural BMPs in place to reduce nutrients entering waterbodies? | YES | ABOVE AVERAGE |
| 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? | NO | |

It is recommended that no further deciduous trees be planted on road verges or near waterbodies. A NIMP should be implemented for streetscapes and a policy to use local native plants as the first choice in landscaping enacted.

## WATER QUALITY MONITORING

| QUESTION | RESPONSE | SECTION BMP |
|---|---|---|
| Are wetlands regularly monitored for nutrient levels? | YES | BELOW AVERAGE |
| Are stormwater drains regularly monitored for nutrient levels? | NO | |
| Are compensating basins regularly monitored for nutrient levels? | NO | |

The City monitors nutrient levels in wetlands and reports the results to the local community. It is recommended that the City implement a monitoring program for stormwater drains and compensating basins and report the results to the local community. SERCULs 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? | YES | ABOVE 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? | YES | |

It is recommended that the City impose conditions requiring NIMPs on developments, monitors these for compliance and prosecutes developers that are not complying.

## 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.

SERCUL
South East Regional Centre for Urban Landcare
ALGAE BUSTER PHOSPHORUS AWARENESS PROJECT

**For further information contact - Natasha Bowden**
Education and Promotion Manager, SERCUL.
E I natashabowden@sercul.org.au
P I (08) 9458 5664



*The Annual Nutrient Survey for Local Government Authorities Results 2022 Report is available at www.sercul.org.au/fertilisewise*