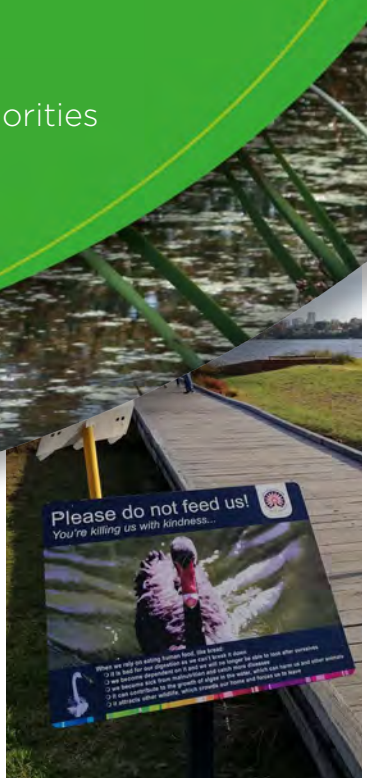
ANNUAL NUTRIENT SURVEY for Local Government Authorities

2021 City of Canning 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: **75% ABOVE AVERAGE**

The City of Canning has been above average in implementing nutrient BMPs in 2020/21. Further improvements can be made in the areas of fertiliser applications to foreshore areas, nutrient management, water quality monitoring, development control 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 performs leaf tissue analysis and soil and moisture testing of sports fields, irrigated parks, dry grass areas and foreshore areas. It is recommended that this testing regime continue.

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	

Fertiliser applied to active and passive turf is completed according to LGA officers experience and interpretation of lab data and is in a liquid form applied to foliage which is recommended. No information was provided on the seasons in which fertiliser is applied to active turf. The City stated that fertiliser applied to foreshore areas does not contain phosphorus and is not a controlled release, low water soluble fertiliser, however, the information provided on the amounts applied indicates that an organic top dress that contains 1.1% phosphorus was applied so the responses were changed accordingly. 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. The application rate of nitrogen from the organic topdress is also above the recommended single application rate of 40kg/ha. It is recommended that in those areas beyond the buffer zone nitrogen is applied at a single application rate of 40kg/ha or below.

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	

It is recommended that no further deciduous trees be planted on road verges or near waterbodies. It is recommended that a NIMP be implemented for streetscapes.

WATER QUALITY MONITORING

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

The City has indicated that all of its stormwater is directed to "dry" sumps or soakwells (those that do not intersect the maximum groundwater table) which is why this question is marked N/A. However, in previous years the City has reported that it monitors stormwater drains and on its website it states that drains carry water to the river as well as sumps. If this is the case it is recommended that both stormwater drains and compensating basins be regularly monitored for nutrient levels.

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 imposes 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	ABOVE AVERAGE
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?	NO	

It is recommended that the City provide ratepayers with 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 SERCULs website (www.sercul.org.au/fertilisewise).

ADDITIONAL INFORMATION PROVIDED

Canning has implemented the practice of foliar applications of straight nutrient blends derived from interpreting raw laboratory data. Blends are sprayed onto the turf with total Nitrogen levels below the threshold for burning (1g/m2), therefore no follow up irrigation is applied. Fine weather conditions are required for the days of application allowing the nutrients to dry on the turf leaves preventing any run off into drains, creeks, rivers etc.

South East Regional Centre for Urban Landcare

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The Annual Nutrient Survey for Local Government Authorities Results 2021 Report is available at www.sercul.org.au/fertilisewise