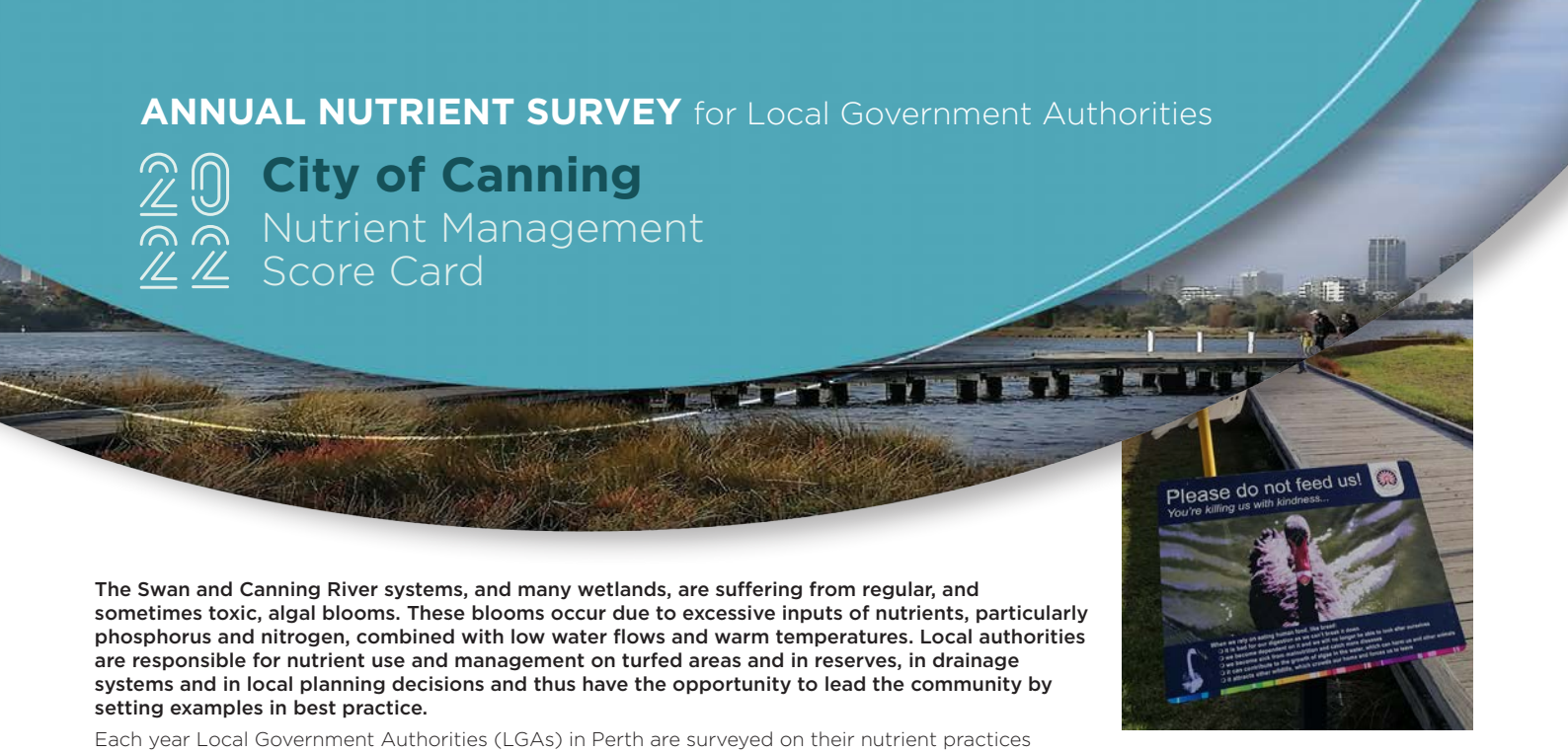
ANNUAL NUTRIENT SURVEY for Local Government Authorities

2022 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 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: **90% EXCELLING**

The City of Canning has excelled in implementing nutrient BMPs in 2021/22. Further improvements can be made in the areas of nutrient monitoring, fertiliser applications to foreshore areas and nutrient management.

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 soil and moisture testing of sports fields, golf courses, irrigated parks and foreshore areas, as well as moisture testing of dry grass areas. Nutrient monitoring of soil and leaf tissue should be undertaken in all fertilised areas.

FERTILISER APPLICATIONS

QUESTION	RESPONSE	SECTION BMP
Are there foreshore reserves and parks in the LGA?	YES	UNSATISFACTORY
Is fertiliser added to foreshore reserves and parks?	YES	
Does the fertiliser contain phosphorus?	YES	
Is it a controlled release, low water soluble fertiliser?	NO	

The City stated that fertiliser applied to foreshore areas does not contain phosphorus and is a controlled release, low water soluble fertiliser, however, the information provided about the fertiliser applied indicates that an organic top dress, which is slow release, and 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 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 performed. The organic topdress is being applied in amounts that may mean that the rates of nitrogen and phosphorus exceed those recommended for a single application. The recommended single application rate of nitrogen is 40 kg/ha and the maximum water-soluble single application rate of phosphorus is 5 kg/ha for a low PRI soil and 20 kg/ha for a high PRI soil. It is not specified, however, how much of the nutrients in the organic top dress are in a water-soluble state. It is recommended that before applying organic top dress in those areas beyond the buffer zone, application rates are determined so that nitrogen is applied at a single application rate of 40 kg/ha or below and water-soluble phosphorus is applied according to the PRI and phosphorus soil test results.

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	EXCELLING
Are stormwater drains regularly monitored for nutrient levels?	YES	
Are compensating basins regularly monitored for nutrient levels?	YES	

It is recommended that the Town continue to monitor wetlands, stormwater drains and compensating basins for nutrient levels. They currently report the monitoring results of wetland and compensation basins to the community and this should continue. They should also start reporting the results of stormwater drain monitoring to the community.

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 Town 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 continue to implement their current practices.

ADDITIONAL INFORMATION PROVIDED

Nutrient management on golf courses and sports grounds.

SERCUL
South East Regional Centre for Urban Landcare

ALGAE BUSTER
PHOSPHORUS AWARENESS PROJECT

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