

# ANNUAL NUTRIENT SURVEY for Local Government Authorities

## 2023 Town of East Fremantle 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 – 83% EXCELLING

The Town of East Fremantle has excelled in implementing nutrient Best Management Practices in 2022/23. Further improvements can be made in the areas of fertiliser applications, nutrient management, 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
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	

Soil testing, leaf tissue analysis and moisture testing were conducted in sports fields and irrigated parks, with no testing or analysis completed in foreshore areas. Sports fields were fertilised, but irrigated parks and foreshore areas were not. It is recommended that the Town continue to conduct regular soil testing and leaf tissue analysis of all fertilised areas and moisture testing in those areas that are also irrigated.

## 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?	NO	
Did the fertiliser contain phosphorus?	N/A	
Was it a controlled release solid fertiliser or a liquid fertiliser applied to foliage?	N/A	
Was there a buffer zone around waterbodies in which no fertiliser was applied?	N/A	
Was any nutrient testing completed of foreshore areas?	NO	

The Town did not apply fertiliser to foreshore areas and it is recommended that this practice continue.

#### General Fertiliser Recommendations:

Analysis of the fertiliser application information indicates that the Town applied Rejuvn8 fertiliser to active turf at rates above the maximum water-soluble single application rate of phosphorus recommended for even a high PRI soil (20 kg/ha). Rejuvn8 is a slow release fertiliser, so it would need to be determined how much of the phosphorus was present in a water-soluble form. Nutrients from slow release fertilisers can be released very quickly when excessive moisture and high temperatures occur in the same period. The Town should adhere to the rates of application specified by the PRI and soil test. It is recommended that fertiliser only be applied in spring and autumn as summer fertilising encourages the overuse of water and turf may grow excessively, while fertiliser applied during winter can be washed into stormwater drains or leached into groundwater. Many grass species are also dormant or semi-dormant in winter. 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?	NO	
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 practice of not planting deciduous trees on road verges or near water bodies be continued. A NIMP should be implemented for streetscapes.

## 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 Town reported having no wetlands or compensation basins under its control and stated that 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	ABOVE AVERAGE
Did the LGA impose conditions on development which included Nutrient and Irrigation Management Plans (NIMPs)?	NO	
Did the LGA have mechanisms in place to regulate sediment management?	YES	

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

## 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 Town provide education to residents, relevant businesses and schools about the impact of all nutrient sources, including fertiliser, pet faeces, grass clippings, leaves, sediment, septic tanks and detergent, on waterways and how they get there (ie. via runoff, stormwater drains and groundwater). SERCUL has relevant information on its website that can be linked to and can 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 Town with nutrient education contact Natasha Bowden on 9458 5664.