

ANNUAL NUTRIENT SURVEY for Local Government Authorities



Town of Bassendean 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 turf 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: **76% ABOVE AVERAGE**

The Town of Bassendean has been above average in implementing nutrient BMPs 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?	NO	UNSATISFACTORY
Is analysis conducted by a lab affiliated with ASPAC?	N/A	
Is plant available phosphorus in the soil measured using an appropriate test?	N/A	
Are rates of phosphorus determined by soil testing and Phosphorus Retention Index (PRI) results?	N/A	

It is recommended that the Town or their Turf Consultant conduct regular soil tests and leaf tissue analysis in all fertilised areas to determine accurate nutrient levels. In irrigated areas that are fertilised they should also conduct soil moisture tests. It is recommended employees involved in turf management attend SERCULs Fertilise Wise Fertiliser Training in 2023.

FERTILISER APPLICATIONS

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

The Town does not apply fertiliser to foreshore areas and it is recommended that this practice continue. The fertiliser being added to active and passive turf contains phosphorus which is being applied at rates above the maximum single application rate for water-soluble phosphorus in a low PRI soil (5kg/ha). It is not specified how much of that phosphorus is in a water-soluble form. The application rate of total phosphorus is, however, quite high and no nutrient monitoring of turf and soil has been undertaken to indicate whether this amount is even required. The fertiliser is also being applied numerous times over all seasons. It is recommended that soil and leaf tissue testing be conducted prior to the application of any fertiliser to determine the nutrient levels required. In irrigated areas they should also conduct soil moisture tests. It is recommended that fertilisers not be applied during winter and summer. Employees involved in turf management would benefit from attending SERCULs Fertilise Wise Fertiliser Training in 2023.

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 water bodies. A NIMP should be implemented for streetscapes.

WATER QUALITY MONITORING

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

The Town regularly monitors wetlands and stormwater drains for nutrient levels but does not report the results to the local community. It is recommended that the City monitor compensating basins for nutrient levels and report all results to the local community. SERCUL 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 Town 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	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 Town continue to implement their current practices in this area.