

ANNUAL NUTRIENT SURVEY for Local Government Authorities

2023 Town of Cottesloe 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) 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 – 76% ABOVE AVERAGE

The Town of Cottesloe has been above average in implementing nutrient Best Management Practices in 2022/23. The Town has no freshwater waterbodies within its borders and only has a small area within the Swan Canning Catchment. Therefore, it is unlikely to contribute greatly to the nutrient load of the Swan Canning River System. The Town should, however, be mindful of the nutrients entering the ocean via the groundwater. Improvements are required in the areas of nutrient monitoring, fertiliser applications, nutrient management 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
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	

The Town completed soil tests in sports fields and moisture tests in foreshore areas. No soil testing or leaf tissue analysis was performed in irrigated parks or foreshore areas which were both fertilised. It is recommended that the Town undertakes regular soil testing and leaf tissue analysis of all turf areas that are fertilised and moisture testing if these areas are irrigated.

FORESHORE FERTILISER APPLICATIONS

QUESTION	RESPONSE	SECTION BMP
Are there grassed/turfed foreshore areas within the LGA?	YES	ABOVE AVERAGE
Was fertiliser added to grassed/turfed foreshore reserves?	YES	
Did the fertiliser contain phosphorus?	NO	
Was it a controlled release solid fertiliser or a liquid fertiliser applied to foliage?	YES	
Was there a buffer zone around waterbodies in which no fertiliser was applied?	YES	
Was any nutrient testing completed of foreshore areas?	NO	

The foreshore area in the Town is adjacent to the ocean rather than the river. Foreshore areas outside a buffer zone were irrigated and fertilised with a phosphorus free, controlled release fertiliser. The only testing performed was moisture testing. Areas outside the buffer zone should be fertilised and irrigated according to regular soil and moisture testing and leaf tissue analysis.

General Fertiliser Recommendations:

Pro Turf was added to passive turf and Pro Turf NK added to foreshore areas outside the buffer zone at rates above the recommended annual application rate of 50 - 100 kg/ha/yr for premium passive turf. In future years the amount applied needs to decrease to within the rate specified for the type of turf and its usage (premium or minor). 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	ABOVE AVERAGE
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 there 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?	NO	

It is recommended that the practice of not planting deciduous trees on road verges or near water bodies be continued. A NIMP for streetscapes and a Local Plants Policy should be implemented.

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 has no wetlands or compensation basins under its control and 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?	NO	BELOW AVERAGE
Did the LGA impose conditions on development which include 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 impose environmental conditions on development including requiring NIMPs. They should monitor these conditions for compliance and prosecute developers that are not complying.

NUTRIENT EDUCATION

QUESTION	RESPONSE	SECTION BMP
Were dog poo bins and bags provided in parks and foreshore reserves?	YES	EXCELLING
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?	YES	

It is recommended that the Town continue to implement their current practices. In addition to what is currently being undertaken, SERCUL has relevant information on its website that can be linked to and can be engaged to deliver presentations about nutrients and their impact on waterways 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.