



January 2022

# City of Busselton

Essential Services Noise Management Plan 2022

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## Overview

The City of Busselton (City) is required to prepare a Noise Management Plan (NMP) for the City's waste collection and street cleaning operations, to minimise the noise impact around noise-sensitive receivers from 'out-of-hours' essential services carried out by the City within its boundaries. The plan may be obtained from the [City's website](#).

Such essential services include:

- Residential, Commercial, Event and Public Place Waste collections, and
- Road, public place and footpath sweeping and cleaning.

This NMP has been prepared to satisfy regulation 14A of the *Environmental Protection (Noise) Regulations 1997* (the Regulations) with guidance taken from the Department of Environment Regulation Draft Guideline DER2014/001628.

This regulation requires that noise emitted from premises (including from within the public realm), does not cause or significantly contribute to, a level of noise which exceeds the assigned levels depending upon premise type. In relation to the City's essential waste (including recycling and third organics bin, if/when implemented) collection, road, footpath and public space sweeping and cleaning activities, the City acknowledges that these essential services will exceed assigned levels, particularly affecting residential premises (noise-sensitive premises).

The regulations prescribe that an NMP expires after a maximum of 3 years from the day on which it is approved by the DWER following public consultation. However, the NMP will be reviewed annually to ensure better practice noise management techniques are continuing to be used.

## Legislation

Within Western Australia, noise is governed by *Environmental Protection (Noise) Regulations 1997*, within the *Environmental Protection Act 1986*, with Regulation 3, 7, 8 and 14A being most relevant, in the context of this Noise Management Plan.

### ENVIRONMENTAL PROTECTION (NOISE) REGULATIONS 1997 – REG 14A

#### Regulation 3. Regulations do not apply to certain noise emissions

- (1) Nothing in these regulations applies to the following noise emissions —
  - (a) noise emissions from the propulsion and braking systems of motor vehicles operating on a road;
  - (b) noise emissions from a safety warning device, other than a reversing alarm, fitted to a motor vehicle operating on a road;

#### Regulation 7. Prescribed standard for noise emissions

Noise standards from any premise or public space (under Regulation 7) do not apply to noise emitted during class 1 works (as described under Regulation 14A), if carried out in the quietest reasonable and practicable manner, using better practice equipment.

Class 2 activities can be exempt from having to comply with Regulation 7, as prescribed in Regulation 14A(3) –

- (3) Regulation 7 does not apply to noise emitted in the course of carrying out class 2 works if the works are carried out in accordance with a noise management plan, excluding any ancillary measure, for class 2 works approved in writing by the CEO.

## Regulation 8. Assigned levels

(3) The assigned level for all premises is to be determined by reference to Table 1.

Table 1				
Type of premises receiving noise	Time of day	Assigned level (dB)		
		L <sub>A 10</sub>	L <sub>A 1</sub>	L <sub>A max</sub>
Noise sensitive premises: highly sensitive area	0700 to 1900 hours Monday to Saturday	45 + influencing factor	55 + influencing factor	65 + influencing factor
	0900 to 1900 hours Sunday and public holidays	40 + influencing factor	50 + influencing factor	65 + influencing factor
	1900 to 2200 hours – All days	40 + influencing factor	50 + influencing factor	55 + influencing factor
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays	35 + influencing factor	45 + influencing factor	55 + influencing factor
Noise sensitive premises: any area other than highly sensitive area	All hours	60	75	80
Commercial premises	All hours	60	75	80

- **L<sub>A 1</sub> assigned level** means an assigned level which, measured as an L<sub>A Slow</sub> value, is not to be exceeded for more than 1% of the representative assessment period;
- **L<sub>A 10</sub> assigned level** means an assigned level which, measured as an L<sub>A Slow</sub> value, is not to be exceeded for more than 10% of the representative assessment period;
- **L<sub>A max</sub> assigned level** means an assigned level which, measured as an L<sub>A Slow</sub> value, is not to be exceeded at any time.

## Regulation 14a. Waste collection and other works

(1) In this regulation —

**ancillary measure** means a measure designated to be an ancillary measure under regulation 14B;

**class 1 works** means specified works carried out between —

- 0700 hours and 1900 hours on any day that is not a Sunday or a public holiday; or
- 0900 hours and 1900 hours on a Sunday or public holiday;

**class 2 works** means specified works carried out otherwise than between the hours specified in the definition of **class 1 works** paragraphs (a) and (b);

**specified works** means —

- the collection of waste; or
- the cleaning of a road or the drains for a road; or
- the cleaning of public places, including footpaths, cycle paths, car parks and beaches; or

- (d) *the maintenance of road verges and public open space (including the collection of rubbish and the planting, trimming, watering or removal of trees); or*
  - (e) *the periodic collection of household items or other things placed on street verges by residents for the purpose of such a collection; or*
  - (f) *activities associated with hazard or emergency management;*
- waste** means waste from domestic or commercial sources and includes —
- (a) *putrescible waste; and*
  - (b) *non-putrescible waste; and*
  - (c) *recyclable materials.*
- (2) *Regulation 7 does not apply to noise emitted in the course of carrying out class 1 works if —*
- (a) *the works are carried out in the quietest reasonable and practicable manner; and*
  - (b) *the equipment used to carry out the works is the quietest reasonably available; and*
  - (c) *in a case where a person has been required to prepare a noise management plan under subregulation (4) in relation to the works —*
    - (i) *the noise management plan has been prepared and submitted in accordance with the requirement, and approved in writing by the CEO; and*
    - (ii) *the works are carried out in accordance with the noise management plan, excluding any ancillary measure.*
- (3) *Regulation 7 does not apply to noise emitted in the course of carrying out class 2 works if the works are carried out in accordance with a noise management plan, excluding any ancillary measure, for class 2 works approved in writing by the CEO.*
- (4) *The CEO may by written notice require a person who carries out class 1 works —*
- (a) *to prepare a noise management plan; and*
  - (b) *within the time specified in the notice, to submit the plan to the CEO, or another person specified in the notice, for the approval of the CEO.*
- (5) *A noise management plan for class 1 works is to include —*
- (a) *details of vehicle or equipment evaluation and purchase policies adopted to select, on a reasonable and practicable basis, the quietest vehicle or equipment available; and*
  - (b) *measures to be adopted to minimise noise emissions resulting from carrying out the works; and*
  - (c) *a description of the specified works to be carried out during the times of day to which the class relates; and*
  - (d) *operator training programmes; and*
  - (e) *community information on the manner in which the specified works will be carried out; and*
  - (f) *a complaints response procedure.*
- (6) *A noise management plan for class 2 works is to include, but is not limited to —*
- (a) *details of vehicle or equipment evaluation and purchase policies adopted to select, on a reasonable and practicable basis, the quietest vehicle or equipment available; and*
  - (b) *measures to be adopted to minimise noise emissions resulting from carrying out the works; and*

- (c) *justification for carrying out the works during the times of day to which the class relates; and*
- (d) *a description of the specified works to be carried out during the times of day to which the class relates; and*
- (e) *operator training programmes; and*
- (f) *community information on the manner in which the specified works will be carried out; and*
- (g) *a complaints response procedure.*

*[Regulation 14A inserted: Gazette 5 Dec 2013 p. 5667-72.]*

## Purpose of the Plan and Justification for Works outside Regulation Hours.

The purpose of the Noise Management Plan is to minimise the impact of noise associated with the provision of the Essential Services activities across the City of Busselton district, between the hours of 0400 hrs and 0700 hrs Monday to Saturday, and 0600hrs to 0900 hrs on Sundays, and Public Holidays. This NMP does not extend to Events specifically, but allow the above-mentioned essential services to be provided safely, efficiently and with minimal inconvenience to the community, throughout the year.

The City has a responsibility not only to its ratepayers but also plays an important role in representing the broader South West region and the West Australia State, at federal and international level. With the Events Capital of WA branding, there is an expectation to create a unique sense of place, to promote tourism, attract and support local businesses and create a healthy, robust, vibrant 24-hour economy.

To live up to this expectation, the City's core essential services of waste collection, public space, footpath and street cleanliness, particularly at high profile focus areas, are required to be maintained at a high level of amenity. This ensures the City is 'business ready' every day of the week, including Saturday, Sunday and Public Holiday mornings, particularly during the peak holiday periods.

A number of businesses including cafés and restaurants with outdoor dining areas, located within (and surrounding) the Busselton and Dunsborough Central Business District and Foreshore areas, together with places such as Yallingup and Vasse town centres, have increased recreational usage and commence trading at 0530 hrs, resulting in an increase in pedestrian and vehicular traffic in the vicinity, along with reduced parking in the area. The increase in pedestrian and vehicle traffic make waste collection, road and pavement cleaning during the day impracticable and more dangerous, potentially hampering the flow of traffic causing significant delays, inconvenience and frustration for other road users. Also, parked vehicles, including private contractors and delivery vans and trucks, are often found to block access to bins, sections of roads and pavement. This problem becomes more significant after 0700hrs as more vehicles descend on the above-mentioned areas.

Consequently, conducting works outside of the hours indicated with the Regulation allows for:

- Significantly reduced pedestrian and vehicle interactions, therefore promoting safety to the public and the City's workforce,
- Improved access to waste collections points resulting in:
  - shorter waste collection cycles and therefore noise exposure;
  - improve manual handling for City staff, therefore minimising risk of injury
- Improved access on main roads (i.e. no obstructing traffic, avoidance of road/construction works)
- Reduced frustration among road users and less likely to be involved in an incident.

Waste collection and footpath cleaning services are conducted at times best suited to the activity in

individual areas, whilst minimising the impact on community. Unfortunately, a level of disruption is unavoidable.

## Works Description and Noise Mitigation Strategies.

The NMP applies across the municipality and relates to all Waste Services activities, including Road, Footpath and Public Places Sweeping and Cleaning. The collection of waste includes the recycling bins, the 3<sup>rd</sup> FOGO bin (if/when it is implemented) presented kerbside for collection, within dedicated undercover car park areas and the servicing of public litter bins located within public open spaces, in parks and reserves.

Noise mitigation under this Plan is intended to be a process of continuous improvement. The measures listed below do not limit the implementation of additional noise reduction measures. Additional measures will only be introduced where they are not detrimental to any person receiving noise from the specified works. Measures which propose to shift the noise impact from one receiver to another will only be considered at the time of preparing a new Noise Management Plan, at which time public consultation will be required as part of the approval process.

### Cleaning of Roads, Footpaths and Public Places

Roads, public places and footpaths are cleaned according a schedule and use a variety of equipment, including road and footpath sweepers and manual blowers. Road and footpath sweepers generally travel along their designated route to the next scheduled section. When cleaning certain footpaths, there may be a requirement for a section to be cleaned several times to achieve a suitable outcome, especially areas with high usage, if there are sand patches or ones with high foliage being shed. There may also be a requirement to involve several machines, at once in the same area to maximise cleaning efficiency and minimise cleaning time.

To minimise the impact to residents, the following will be implemented within a practical timeframe:

- All new plant will be fitted with smart broadband reversing alarms;
- Where practicable, battery powered leaf blowers will be operated in standard operating mode and the use of the 'turbo mode' will be minimised. In some cases, however, it may be preferable to be operate in 'turbo mode' to prevent going over the same area several times, therefore minimising the overall noise exposure;
- Pavement cleaning using the high-pressure cleaner is minimised near noise-sensitive premises;
- All cleaning activities scheduled to minimise Class 2 works. However, Class 2 works activities may be necessary, due to unforeseen circumstances or scheduled public events in certain areas;
- Where suitable, use of battery powered hand-held leaf blowers (over petrol powered ones) will be preferred in noise-sensitive areas.
- Where practicable, petrol powered hand-held leaf blowers will be used with 'throttle lock' to provide constant engine speed while cleaning, therefore minimising potentially annoying characteristic of 'modulation' associated with the up/down revving of petrol engine.

### Kerbside Collections

Domestic and Commercial bins may be presented singularly or grouped, on the kerb or on a bin pad area. In some instances, bins are wheeled by hand to locations that enable servicing. Compaction of waste generally occurs immediately to ensure the vehicle is ready for the next waste collection.

## Driver Training and operating Procedures

All plant operators are required to undergo vehicle and equipment training on commencement followed

by refresher training when appropriate. They will also be trained accordingly to embrace 'Noise Minimisation Measures'. Any new staff or staff who have not previously carried out waste collection activities will be provided with on the job training and instruction by experienced staff to ensure continuity of service in accordance with this noise management plan. Noise minimisation measures will be communicated at toolbox meetings to constantly remind operators of their obligation whilst conducting collections during prescribed times.

Plant operators will operate plant in line with Waste Services 'Safe Operating Procedures', including the following key aspects:

Activity 1 – Commence collection in Commercial areas rather than residential with Quiet bin lifting techniques

- Waste collection routes to minimise impact on residents
- Techniques to reduce noise associated with the lifting of each bin
- Cab windows are closed to reduce the impact of any radio emissions

Activity 2 – Collection vehicles remain stationary whilst emptying bins

- This will reduce acceleration and braking noise

Activity 3 – Always empty bins in either Neutral or Drive gear selection (NEVER in Reverse gear selection)

- Engine revs do not exceed idle limitations
- This will reduce the frequency of the plants 'reversing beeper' sounding whilst ensuring no additional increased noises are realised due to 'At Fault' accidents/incidents

Activity 4 – Compaction Zones

- Appropriate locations to compact will reduce noise impact on residents whilst achieving optimal compaction
- Hydraulics and Power Take Off (PTOs) devices are disengaged between travel to next collection location

Activity 5 – Reversing to be kept at a bare minimum

- This will reduce the frequency of the plants 'reversing beeper' sounding

Activity 6 – Always scan the area for potential hazards (low lying branches, overhead electrical wires, parked third-party vehicles, pedestrian movements etc.) and assess traffic flow.

- This will minimise any potential increased noise due to 'At Fault' accidents/incident impacts

Note: If an object obstructs the natural lifting arc of the side loader, the operator may move the bin to an unobstructed area carrying the bin with the lifter before emptying.

Activity 7 – Report any defective components on the vehicle to Waste supervisor as soon as possible.

- Operators will undertake pre and post run vehicle inspections
- Sufficient maintenance programmes will rectify noisy components

## Plant and equipment used

Noise emissions from the waste collection trucks are dominated by the hydraulic power unit for the lifting and compaction mechanism, since the truck remains at low idle during the loading and compaction cycle. Maximum noise levels will depend on the type of waste in the bins and to some degree, how the bins are handled during the servicing cycle. The measurements in the table show that the noise levels are similar regardless of the size of the truck. Based on the above, a sound power level of 92 – 93 dB (A) is estimated for the waste collection trucks.



The Plant and Equipment used for the performing the essential services consists of the following:

- Iveco 2350G Acco fitted with Bucher Municipal 22m<sup>2</sup> Side Loading Compactor – rego BSN 734P
- Iveco 2350G Acco fitted with Bucher Municipal 22m<sup>2</sup> Side Loading Compactor – rego BSN 850R
- Volvo FE320 (Euro 6) fitted with Gen 6 Bucher Municipal 22m<sup>2</sup> Side Loading Compactor – rego 1GHY 540
- Volvo FE320 (Euro 6) fitted with Gen 6 Bucher Municipal 22m<sup>2</sup> Side Loading Compactor – rego 1GPU 254
- Volvo FE320 (Euro 6) fitted with Gen 6 Bucher Municipal 22m<sup>2</sup> Side Loading Compactor – rego 1GUG 884
- Volvo FE320 (Euro 6) fitted with Gen 6 Bucher Municipal 22m<sup>2</sup> Side Loading Compactor – rego 1HKR 794
- Hako Citymaster 1600 rego – BSN82BD
- Stihl BG 86 C-E Blower
- Stihl BGA 200 Battery Blower
- Stihl BGA 100 Battery Blower
- Crommelins CPV2700HP Petrol High Pressure Cleaner 2700 PSI
- Jiff Ute Mounted Bin Cleaning Machine

Measured Noise Report			
Assessment	Vehicle Type	Noise (dB)	
		Limit	Obtained*
Stationary Vehicle	Volvo FE320 (Euro 6) fitted with Gen 6 Bucher Municipal 22m <sup>2</sup> Side Loading Compactor	84	82
	Iveco 2350G Acco fitted with Bucher Municipal 22m <sup>2</sup> Side Loading Compactor		81
	Hako Citymaster 1600		73
Vehicle in Motion	Volvo FE320 (Euro 6) fitted with Gen 6 Bucher Municipal 22m <sup>2</sup> Side Loading Compactor	103	92
	Iveco 2350G Acco fitted with Bucher Municipal 22m <sup>2</sup> Side Loading Compactor		79
	Hako Citymaster 1600 Hako		82
	Stihl BG 86 C-E Leaf Blower		90
	Stihl BGA 200 Battery Blower		80
	Stihl BGA 100 Battery Blower		80
	Crommelins CPV2700HP Petrol High Pressure Cleaner		68
	Jiff Ute Mounted Bin Cleaning Machine		92

\*Values obtained from documents found within the References.

## Plant and Equipment Purchasing Policy

The [City of Busselton Purchasing Policy](#) is an overarching document directed towards satisfying the following objectives:

- achieving 'best value for money' with respect to all purchasing;

- b. ensuring that the City complies with all regulatory obligations;
- c. strengthening integrity and confidence in the purchasing system;
- d. ensuring that sustainable benefits, such as environmental, social and local economic factors are considered in the overall 'best value for money' assessment;
- e. mitigating probity risk, by establishing consistent and demonstrated administrative processes that promote transparency and fairness; and
- f. ensuring that purchasing activities are conducted in a consistent and efficient manner across the City.

Furthermore, the City of Busselton Plant and Vehicle Fleet replacement model focuses heavily on ensuring best practice industry standard is attained whenever a new contract is drawn-up, a purchase made or an amendment to an existing contract relating to equipment servicing is made. Whenever a new plant purchase is to occur, the first criteria assessed, is whether a battery powered alternative is viable, and followed by a determination of noise and emission levels, particularly in Internal Combustion Engines (ICE).

Generally, there is emphasis on purchasing plant and equipment from reputable industry leaders, who drive continuous improvement and dedicate research and development towards innovation and best practice. If an ICE vehicle or plant item is to be purchased, there is a preference towards ICE that meet the more stringent Euro VI emissions standard, instead of the minimum ADR79/04 or 80/03, which are Euro V based. ICE powered heavy plant such as the Hako Citymaster footpath and street sweeper and the side-loading waste compaction trucks are turned over every 6 years, while other equipment, such as the high-pressure cleaner and leaf blowers are changed over at 4 – 5 year intervals.

## Plant and Equipment Maintenance

All operators are required to clean and grease lifting components and packing mechanisms, according to manufacturer's recommended maintenance schedules, to ensure moving parts and bearings remain lubricated, preventing premature wear and tear, whilst minimising potential noise related issues.

Furthermore, as part of scheduled servicing regimes, comprehensive periodic plant inspections are undertaken by mechanics, to identify early stages of wear and tear. Although, it is the operators obligation to detail any defective components, these inspections ensure issues can be addressed accordingly and identify which operators are meeting their pre and post run vehicle inspections adequately. Any works necessary to fix the issue, are completed within the required times frames and any defective component which contributes to abnormal noise levels will be given a priority rating for immediate rectification.

Additionally, all existing waste collection trucks are fitted with tonal reversing alarms. This would be reviewed and replaced with smart, multi-frequency broadband alarms, when practicable over the next 18 – 24 months, or when a plant is changed over as part of the fleet replacement program.

## Complaints procedure

The City of Busselton regards the provision of timely, impartial and equitable complaint resolution as a core strategic responsibility, and crucial to ensuring the delivery of quality services. All noise complaints regarding specified works under this Plan will be investigated by the Manager Waste and Fleet Services or delegate, who may request assistance from the City's Environmental Health Officers if deemed appropriate. Aside from potential discussions with the complainant, the investigations may require an onsite assessment, during the time of the works, to determine whether the operations are consistent with this NMP.

Engaging with residents and receiving any relevant feedback is important to the City. The City encourages

the use of the online – [Report It Form](#) for this, along with registering noise complaints. Alternatively, telephone complaints using the City’s 24 hour telephone number (08) 9781 0444, along with complaints received in person, would be registered using the City’s electronic records management database system.

The City’s Complaints Management Policy states the following:

- The City’s Code of Conduct and its Customer Service Charter details expectations in relation to employee behaviour and levels of service.
- The City will support and promote a culture where complaints are seen as opportunities to learn and improve service delivery.
- The City will manage all Complaints in a manner that is:
  - a) focused on the customer with visible and accessible contact points provided for Complaints;
  - b) responsive and empathetic to people who have cultural and language differences, disabilities, literacy issues and requirements relating to remote access;
  - c) objective, fair and neutral;
  - d) confidential wherever possible and respectful of a person’s privacy;
  - e) accountable and transparent, with appropriate and efficient record-keeping and decision-making;
  - f) outcome focused and ensures the customer is involved in the entire process until resolution of the Complaint;
  - g) free of reprisals against any person involved in the Complaint management process; and
  - h) accessible and accountable for the continued improvement of the management of Complaints.
- A Complaint is not:
  - i) a request for service;
  - j) a request for information;
  - k) the lodging of an appeal in accordance with a standard procedure or policy;
  - l) a freedom of information enquiry;
  - m) an allegation of a breach of the law by a third party; or
  - n) an expression of dissatisfaction with a decision.

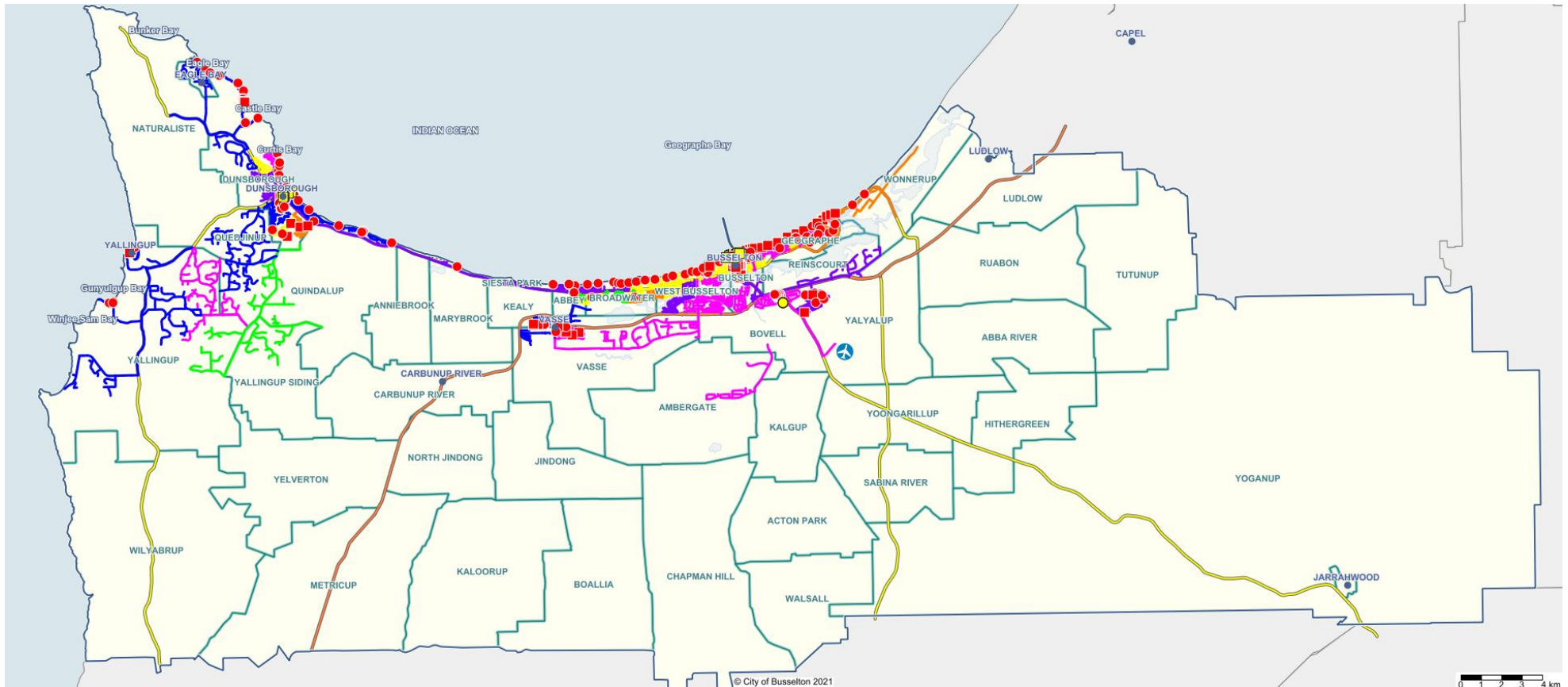
## Review

The regulations prescribe that a noise management plan expires after a maximum of 3 years from the day on which it is approved by the DWER following public consultation. This NMP will be reviewed annually, with issues and feedback raised during the year considered for continuous improvement and measures to be implemented.

Review Frequency	Annually		
<b>Originator:</b>	M.Wong	<b>Date:</b>	03 February, 2022
<b>Reviewer:</b>	M.Wong	<b>Date:</b>	14 February, 2022
<b>Approver:</b>		<b>Date:</b>	

## Locations and Routes

The map below shows where waste collection (red dots indicate locations where there are Public Litter Bins are located), footpath and road sweeping may occur, while the various coloured lines highlight (the most common) routes used to perform those services.



## References

1. [Environmental Protection \(Noise\) Regulation 1997](#)
2. [Guide to management of noise from waste collection and other works](#)
3. [Volvo FE320 Bucher Gen6 22m<sup>2</sup> SL Compactor - Noise Report](#)
4. [Iveco Acco 2350G with Bucher](#)
5. [Stihl BG86 Instruction Manual](#)
6. [Stihl BGA 200 Instruction Manual](#)
7. [Stihl BGA 100 Instruction Manual](#)
8. [Hako Citymaster 1600 Technical Manual](#)
9. [Crommelins CPV2700HP Petrol High Pressure Cleaner 2700 PSI](#)
10. [Jiff Ute Mounted Bin Cleaning Machine](#)
11. [City of Busselton - Purchasing Policy](#)
12. [City of Busselton - Complaints Policy](#)
13. [City of Busselton Online Form – Report It](#)