

Submission on the Draft Western Australia State Waste Infrastructure Plan

June 2023

Status of this Submission

This Submission has been prepared through the Municipal Waste Advisory Council (MWAC) for the Western Australian Local Government Association (WALGA).

WALGA is an independent, member-based, not for profit organisation representing and supporting the WA Local Government sector. WALGA's membership includes all 139 Local Governments in the State. MWAC is a standing committee of WALGA, with delegated authority to represent the Association in all matters relating to solid waste management. MWAC's membership includes the major Regional Councils (waste management) as well as a number of Local Government representatives. This makes MWAC a unique forum through which all the major Local Government waste management organisations cooperate.

Summary of Recommendations

Recommendation 1

WALGA conditionally supports the planning principles identified, with the following recommendations.

Principle 1 - Emphasise the integration of waste management into the planning and development frameworks to ensure effective waste services can be provided.

Principle 1 - Emphasise equitable access to all waste services and infrastructure across the state.

Principle 3 – Provide guidance and funding support to regional Local Governments reliant solely on landfill to investigate alternative collection mechanisms to achieve Waste Strategy targets.

Principle 3 - That the Environmental Protection Act be amended to ensure the Director General of DWER can refuse a license application if a proposed facility will undermine Waste Avoidance and Resource Recovery Strategy outcomes and targets.

Principle 3 - Assess the 109 landfills managed under the Remote Essential and Municipal Services (REMS) program to establish the role these facilities play within the regions and how this data can be integrated into the plan in future reviews.

Additional Principle – Manage waste as close as possible to source of generation.

Recommendation 2

Develop frameworks and funding support/incentives for regional Local Governments to investigate feasibility of new collection and processing approaches within their region.

Recommendation 3

Provide support and incentives for industry investment in non-metropolitan regions.

Recommendation 4

Investigate the adoption of a similar framework to the Victorian *Statewide Waste and Resource Recovery Infrastructure Plan* (SWRRIP), which includes the development of Regional Implementation Plans to inform overall strategic direction.

Recommendation 5

Include in the Plan the list of facilities in each region which have been used as a basis for the modelling and the licence category.

Recommendation 6

Undertake further investigation into sites included under license categories 67A or a combination of 67A, 61 and 61A as Organics recovery facilities to determine their current and future capacity to process food and garden organics, and their interest in doing so.

Recommendation 7

Clarify the definition of 'transfer stations', with reference to licence category or activities on site, and identify sites which have been included in the Plan.

Recommendation 8

Include transfer stations and container refund points in future regional summaries.

1 Introduction

WALGA welcomes the opportunity to comment on the Department of Water and Environmental Regulation's [Draft Western Australia State Waste Infrastructure Plan](#) (draft Plan).

The State Waste Infrastructure Plan aligns with the *Waste Avoidance and Resource Recovery Strategy 2030* (State Waste Strategy) and is intended to support the Strategy target of long-term planning for waste infrastructure at a state level. The draft Plan includes a summary of waste generation, flows and infrastructure needs for each region across the state, focusing on the built infrastructure required for municipal solid waste (MSW), commercial and industrial (C&I) waste and construction and demolition (C&D) waste by 2030. The draft Plan identifies likely capacity constraints for waste streams in each region and proposes infrastructure solutions to address these constraints, including new infrastructure, expansion of existing infrastructure and transport of materials to neighbouring regions.

Once adopted, the Plan is proposed to be reviewed every five years. The forecast modelling used in the draft Plan assumes all 2030 State Waste Strategy targets are met. If the targets are not achieved, impacts on the anticipated capacity will need to be addressed in future reviews of the plan.

The release of the draft Plan is welcomed as a first step in providing a framework for State and Local Government, and other stakeholders, to make informed decisions on better practice waste and resource recovery. This Submission examines the purpose of the plan, the principles identified to guide planning, the specific considerations for regional areas and the limitations of some of the data used to formulate the draft Plan.

2 Purpose of the Plan

The Draft Plan is intended to:

“Provide a long-term information framework and principles to guide decision making for the planning and development of waste and resource recovery infrastructure in Western Australia.”

Feedback from Local Government has indicated the importance of ensuring that the Plan can also guide infrastructure licencing and planning approvals, investment and funding. However, for the Plan to achieve this, the issues outlined in this Submission need to be addressed. The [Waste Avoidance and Resource Recovery Strategy 2030](#) identifies that WA needs to transition to a Circular Economy, and if this is to occur the Infrastructure Plan has a key role which needs to be clearly articulated in its purpose.

3 Planning principles

The draft Plan proposes five principles to guide planning and decision making for waste and resource recovery infrastructure:

1. *Waste management is an essential service*
2. *Waste infrastructure should be in suitable locations*
3. *We have a reduced but ongoing need for landfills*
4. *We need to increase our capacity to recover resources from certain types of waste*
5. *Waste facilities strive for better practice*

WALGA conditionally supports these principles, with further clarification recommended. WALGA also proposes an additional principle, which highlights the need to manage waste as close as possible to its source.

Principle 1 – Waste management is an essential service

Principle 1 states the importance of waste management as an essential service integrated into all aspects of planning and development activities. This aligns with [research](#) WALGA has undertaken regarding how waste management could be considered an essential service. **It is recommended that this principle emphasise the integration of waste management into the planning and development frameworks to ensure effective waste services can be provided.** For example, in development of new sub divisions with laneways, consideration to the number of bins required and how truck access will be achieved.

It is recommended the principle emphasise equitable access to all waste services and infrastructure across the state, as regional communities are often disadvantaged by limited access to waste facilities, and the high cost of collection and processing material is primarily borne by Local Governments.

While the modelling indicates a range of options for infrastructure in each region, it is essential to assess the long-term viability of establishing and maintaining these options with the regional Local Governments concerned. This is explored further in the Regional Considerations section.

Principle 2 – Waste management infrastructure should be in suitable locations

The siting of waste facilities to minimise harm to the environment, human health and amenity is essential in the planning process. In addition to licensing and environmental requirements, collection optimisation options and logistics also play a key role in ensuring the facility is fit for purpose and in increasing its operating life. The consideration of waste 'precincts' to consolidate infrastructure, or alternatively smaller processing facilities catering to defined areas, as part of overall strategic planning has been raised by regional Local Governments, to maximise available resources and generate community benefits through employment and market opportunities. These issues are further explored in the additional principle which WALGA is proposing.

Principle 3 - We have a reduced but ongoing need for landfills

WALGA supports the plan's assessment of the role of landfills going forward, primarily as facilities used as an alternative in unforeseen events, receiving large volumes of waste from natural disasters and for certain streams which lack a viable processing alternative.

In a previous [submission](#) regarding the future of landfills as part of the State Waste Strategy, WALGA acknowledged the need for appropriately planned landfills in the future while reiterating changes to the regulatory framework are required to ensure any facilities are assessed under a consistent, strategic approach rather than on a case by case basis. In relation to the practical application of this approach, WALGA recommended in its January 2020 Submission on the review of the Environmental Protection Act that:

That the Environmental Protection Act be amended to ensure the Director General of DWER can refuse a license application if a proposed facility will undermine Waste Avoidance and Resource Recovery Strategy outcomes and targets.

When the Waste Avoidance and Resource Recovery Act (2007) was reviewed in December 2014, the Background Paper identified that the existing landfills had capacity for the waste being generated until around 2025, or until 2030 if the targets in the Waste Strategy were met. The Paper also identified that there was "increasing pressure for metropolitan waste to be disposed to landfill outside the metropolitan area". The Paper stated "There is a strong case to reform the landfill policy and regulatory framework to include planning, siting and compliance considerations so that landfills can be managed consistent with government policy. Policy considerations should balance the need to ensure availability of sufficient landfill space to manage residual waste and unplanned events...with the need to limit supply to encourage maximum diversion from landfill".^[1] The Association agrees with the assessment of the gap in policy, which has yet to be addressed.

In regional areas currently reliant solely on landfill for municipal solid waste disposal, guidance and funding support must be made available to investigate alternative collection mechanisms to achieve Waste Strategy targets.

Further assessment of the 109 landfills managed under the Remote Essential and Municipal Services (REMS) program is recommended to establish the role these facilities play within the regions and how this data can be integrated into the plan in future reviews.

Principle 4 - We need to increase our capacity to recover resources from certain types of waste.

Recovery of certain material types in Western Australia has been limited by the availability of local processing facilities and viable end markets. In considering required infrastructure for Waste Strategy priority materials, the plan assumes an economically minimum viable capacity for each new facility type, based on anticipated tonnage up to a 'critical mass' point. The inputs to determining the critical mass are listed, however without access to source material it is not possible to determine the weight given to each element, particularly the viability of the end markets for products and potential collection and transport costs.

^[1] Department of Environment Regulation (2015). *Review of Waste Avoidance and Resource Recovery Act 2007 Discussion paper*. Available online <https://www.der.wa.gov.au/component/k2/item/6474-review-of-the-waste-avoidance-and-resource-recovery-act-2007>

Industry feedback shows commercial viability of the infrastructure relies on robust markets for recovered material, the potential for which is mentioned in regional summaries (for example, the use of recovered organics in mining rehabilitation projects). Further detailed investigation of these potential markets including transport logistics and financial responsibility is required in order to justify the establishment of material collection and processing infrastructure. The viability of initiating collection systems for priority materials in regional areas must also be considered, as discussed in the Regional Considerations section of this Submission.

Principle 5 - Waste facilities strive for better practice

State Waste Strategy targets state all waste is managed and/or disposed to better practice facilities by 2030.

The State Waste Strategy references better practice as a key focus, stating better practice guidance '*will be outcome-focussed, evidence-based, informed by performance achieved in other jurisdictions, developed in consultation with key stakeholders, and set out in guidelines that are framed to reflect the varying resources and capacities of the users of those guidelines.*'¹

WALGA has in a previous [submission](#) questioned the position of better practice guidance in a regulatory context and how implementation would be monitored and enforced. In particular, regional and remote Local Governments with limited resources will require significant support to implement new approaches or adapt existing infrastructure, and consideration must be given to establishing funding frameworks to meet these targets.

Better practice approaches should build on the regulatory frameworks in place for waste facilities, rather than being compliance-based, and be developed in consultation with industry to ensure effective implementation.

Additional Principle: Manage waste as close as possible to source of generation

In addition to the considerations under Principle 2 of ensuring the site is suitable, it is also important that waste is managed as close as possible to the source of its generation. This reduces the movement of waste and associated transport hazards and impacts, incentivises the development of local industries and solutions, and assist with contingency planning. In a non-metropolitan context, the Draft Plan has suggested that waste be transported from the Pilbara and Kimberley Regions (the issues with this are further explored in section 4 of this Submission). While distances may be less in the metropolitan area, the tonnages are greater, and this principle is essential for optimal management of waste. For example, in northern region of Perth there are currently no material recovery or a waste to energy facilities located. To access these facilities waste, upwards of half a million tonnes of waste will be trucked from the northern suburbs through Perth to south of the river locations.

4 Regional considerations

WALGA acknowledges increasing material recovery across all regions is necessary to meet Waste Strategy targets, however detailed consultation with regional Local Governments, and other stakeholders, is essential to create a viable framework to enable this moving forward.

¹ [Waste Avoidance and Resource Recovery Strategy 2030](#), Waste Authority

The draft Plan states: *‘Development of waste infrastructure in the regions will be critical to achieving all waste Strategy targets. **The introduction of new collection services and the increase of material consolidation from outer regions** can help generate the necessary material quantities to justify new waste facilities. These facilities can be planned near major regional transportation networks which combine road, rail and port facilities.’*

The modelling considers the most viable options for the establishment of new, and use of existing, infrastructure, based on increased regional recovery of recyclable materials. However, if there is an expectation regional Local Governments initiate collections it is likely to be a significant, ongoing financial impost unless frameworks and funding support are in place.

Many regional Local Governments do not have collection systems in place for target materials, such as kerbside recycling or FOGO collection, due to financial and infrastructure constraints. For example, 36 Local Governments outside Perth and Peel do not currently provide a kerbside recycling collection, and only two non-metropolitan Local Governments north of Perth have trialled FOGO collections. FOGO is in place in seven Local Governments in the South West, and one in the Great Southern region.²

For Local Governments not currently providing a kerbside recycling or FOGO service, establishment costs include infrastructure (bins and caddies), potential fleet investment, variation to collections contracts, and resourcing for operational and support roles including education and communications.

Establishing drop off services at Local Government sites for these and other recyclable materials such as e-waste would include ensuring sites are appropriately licenced to collect the materials for recycling, potentially installing collection infrastructure, ongoing maintenance and resourcing of the collection site, transport costs to an approved recycler and recycling costs. WALGA has received feedback from a number of Local Governments expressing considerable concern regarding their ability to resource such a requirement.

The plan acknowledges the limitations of transporting material between regions due to cost factors, yet the transfer of materials option makes up a significant portion of the modelling due to the projected waste generation volumes and the critical mass principle.

While frequent transport between the Perth and Peel regions, and to some areas of the South West and Wheatbelt, could be considered viable, transport costs in the Mid West, Gascoyne, Pilbara and Kimberley regions are significantly higher due to the distances involved and limited economies of scale.

The plan acknowledges the barriers facing the Kimberley relating to improving resource recovery, including dispersed population and high cost of transport. The proposal to consider consolidation between the Pilbara and Kimberley regions addresses the viability of combining projected volumes of waste generated, however does not specify the facilities and transport distances involved.

An analysis of current and projected transport costs relative to the proposed actions is required to allow regional Local Governments to better assess the viability of the proposals and the level of support required. This should include both financial and environmental impacts.

² Waste Authority, 2023

Increased transport of materials between regions is expected to be carried out primarily through the State's road network, leading to higher numbers of trucks on the roads, increased wear and tear on regional roads and further demand for drivers which has been a significant resourcing issue for Local Governments and industry for several years.

Regional Local Government feedback shows the consolidation model, where infrastructure is established or expanded for the purpose of consolidating and transporting material to Perth and Peel, is not supported as a priority. The preference is for the creation of precincts within the region to facilitate waste being received and processed locally to maximise benefit to local communities, or a series of small individual processing facilities in key areas.

To support local processing and end markets, industry investment in the regions must be encouraged through incentives and planning. Feedback from the Waste Summits that WALGA has hosted in regional areas (Kalgoorlie, Broome, Karratha, Albany and Shark Bay) have all identified that in their areas, Local Government waste may only be a small proportion of the overall waste stream and therefore effective industry engagement is essential to developing solutions.

WALGA recommends investigating the Victorian [Statewide Waste and Resource Recovery Infrastructure Plan](#) (SWRRIP), which aims to achieve long term planning for waste and resource recovery infrastructure at a state and regional level. Victoria's seven Regional Waste and Resource Recovery Groups have each develop a detailed Regional Implementation Plan which outlines how the region will implement the strategic direction of the SWRRIP at a local and regional level. This offers an opportunity for Local Government and the community to be involved in waste planning in the region and reliably informs the overall strategic direction.³

Recommendation 2: Develop frameworks and funding support/incentives for regional Local Governments to investigate feasibility of new collection and processing approaches within the region.

Recommendation 3: Provide support and incentives for industry investment in non-metropolitan regions.

Recommendation 4: Investigate the adoption of a similar framework to the Victorian *Statewide Waste and Resource Recovery Infrastructure Plan* (SWRRIP), which includes the development of Regional Implementation Plans to inform overall strategic direction.

5 Exclusions and limitations

The modelling used to determine current and future capacity in each region is based on the maximum capacity of sites licenced according to the *Environmental Protection Regulations 2008* and regulated by the Department of Water and Environmental Regulation. The draft Plan identifies:

“Outside of the Perth and Peel regions, the State Waste Infrastructure Needs Analysis modelling classified all facilities under license categories 67A or a combination of 67A, 61 and 61A as Organics recovery facilities. This was regardless of whether the facility was processing food organics and garden organics, only

³ [Statewide Waste and Resource Recovery Plan](#), Sustainability Victoria, 2023

garden organics (green waste) or a combination. A preliminary analysis in each region can identify the potential food organics and garden organics capacity in each region, by looking at facilities which are licensed to accept food organics and garden organics but which have not been categorised as processing food organics and garden organics in the State Waste Infrastructure Needs Analysis modelling.”

This method gives a theoretical capacity for food and garden organics processing. Further investigation and consultation with the sites in question is required to determine the practical application. Regional feedback indicates a number of sites included under this method, while holding the category licence, would not be appropriately resourced or structured to process food and garden organics and their inclusion should be reconsidered.

As a result of this regional modelling approach, overall capacity for the region may show as sufficient until 2030 but may not be accessible to Local Governments seeking processing solutions. Local Governments have raised concerns around the potential impact of this modelling on future funding submissions for infrastructure, as there is a risk of applications being declined based on the plan demonstrating needs have been met.

Recommendation 5: Include in the Plan the list of facilities in each region which have been used as a basis for the modelling and the licence category.

Recommendation 6: Undertake further investigation into sites included under license categories 67A or a combination of 67A, 61 and 61A as Organics recovery facilities to determine their current and future capacity to process food and garden organics, and their interest in doing so.

The use of the terms, ‘transfer station’, ‘community recycling centre’ and ‘consolidation centre’ are used throughout the plan, however, what they specifically refer to requires clarification, particularly regarding the facilities which are excluded from the capacity modelling.

WALGA understands ‘transfer station’ to refer to a site licenced solely under Category 62 (Solid waste depot) of the *Environmental Protection Regulations 2008*, being a ‘premises on which waste is stored or sorted, pending final disposal or re-use’. A number of sites licenced under Category 62 hold additional category licences as solid waste facilities or landfills, with the assumption that these have been included in the modelling.

Community recycling centres are described as ‘facilities which offer a variety of reuse, recycling and waste drop off services to the community...often co-located with existing facilities such as landfill’. WALGA asserts this description can also be applied to transfer stations and recommends clarification on the terms.

From these descriptions it can be assumed ‘consolidation facilities’ refers to establishing new infrastructure for aggregation of materials, rather than developing existing infrastructure for future expansion as stated:

“Where capacity need was identified, yet it does not meet a threshold to establish a new facility the Infrastructure Plan identified a need to establish consolidation centres to support bulking and transfer of the material to a region with treatment capacity”.

A reason given for the exclusion of transfer stations, community recycling centres and container refund points from the plan is *“the lack of suitable data pertaining to locations, quantities and type of materials managed and the secondary treatment pathways”.*

As licenced facilities, transfer stations are required to report annually on the tonnage of specific material received, recovered and disposed through the facility. Container refund points are also required to collect and report data to the scheme administrator, which reports regularly on collection volumes, recovery rates and destination of material types.

While it is acknowledged transfer station tonnage may be captured in the Plan through the materials' final processing facility, container refund point volumes, particularly in the regions where kerbside or other recycling options are not available, can have a significant impact on recovery rates within regions.

Excluding Container Deposit Scheme volumes from the modelling is likely to present an inaccurate estimate of Materials Recovery Facility capacity required in the region, as a percentage of the estimated volumes will be captured through existing refund points. The proposed expansion of the Container Deposit Scheme to include a wider range of beverage containers is also anticipated to boost redemption volumes and significantly reduce volumes collected through MRFs by accepting glass wine and spirit bottles in the scheme.

Transfer stations are key to effective and efficient management of waste by Local Governments and are highly valued by the community for the range of services they provide. While the plan acknowledges transfer stations as an important element in the waste management cycle, the exclusion of these facilities from the modelling disregards a further source of local infrastructure which can be easily utilised, whether at its current capacity or potential future expansion.

Recommendation 7: Clarify the definition of 'transfer stations', with reference to licence category or activities on site, and identify sites which have been included in the Plan.

Recommendation 8: Include transfer stations and container refund points, and the associated volumes collected, in future regional summaries.

6 Conclusion

WALGA considers the draft Plan provides a useful starting point for engagement and discussion with Local Government regarding waste infrastructure requirements. The draft Plan outlines a range of stakeholders in the development and implementation of the plan, which is beneficial in identifying roles in the planning process. Outlining the decision-making process for new infrastructure would also be useful, to identify the key points at which each stakeholder group is active and their level of involvement.

Local Government has expressed concern that aside from the Plan, there needs to be other supporting policies, programs and approaches to enable the development of the necessary infrastructure required to meet State Waste Strategy Targets. It is essential that detailed consultation be undertaken with Local Governments (and other waste generating entities) in each region as to the proposed infrastructure activities and their long-term viability, prior to the plan being formally adopted. In its current form, the draft Plan offers a broad overview of theoretical infrastructure requirements. This approach does not provide a sound basis for decision making and ground truthing of facilities' actual capacity, ability, resources and willingness to accept the proposed waste streams is essential to ensure waste needs of regional communities are met.

The modelling in the draft Plan is based on 2020 data, meaning that actual progress against the State Waste Strategy targets is not reported in the draft Plan. It is important that the finalised Plan, and future revisions, include a report of progress against Strategy

targets as this will impact on infrastructure requirements. This is particularly relevant given the impact of the COVID-19 pandemic on waste generation rates, as well as material recovery achieved through the Container Deposit Scheme since its introduction in October 2020 which is not reflected in the 2020 data used in the draft Plan.