

Waste Reduction and Recycling Plan

2015 – 2018

Prepared by: Governance and Strategy, Department of National Parks, Sport and Racing

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Foreword

The Department of National Parks, Sport and Racing is a diverse organisation that performs a wide range of functions. As with any organisation, it is inevitable that those functions will produce waste; waste that NPSR is committed to managing responsibly and effectively.

Towards this end, the NPSR Waste Plan 2015-2018 details the steps we will take in the next three years to contribute to achieving the state-wide waste management targets in the Queensland Waste Strategy: Waste – Everyone’s Responsibility: Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024).

NPSR’s efforts over the next three years, and ultimately over the 10 years of the Queensland Waste Strategy, will aim to reduce waste, appropriately manage the waste that remains, and ultimately provide a better environment for all Queenslanders.

Dr John Glaister
Director-General

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Introduction

The Queensland *Waste Reduction and Recycling Act 2011* (the Act) requires each State entity to prepare, adopt and implement a Waste Reduction and Recycling Plan. Each of these plans will contribute to the achievement of the 10 year state-wide targets set in the *Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024)* (the Strategy).

The Department of National Parks, Sport and Racing (NPSR) Plan for Waste Reduction and Recycling (the Plan) sets the overall direction for waste management within the department for the period 1 July 2015 to 30 June 2018.

An overview of the organisation, the functions performed and the wastes that are generated as a result of departmental activities are provided in sections 1 and 2 of this Plan.

Sections 4 and 5 describe how this Plan will be implemented. The primary focus of the 2015-2018 Plan will be to develop a comprehensive understanding of the types and quantities of waste generated as a result of NPSR's activities. With this information as a baseline, action plans will be developed to improve the ways in which the department manages its waste. These plans will be tailored to specific waste streams, locations or functions. Action plans will be progressively developed and implemented during the second half of the implementation period of this Plan. The lessons learned and efficiencies achieved during the implementation period of this Plan will feed into the development of the 2018-2021 Plan.

In line with NPSR's culture of continuous improvement the success of the department's Waste Reduction and Recycling Plan will be monitored to ensure its objectives are met.

1. Overview of our organisation

The Department of National Parks, Sport and Racing performs a diverse range of functions on behalf of Queenslanders. The department manages parks and forests and their use and enjoyment by all Queenslanders; encourages active lifestyles by providing recreational and sporting opportunities; and manages the racing industry which directly employs 30,000 Queenslanders.

Queensland's protected area estate covers more than 12 million hectares and includes national parks, marine parks, State forests, regional parks and declared fish habitat areas.

National parks and forests play an important part in building stronger communities by providing recreational activities and helping to build the economy through sustainable ecotourism ventures.

National parks are the cornerstone of Queensland's protected area estate and are an important part of our natural environment and cultural heritage. Through proper management, we aim to ensure that the parks are protected, accessible and valued by all Queenslanders.

By managing important marine protected areas, such as declared fish habitat areas, we aim to ensure sustainable recreational, commercial and indigenous fishing.

We also encourage Queenslanders to lead active, healthy lifestyles by participating in sport and active recreation. This is achieved through a suite of initiatives including funding programs, community programs and workshops, active recreation centres and physical activity resources for parents and teachers aimed at getting Queenslanders physically active.

We also support and develop elite athletes through the Queensland Academy of Sport.

The department is responsible for regulating Queensland's racing industry, to ensure it is commercially responsive and contemporary. We are responsible for ensuring the industry is operated in a responsible and accountable manner and that racing animals are cared for to the highest standard.

2. What wastes are generated from NPSR activities?

NPSR has approximately 1,500 staff members working in more than 130 locations across the state. Approximately 20% of NPSR's work force is located in the department's head office at 111 George Street in Brisbane.

Office vs non-office based activities

For the purposes of waste management, NPSR activities have been divided into two broad categories: Office based and non-office based activities.

The rationale behind this distinction is the underlying assumption that, in general, office based functions will generate a generic waste stream irrespective of the geographical location or the specific role performed.

On the other hand, the department's non-office based activities are unique in nature and therefore generate distinctive waste streams.

Waste generated from office based activities

A large proportion of the department's staff members perform office based functions. At the time of the release of this Plan, the total quantity and exact composition of office waste is unknown. Gaining an understanding of this waste profile has been identified as a priority activity.

Preliminary investigations into the office based waste stream, indicate, that it is likely to be consistent with the profile of waste generated in a typical office environment, as represented in Figure 1 below.

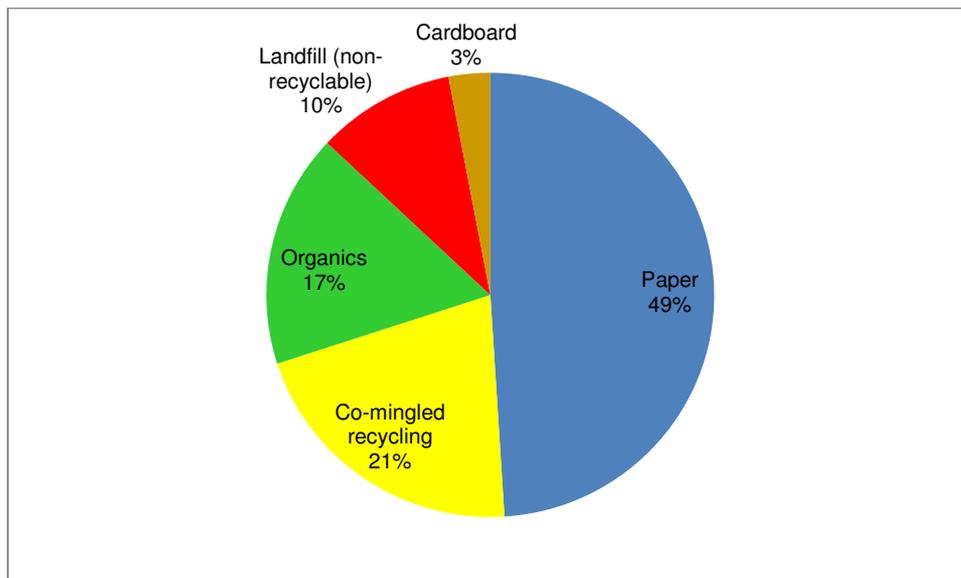


Figure 1: Components of a typical office based waste stream¹

While about 80 percent of the department's employees are located in small or medium sized work groups throughout the State, about 20 percent of the department's employees are located at our head office, 111 George Street in Brisbane. Waste management in this building will be a priority for this Plan.

In addition, NPSR has medium sized office based operations (between 10 and 30 employees) in:

- Maroochydore
- The Gap (Brisbane)
- Rockhampton
- Manly
- Cairns
- Toowoomba
- Maryborough

Waste generated from non-office based activities

The non-office based activities performed by NPSR include:

- Operational activities performed by Queensland Parks and Wildlife Service (QPWS) rangers and other employees in national parks, State forests, regional parks and marine parks.
- The activities of the Racing Sciences Centre
- The management and operation of sport and recreation facilities, including active recreation centres and sport reserves
- Activities of the Queensland Academy of Sport.

Preliminary investigations indicate that each of these activities has a fairly unique waste profile. The collection of baseline data will address the current situation, where limited information is available on the types and volumes of wastes being generated. As outlined in section 5 below, investigations will be undertaken during the first phase of this Plan to determine:

- the types of wastes generated by these activities
- potential methods to capture the volumes of wastes generated
- the boundaries of responsibility for waste generated by functions delivered in partnership with other agencies, institutions or external contractors
- the boundaries of responsibility for waste generated by services delivered to the public or at facilities that are used by the public
- existing waste management arrangements and current practices.

¹ Source: Public Sector Environmental Management Better Practice Guide, <http://www.anao.gov.au/html/Files/BPG%20HTML/EnvironmentalBPG/index.html>

3. NPSR’s approach to Waste Management

NPSR’s approach to waste management is guided by the principles set out below.

The waste management hierarchy

The waste and resource management hierarchy (Figure 2 below) sets the order of preference for options to manage waste—from avoiding, to re-using, recovering, treating and disposing of waste.

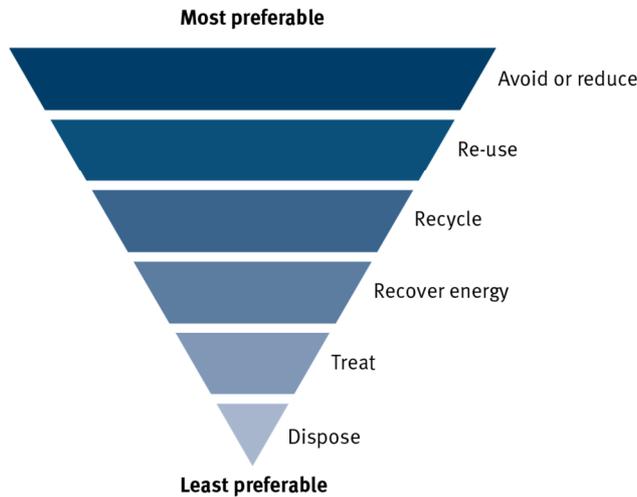


Figure 2: The waste and resource management hierarchy

The hierarchy is a tool to help decision makers prioritise waste management activities. Where avoidance is not possible, options should be investigated for the reuse, and then the recycling of waste materials. As a next available option, waste could be used as a source of energy. Disposal of waste should be the last resort.

The table below provides more detail on how NPSR will use the hierarchy in managing its waste.

Management Option	Definition	Examples of activities that could be included in action plans ²
Avoid	<i>Avoid unnecessary resource consumption.</i>	Avoid the generation of paper waste by encouraging the use of electronic copies of documentation.
Reduce	<i>Reduce waste generation and disposal.</i>	Ensure all printers are set to double-sided printing as a default.
Reuse	<i>Reuse waste resources without further manufacturing.</i>	Review policies on the disposal of obsolete IT (or other) equipment with a focus on identifying alternative uses or users.
Recycle	<i>Turning waste resources into similar or different products.</i>	Increase staff awareness in order to maximise co-mingled recycling and avoid contamination of recycling bins.
Disposal	<i>Dispose of waste only if there is no viable alternative.</i>	NPSR will ensure that our waste will only be disposed of at landfill facilities that are operated in accordance with prescribed legislation.

² Note that these are generic examples. As outlined in section 5 of this plan, specific action plans will only be developed once sufficient baseline data has been collected.

Resource management principles

The following principles will guide the waste management decisions made by the department.

Principle	Definition	Examples of activities that could be included in action plans
The polluter pays principle	<i>All costs associated with the management of waste should be borne by the persons who generated the waste. The costs associated with the management of waste may include the costs of minimising the amount of waste generated; containing, treating and disposing of waste; and rectifying environmental harm caused by waste.</i>	Educating staff on the full implications of inappropriate waste activities – e.g. once a co-mingled recycling bin is contaminated, the contents of the whole bin will go to landfill. This has an environmental cost as well as an added financial cost to the organisation.
The proximity principle	<i>Waste and recovered resources should be managed as close to the source of generation as possible</i>	Reviewing waste management arrangements to ensure that we use local service providers where possible. (Note: This will be particularly relevant to the management of waste in regional and remote locations.)
The product stewardship principle	<i>There is a shared responsibility between all persons who are involved in the life cycle of a product for managing the environmental, social and economic impact of the product</i>	Reviewing procurement procedures.

Continuous Improvement

The diagram below illustrates how the activities that are proposed for this plan (as described in section 5) will align with a cycle of continuous improvement.

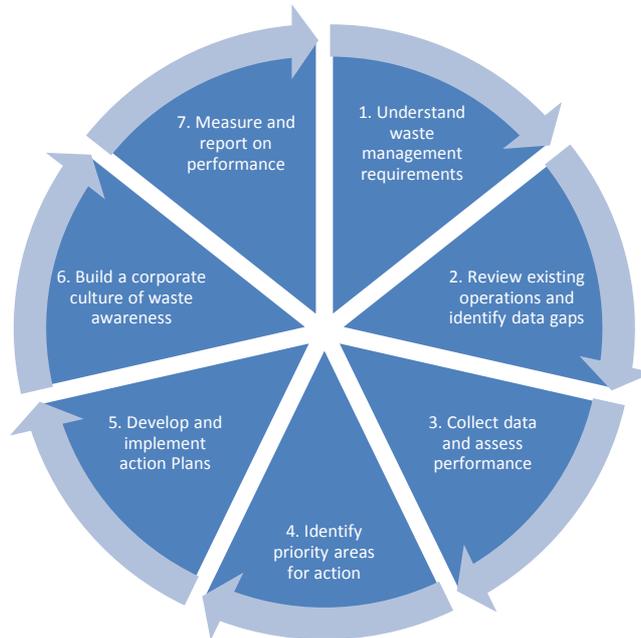


Figure 3: Cycle of continuous improvement in waste management

Establishment of a Waste Reduction and Recycling Network

NPSR will establish a working group to address waste reduction and recycling. The department's Governance and Strategy (G&S) branch will take a leading role in establishing this group. A staff member from Business and Professional Services (BPS) will chair the working group.

The working group will consist of representatives from each division within the department, as nominated by Executive Management Team (EMT) members.

The members of the working group will:

- facilitate baseline information collection including data where possible,
- assist in the development and review of action plans where waste types and volumes warrant these,
- promote waste awareness,
- collect and consolidate ideas for improved waste management,
- measure the success of waste action plans.

Apart from divisional representation, each location or floor will be required to nominate a local waste champion, whose role will be to facilitate information sharing and promote a culture of waste reduction and recycling.

4. Long-term Objectives

Waste—Everyone's responsibility: Queensland Waste Avoidance and Resource Productivity Strategy (2014–2024) (the State Strategy) sets a range of targets to be achieved in Queensland by 2024. NPSR will contribute to the following strategy targets:

- general waste production will be reduced by 5% (from 2012-13 levels); and
- 55% of commercial and industrial waste generated in Queensland will be recycled.

The State Strategy furthermore states that the Queensland Government will work with industry and the community to identify problem or priority wastes and determine the most appropriate management option for each waste stream. Action plans developed under the State Strategy will include methods for the improved management of Queensland's priority wastes. NPSR will identify the priority wastes generated from its operations, and will address the management of these wastes in accordance with state wide action plans once these plans have been developed.

NPSR's approach over the period of this Plan will be to contribute to the 2024 state-wide targets by:

- clearly identifying and monitoring the department's waste profile; and
- adopting waste management and reduction practices that maximise NPSR's contribution to achieving the State targets, within the context of the wider public interest.

The nine-year timeframe for realising the state-wide targets provides for a trio of agency plans, each with a three year timeframe. Broadly speaking, it is envisaged that those three plans will take the following approaches:

Plan: 2015-2018 – baseline information and data collection, development and implementation of initial action plans

Plan: 2018-2021 – continuous improvement, review and refinement of action plans

Plan: 2021-2024 – further improvement and consolidation.

These agency plans will be integrated, such that each of the latter plans will build on the work undertaken as part of the preceding plan.

5. Activities planned for July 2015 to June 2018

As noted in section 4, the guiding principle for the 2015-2018 Plan will be to start the process to maximising NPSR's contribution to the state-wide Strategy's waste reduction and management targets by 2024. In doing so, the agency will take account of those best practice waste management and reduction principles most relevant to NPSR's waste profile and operating environment.

Activities for the three year implementation period of the 2015-2018 Plan will be undertaken in three phases.

Phase One – Baseline data collection

Before taking specific actions, NPSR will need to better understand the types and quantities of waste generated from its operations. Furthermore, there is a need to investigate and document local waste management practices at the department's various sites across the state.

The focus of the initial 12 months will therefore be on collecting baseline information and data where possible. This information is anticipated to enable the department to develop baselines for future performance. It will also allow NPSR to formulate an approach that will realise the greatest benefit.

Priority areas for baseline data collection are:

- Mapping the office-based waste generated and contractual arrangements governing its collection and disposal at NPSR's large office locations
- Where contractual arrangements allow, seeking to quantify the waste generated in NPSR's large office locations,
- Gaining a better understanding of the waste types and ultimate destination of waste generated from non-office based activities.

The collection of quantitative waste data at NPSR's head office

Approximately 20% of NPSR staff members are based in 111 George Street in Brisbane, a multi-tenanted building. Data will be collected on the waste generated from NPSR activities at this location. Investigations will be made into the waste profile, existing waste management facilities, staff awareness and engagement, and contractual service arrangements.

Investigations into the waste generated from NPSR's non-office based activities

Limited information is available on the types and volumes of wastes being generated from non-office based activities. These activities include:

- Operational activities performed by Queensland Parks and Wildlife Service (QPWS) in national parks and forests resulting in organic debris, e-waste, chemical waste, construction waste and waste generated by visitors including human waste, litter and other rubbish.
- The activities of the Racing Sciences Centre
- The management and operation of sport and recreation facilities, including active recreation centres and sports reserves
- Activities of the Queensland Academy of Sport.

Investigations will be undertaken to determine the types of wastes generated and current disposal arrangements and to identify potential methods to capture the volumes of wastes generated.

Complexities regarding seasonal fluctuations in waste types and volumes will be investigated.

The boundaries of responsibility for waste generated by functions delivered in partnership with other agencies or institutions as well as existing waste management arrangements and current practices will also be documented.

Based upon the outcomes of these investigations, nominations may be sought from the operational units delivering these activities to participate in the department's waste reduction and recycling network.

Investigations into the waste generated at other large NPSR office locations

The department currently has several relatively large regional offices. The following locations accommodate 20 or more office-based NPSR staff members:

- William McCormack Place (Cairns)
- Mike Ahern Centre (Maroochydore)
- DAguilar National Park, The Gap (Brisbane)
- Rockhampton Office
- Manly Office (Brisbane)
- Tingira Street Office, Portsmith (Cairns)
- South Western Regional Office, Toowoomba
- Maryborough Office

Investigations will be made into local waste profiles, waste management facilities, staff awareness and engagement, and contractual service arrangements.

Nominated local contacts will represent each of these locations on the department's waste reduction and recycling network.

Phase Two – Development of action plans

During the next 6 to 12 months the baseline information and data on locations and activities within the sampling set, will be used to identify specific issues and opportunities for improvement, within the context of existing contractual arrangements, further develop baselines, set targets and develop specific action plans.

Depending on the improvement opportunities identified during baseline data collection, action plans may be developed to address issues surrounding:

- a particular waste **stream** (*e.g. an action plan for dealing with printing paper waste*)
- waste management at a particular **location** (*e.g. an action plan educating staff at location x on the appropriate use of their recycling facilities*)
- a particular **departmental function** (*e.g. an action plan for helping team x or unit y rethink the wastes produced from their activities and how this can be better managed*); or
- a combination of these factors.

Action plans will have the shared objective of aiming towards best practice for the specific area of improvement, in the context of the local operating environment.

Action plans will be developed in consultation with local stakeholders and contain the following elements:

- a clearly defined objective
- clarification on scope
- a timeline for implementation (where applicable)
- actions
- identification of the human, financial and other resources required
- roles and responsibilities
- data collection (where applicable)
- measurement and monitoring
- reporting requirements

Action plans will be submitted to relevant EMT members for approval and the allocation of required resources.

Phase Three – Implementation of action plans

During the remainder of the three year period NPSR will focus on implementing the action plan/s developed during Phase Two.

Progress will be regularly monitored (as defined in individual action plans) and will be reported upon as discussed in the reporting section below.

Lessons learnt from data collection at large office locations (see Phase One above) will be used to gradually expand this effort to smaller locations.

During the last year of this Plan, NPSR will define areas for improvement that will be incorporated in the 2018-2021 waste plan.

6. Waste reduction and recycling targets

The Waste Reduction and Recycling Act (2011) requires NPSR to set waste reduction and recycling targets for the waste generated by the department in carrying out its activities.

Understanding our waste profile

As mentioned in section 5, quantifiable targets can only be set once the agency has a clear understanding of its waste profile, and where its contractual arrangements provide for this level of reporting. The objective of the first phase of the implementation of this Plan is to establish a robust baseline. This baseline will be used to identify opportunities for improvement and to set targets.

Quantitative targets will therefore only be set towards the end of the implementation period of this Plan. Once defined, these targets will be submitted to NPSR's Executive Management Team (EMT) for approval.

It is envisaged that differential targets may be set for metropolitan and regional locations.

Waste generation target

In line with the State wide reduction target for all general waste, NPSR will strive towards best practice (as relevant in each of its locations) as a means of contributing towards a 5% reduction in state-wide waste generation by 2024.

For the period of this Plan, the department's aim is to quantify (or provide estimates, based on sound methodologies) of the amount of waste generated for its significant waste streams in order to determine an appropriate baseline.

Based upon the findings of baseline information and data collection, the department will set reduction targets for the total waste stream or – it appropriate - for specific components of the waste stream. For example, there may be a target to reduce paper waste generated at specific location by a certain percentage.

Recycling target

In line with the State wide target for commercial and industrial waste, NPSR will strive towards best recycling practice (as relevant to individual locations) as a means of contributing towards a state-wide recycling rate of 55% in the commercial and industrial waste stream by 2024.

Based upon the findings of baseline data collection, the department will set recycling targets for components of its waste stream. For example, there may be a target to achieve a specific comingled recycling rate in metropolitan locations.

7. Endorsement and resource allocation

The members of NPSR's Executive Management Team (EMT) have endorsed the contents of this plan and agree with the overall direction of waste reduction and recycling activities within the department.

Action plans will be submitted to EMT for approval and the allocation of resources.

8. Roles and responsibilities

As mentioned in section 3, NPSR will establish a working group to address waste reduction and recycling. The department's Governance and Strategy (G&S) branch will take a leading role in establishing this group. A staff member from Business and Professional Services (BPS) will chair the working group.

The working group will consist of representatives from each division within the department, as nominated by Executive Management Team (EMT) members. The members of the working group will:

- facilitate baseline information and data collection,
- assist in the development of action plans,
- promote waste awareness,
- collect and consolidate ideas for improved waste management, and
- measure the success of waste action plans.

Apart from divisional representation, each location or floor will be required to nominate a local waste champion. The roles and responsibilities for the implementation of action plans will be outlined in each plan.

9. Reporting

NPSR will produce an annual report on waste reduction and recycling in accordance with the requirements of the Act.

Reporting will include progress made against the targets and objectives set out in this Plan.