

DAF Waste Reduction and Recycling Plan
2018-2021

Prepared by: Corporate, Finance and Asset Management, Department of Agriculture and Fisheries.

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Foreword

The DAF Reduction and Recycling Plan 2018-2021 (the Plan) outlines the actions the department will take over the next three years to contribute to meeting the state-wide targets by 2024. Those actions will be directed towards reducing unnecessary waste, recycling unavoidable waste, and ultimately to achieve a leaner, healthier environmental footprint and better use of our finite resources.

There are two basic principles of the plan. The first is that all staff should avoid or reduce the production of waste products and secondly, when this is not possible, reuse or recycle unavoidable waste. These are principles we can all commit to and make a difference in our own workplaces.

Through support and education, the plan follows the principles of the waste management hierarchy in identifying and implementing practices which will effectively reduce the impacts on the environment of the department's operations.

The plan has been developed to support the *Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024)*. The reporting component of the plan will help to build a better picture of waste management and resource recovery practices across the department. Through the life of the plan, DAF will not only reduce our negative impact on the environment, but also aim to secure financial savings through more effective use and reuse of resources.

Dr Elizabeth Woods
Director-General
Department of Agriculture and Fisheries

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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 that 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 plan sets the overall direction for waste management within the department.

An overview of the department, the functions performed and the types of waste generated as a result of the department's activities, are provided in Sections 1 and 2 of the plan. Section 4 details the approach to meeting waste management responsibilities.

The primary focus of the 2018-2021 Plan will be to improve the understanding of the types and quantities of waste generated as a result of DAF's activities and to report on disposal methods for regulated and trackable waste. Whilst the department is not able to set reduction targets for this type of waste, DAF can ensure it is disposed of in an appropriate manner.

The plan will be tailored to specific locations, waste streams or functions.

In line with DAF's culture of continuous improvement, particularly in respect to office waste, the success of the department's Waste Reduction and Recycling Plan will be monitored.

1. Overview of the organisation

The Department of Agriculture and Fisheries (DAF) works to achieve the vision of a productive and profitable agriculture, fisheries and forestry sector. The department promotes a sustainable and innovative sector, helping to realise its value to the economy and the community.

Agriculture is a high risk business, affected by rainfall, price variability and susceptibility to pest and disease threats. Biosecurity leadership and delivery of drought assistance, and extension services are crucial to improve risk preparedness and resilience. These services contribute to the Government's objectives to deliver quality frontline services and to build safe, caring and connected communities.

The department's management of fisheries and forestry resources and programs for best practice land management strives to balance commercial interests with the ongoing economic, environmental and social value of the community's resources.

The department's efforts and those of the sector contribute to the Government's objective to protect the environment.

2. What wastes are generated from DAF's activities?

DAF employs about 2,000 people in areas including policy development, leading-edge science, Biosecurity Queensland, fisheries and forestry management, trade and export at approximately 103 locations in Queensland with the majority of the workforce located at 41 George Street, Brisbane.

Office vs non-office based activities

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

Waste generated from office-based activities

The majority of the departments' staff members perform office based functions. The total quantity and exact composition of office waste is based on data collected by the Department of Housing and Public Works (DHPW) for 41 George Street, Brisbane and the Eco Sciences Precinct Building at Boggo Road, Dutton Park.

Since the 2017 report DHPW has added four sites and these are located at:

- Gympie – Forestry Research
- Emerald – Government Office Building
- Mackay – Government Office Building
- Dalby – Courthouse / Government Office Building.

Gaining an understanding of a current waste profile at larger centres across the state is an ongoing priority in implementing the Waste Reduction and Recycling Plan 2018-2021.

Waste generated from non-office based activities

As a result of the diverse nature of the department's business activities and the legislative requirements, a diversity of clinical and related waste, trackable waste and other regulated waste is generated.

A profile of the types and amount of waste generated at larger DAF owned research facilities such as Spyglass and Maroochy is being compiled.

Waste categories include:

- Animal waste
- Asbestos
- Chemicals
- Discarded sharps
- Grease trap waste
- Laboratory waste
- Sewage.

Waste management achievements to date

DAF has implemented a number of initiatives to improve the management of waste generated by its operations

including:

- recycling waste paper products where feasible, and reducing paper and toner cartridge consumption by using double-sided and grey scale printer default settings
- introduction of 'follow-me' printing on all DAF floors at 41 George Street
- continuing to rollout eDOCS which continues to reduce the need for paper and physical file storage
- where possible embracing the paper-lite concept at meetings by using Skype for Business
- continuing to use 'Tadpole' as the departments' electronic timesheet.

The plan is designed to build on these initiatives and to integrate sound waste management practices into day-to-day operations.

3. Out of Scope

The following dot points highlight a couple of areas that have been considered to be out of scope for this plan.

- Smaller offices and owned research facilities in rural/remote locations where recycling activities may not be available or it is difficult to obtain reliable data.
- Research facilities where the department is not able to reduce the amount of waste generated due to the nature of their operation.

4. DAF's approach to Waste Management

DAF'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.

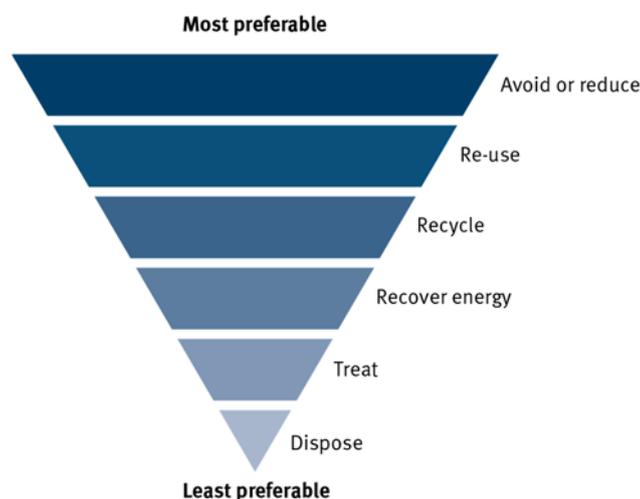


Figure 2: The waste and resource management hierarchy.

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 some information on how DAF will use the hierarchy in managing its waste.

Management Option	Definition	Examples of activities
Avoid	Avoid unnecessary resource consumption.	Avoid the generation of paper waste by encouraging the use of electronic copies.
Reduce	Reduce waste generation and disposal.	Ensure all printers are set to double-sided printing as a default. Printing in black ink reduces the turnover of colour cartridges. 'Follow-me' printing in 41 George Street is an IT initiative.
Reuse	Reuse waste resources without further manufacturing.	Review policies on the disposal of obsolete IT (or other) equipment with a focus on identifying alternative uses or users.
Recycle	Turning waste resources into similar or different products.	Increase staff awareness in order to maximise co-mingled recycling and avoid contamination of recycling bins.
Disposal	Dispose of waste only if there is no viable alternative.	DAF will endeavour to ensure that waste will only be disposed of at landfill facilities that are operated in accordance with prescribed legislation. Bury animal carcasses on site at research facilities.

Resource management principles

The following principles guide the decisions DAF makes in the management of its waste.

	Definition	Examples of activities that could be included in action plans
The polluter pays principle	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.	Educate staff on the full implications of inappropriate waste activities – for example once a co-mingled recycling bin is contaminated, the contents of the whole bin will go to landfill. This has an environmental and financial cost to the department.
The proximity principle	Waste and recovered resources should be managed as close to the source of generation as possible.	Review waste management arrangements to ensure that we use local service providers where possible.
The product stewardship principle	There is a shared responsibility between all persons who are involved in the lifecycle of a product for managing the environmental, social and economic impact of the product	Review procurement procedures.

Continuous Improvement

The diagram below illustrates how the activities that we propose for the plan (as described in Section 6) will align with a cycle of continuous improvement.

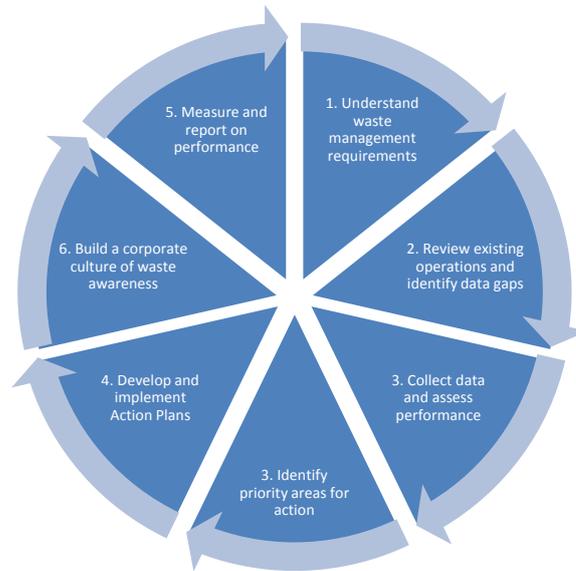


Figure 3: Cycle of continuous improvement in waste management

DAF will address its waste reduction and recycling responsibilities through ongoing assessment of its activities and implementing industry best-practice where possible by:

- facilitating the on-going collection of baseline data at DAF's major leased offices at 41 George Street, Brisbane and Tor Street, Toowoomba, and owned research facilities at Spyglass and Maroochy Research Facility
- measuring and monitoring the success of the waste plan
- promoting waste reduction and recycling awareness
- encouraging, collecting and consolidating ideas for improved waste management and waste reduction.

DAF will strive for continuous improvement and will review and refine waste reduction and recycling activities where possible.

5. Long-term Objectives

Where possible, DAF will continue to identify the priority wastes¹ generated from its operations, and in particular the wastes identified in the state-wide action plan that have high disposal impacts. These wastes are:

- plastic packaging, and
- fluorescent lights (as part of the complementary national product stewardship measures).

In addition to these priorities, DAF's approach over the period of the plan will be to:

- continue to identify and monitor the department's waste profile
- adopt waste management and reduction practices, where possible
- collaborate with other departments and share learnings from DAF's waste initiatives.

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

Plan: 2015-2018 (completed) – baseline data collection, development and implementation of initial waste

¹ Priority waste is defined in the Strategy as wastes "with high disposal impacts (such as toxicity or greenhouse gas emissions), social impacts (such as community concern or amenity) or whose recovery would represent resource savings or business opportunities".

reduction and recycling activities

Plan: 2018-2021 – continuous improvement, review and refinement of waste reduction and recycling activities

Plan: 2021-2024 – further improvement and consolidation.

These plans will be integrated, with each plan building on the work of the previous one.

6. Activities planned for 2018 to 2021

The guiding principle for the plan will be to continue the journey necessary to maximise DAF's contribution to achieving the state-wide Strategy's waste reduction and management targets by 2024. In doing so, DAF will consider best practice waste management and reduction principles most relevant to DAF's waste profile and operating environment.

Throughout the period of this Plan DAF's focus will be on the following larger sites where more reliable data is available:

- 41 George Street, Brisbane
- Tor Street, Toowoomba
- Gympie – Forestry Research
- Emerald – Government Office Building
- Mackay – Government Office Building
- Dalby – Courthouse / Government Office Building.
- Maroochydore Research Facility
- Spyglass Research Facility, Charters Towers.

DAF will continue to identify the types of regulated and other non-office based waste generated by DAF's activities at the above locations and report annually on progress.

Phase One – Baseline data collection

The focus will continue to be on collecting baseline data to allow DAF to assess future performance and allow DAF to focus on waste management efforts that will realise the greatest benefit.

Priority areas for baseline data collection are to:

- quantify the waste generated in the locations named in this Plan
- better understand the types of waste generated from non-office based activities.

While a brief description of the priority activities is given below, more information on baseline data collection is provided in Appendix A.

DAF staff in the Brisbane CBD occupy multiple floors of a multi tenanted building at 41 George Street.

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

Ongoing investigations will continue to determine the types of wastes generated and to identify potential methods to capture the volumes of wastes generated.

Phase Two – Actions to strengthen the management of waste reduction and recycling activities

DAF will continue to collect quantitative baseline data for office waste from 41 George Street, Brisbane to identify specific issues and opportunities for improvement, set targets and continue to strengthen our management strategies and action to minimise waste and increase recycling activities.

Depending on the types of waste generated at specific locations identified in this plan improvement opportunities may address issues surrounding:

- a particular waste **stream, for example office waste**
- waste management education for example educating staff on the appropriate use of their recycling facilities
- a combination of these factors.

Phase Three – Implementation of action plans

- DAF will focus on implementing the actions developed during Phase Two.
- Progress will be regularly monitored and reported in section 9 below.

7. Waste reduction and recycling targets

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

Understanding our waste profile

For the period of the plan, the department's aim is to continue to quantify the amount of waste generated in order to determine an accurate baseline.

Once established, baseline data will be used to identify opportunities for improvement and to set waste reduction targets and it is envisaged that different targets may be set for metropolitan and regional locations.

Waste generation target

In line with the reduction target for all general waste, DAF will strive towards best practice as a means of contributing towards a five per cent reduction in state-wide waste generation by 2024.

Recycling target

Based on the findings of reliable baseline data, the department will set recycling targets for components of its waste stream. For example, there may be a target to further reduce paper waste generated in the CBD.

The Director-General has endorsed the contents of the plan and agreed with the overall direction of waste reduction and recycling activities within the department.

8. Roles and responsibilities

The plan will be coordinated through Corporate, Finance and Asset Management.

- DAF has an established network of contacts across the State through establishment of the DAF Accommodation Committee and DAF Accommodation Committee Working Group.
- The Acting Deputy Director-General, Corporate is a sponsor for waste reduction and recycling activities and setting waste and recycling targets.
- The Director-General approves the plan. It will then be uploaded to the department's website and intranet site and a progress report prepared annually for the Department of Environment and Science.

9. Reporting

DAF will review the plan at three year intervals and produce annual reports on waste reduction and recycling in accordance with the requirements of the relevant legislation.

Reporting will include progress made against the activities set out in the plan and will include:

- the types and amounts of waste generated, recycled or disposed of by the department in carrying out its activities
- any action taken to reduce the amounts of waste generated or re-used or recycled
- the department's contribution towards achieving the goals and targets of the State's Waste Management Strategy.

Appendix A – Baseline Data Collection

While DAF currently has a reasonably good understanding of the types of waste generated from its operations, better information can be collected on the volumes of the waste types.

It is essential that a baseline be established before effective action plans to manage DAF waste can be developed and implemented. This baseline will provide the means to analyse how waste is being generated and managed. It will also highlight practices that have potential for improvement and can help with the identification of potential cost savings.

Action plans with realistic outcomes cannot be effectively developed and sustainably implemented if the current situation is not identified and documented for future monitoring and measurement.

Crucial to the success of this data collection exercise will be the identification of appropriate staff members with the knowledge of the operational practices within their work unit or physical location. These local contacts will make up the Waste Reduction and Recycling Network and be the starting point of a directory of stakeholders that will be consulted for further information. Information will be collected on the various aspects of the department's waste profile.

Waste generation

- Identify the types of waste generated by office based activities.
- Identify the types of waste generated from non-office based activities.
- Verify the current level of staff awareness on waste management practices specific to their location.

On-site waste handling

- Signage for waste segregation and storage
- Waste receptacle types, numbers and accessibility.

Waste recycling and disposal

- Confirm that contract arrangements are in place to ensure local service providers are handling, transporting, recycling and disposing waste appropriately

Endorsement

Assess the available waste data from each location to determine whether the quality of the data is acceptable for reporting purposes. If the data is not acceptable, measures will need to be implemented to improve data collection and accuracy. These measures may include surveys or periodical audits.

Demand and Resource Committee members will be briefed on the requirements for, and the resource input required to achieve a worthwhile baseline of current waste management practices as well as the requirements for ongoing data collection.